Transsylvania nostra
BUILT HERITAGE
PATRIMONIU CONSTRUIT
ÉPÍTETT ÖRÖKSÉG
YEAR XVIII. 67-68TH ISSUE ■ ANUL XVIII. NUMERELE 67-68 ■ XVIII. ÉVFOLYAM. 67-68. SZÁM

SZABÓ BÁLINT 1944-2024

IN MEMORIAM SZABÓ BÁLINT





6 423493 000779 120 lei

2024



SZABÓ BÁLINT
1944-2024

My brief autobiography

My name is Bálint (György) SZABÓ.
I am a structural engineer as of my qualification (1966), and I specialized in historic load-bearing structures after 1989.
Since 1979 my main employment was at the Technical University of Cluj-Napoca as a lecturer, where in 1998 I became professor. At the Babeş-Bolyai University I created and led a postgraduate course in built heritage conservation. Since 2000 I am a PhD supervisor.
In 1991 I established a profit-oriented company for the research and design of built heritage, where I provide employment for 15 to 40 people constantly: our company is the largest in the field in the country!
In the meantime, I acquired several qualifications: expert in load-bearing structures (1993), design supervisor (1993), expert in historic load-bearing structures (2000): since 1979, I provided expertise for more than 200 buildings.
I was and I am a member in several expert committees dedicated to historic building restoration and regulations related to built heritage: National Monument Council of Romania, Regional Monument Council (being the president for the South-Transylvanian Committee).
I established foundations ensuring a framework for built heritage conservation activities: Transylvania Trust (1996) and Transsylvania Nostra (2008). The former has already memorable achievements, among others, in the safeguarding of the Bánffy castle in Bonţida.
Since 2007 I am editing and financing a journal: Transsylvania Nostra is the only journal in Romania specialized in built heritage protection.
The PhD students supervised by me chose different topics related to the built heritage: they carried out research on Roman, Gothic and Baroque roof structures of Transylvania, and many others.
I had a very intense relationship with Hungary during the 1990s: although I never lived on its support (my salary as a professor and the fees received for expert assessments always ensured a decent living), the professionals working at the National Office for Monument Protection (and others) supported me to a great extent in acquiring knowledge on built heritage, for which I am truly grateful.
In recognition of my work, I received several awards at home and in Hungary during the past 25 years.

2018

Scurtă autobiografie

Mă numesc Bálint (György) SZABÓ.
Profesia mea de bază este inginer constructor (1966), după 1989 m-am specializat în structuri portante istorice. Începând cu 1979, am fost asistent universitar la Universitatea Tehnică din Cluj-Napoca, unde în 1998 am obţinut titlul de profesor universitar. La Universitatea Babeş-Bolyai am înfiinţat si am condus un curs postuniversitar de conservare a patrimoniului construit, iar din 2000 sunt conducător de doctorat.
Am înfiinţat o firmă specializată în cercetarea şi proiectarea patrimoniului construit în 1991, prin care asigur loc de muncă pentru 15-40 de persoane în mod permanent. Firma noastră este cea mai mare companie specializată în acest domeniu din ţară!
Între timp am obtinut diverse calificări: expert în structuri portante (1993), verificator de proiect (1993), expert în structuri portante istorice (2000): din 1979 am întocmit expertiza a peste 200 de clădiri.
Am fost şi sunt membru în comisii de monumente si de legiferare: Consiliul National al Monumentelor Istorice, Consiliul Regional al Monumentelor Istorice (fiind preşedinte timp de 6 ani al filialei din Transilvania de Sud).
Am înfiinţat fundaţii care asigură cadrul necesar protejării patrimoniului construit: Fundaţia Transylvania Trust (1996) şi Fundaţia Transsylvania Nostra (2008). Cea dintâi are rezultate memorabile în salvarea Castelului Bánffy din Bonţida.
Sunt redactorul şi finanţatorul unui jurnal de specialitate din 2007: „Transsylvania Nostra" este singurul jurnal din ţară specializat în conservarea patrimoniului construit.
Doctoranzii îndrumaţi de către mine au ales teme din domenii diferite ale patrimoniului construit din Transilvania: au făcut cercetări în şarpantele istorice cu caracter romanic, gotic şi baroc, şi multe altele.
Relaţia mea cu Ungaria a fost foarte intensă în anii 1990: deşi nu mi-a asigurat existenţa niciodată (salariul de profesor şi remuneraţiile primite pentru expertize garantându-mi un trai decent), colegii de la Oficiul Naţional al Monumentelor Istorice din Ungaria (şi alţii) m-au ajutat mult în acumularea cunoştintelor despre patrimoniul construit, fapt pentru care le sunt recunoscător.
În semn de apreciere a muncii mele, am primit mai multe premii în România şi Ungaria în ultimii 25 de ani.

2018

Rövid önéletrajzom

SZABÓ Bálint (György) a nevem.
Alaptevékenységem építőmérnök (1966), 1989 után szakosodtam a történeti tartószerkezetekre. 1979-től a Kolozsvári Műszaki Egyetemen egyetemi oktató voltam főállásban, egyetemi tanár lettem 1998-tól, valamint (a Babeş–Bolyai Egyetemen) műemlékvédelmi posztgraduális képzést hoztam létre és irányítottam, 2000-től doktorátusvezető vagyok.
Építettörökség-kutató, -tervező, profitorientált kft.-t alapítottam 1991-ben, ahol folyamatosan 15–40 szakembernek teremtek munkahelyet: az ország legnagyobb építettörökség-helyreállításra szakosodott kutató-tervező cége a miénk!
Közben különböző minősítéseket szereztem: tartószerkezet-szakértő (1993), tervellenőr (1993), történetitartószerkezet-szakértő (2000): 1979-től több mint 200 épület szakértői véleményét készítettem el.
Műemlék-helyreállítási és törvényalkotói szakbizottságoknak voltam és vagyok tagja: (Román) Országos Műemléki Tanács, Regionális Műemléki Tanács (a dél-erdélyinek 6 évig elnöke).
Alapítványokat hoztam létre, melyek az épített örökség-védelemben biztosítanak működési keretet: Transylvania Trust – TTA (1996) és a Transsylvania Nostra – TNA (2008). A TTA többek között a bonchidai Bánffy-kastély megmentésénél alkot maradandót.
Szakfolyóiratot szerkesztek és finanszírozok 2007-től: az egyetlen hazai építettörökség-védelmi szakfolyóiratot, a Transsylvania Nostrát.
Doktoranduszaim az erdélyi épített örökség különböző részeiből választottak témát: feldolgozták már az erdélyi román kori, gótikus és barokk fedélszerkezeteket és még sok más mindent.
Az anyaországgal a kapcsolatom a '90-es években nagyon intenzív volt: bár soha, egy pillanatig sem éltem a támogatásukból (egyetemi oktatói fizetésem, szakértői vélemények tiszteletdíjai mindig is tisztes megélhetést biztosítottak számomra), az Országos Műemlékvédelmi Hivatal – OMvH – munkatársai (és mások is) sokban segítettek műemlékes általános kultúrám kialakításában, amiért is nagyon hálás vagyok.
Munkám elismeréseként számos hazai és magyarországi kitüntetést vehettem át az elmúlt 25 esztendőben.

2018

■ FURU Árpád[1] ■ KIRIZSÁN Imola[2] ■ MAKAY Dorottya[3]

Farewell to Bálint SZABÓ (1944–2024)

■ *Only a very few are granted to bring such a major change in the development of a certain field during their career, such as the one achieved by Bálint SZABÓ in the protection of the built heritage of Transylvania. His system-creating thinking, charisma and enormous drive made that after the hesitant beginnings of the restart, after a few decades, a well-established, complex civil built heritage conservation system and a new generation of professionals stood out for the cause of Transylvanian built heritage.*

The beginnings

■ Bálint SZABÓ was born on the 9th of April 1944, in Cluj. In his family, for many generations the active intellectual life has been intertwined with serving the public good in the spirit of Transylvanian multiculturalism. His ancestors on both sides were Székelys, his predecessors being educators, teachers, lawyers, economists, community organizers. His father, Gyula SZABÓ was a teacher of

1 PhD, engineer, historic building conservation specialist, ethnographer, historic building conservation consultant for the Hungarian Unitarian Church, Cluj, Romania.
2 PhD, engineer, historic building conservation specialist, technical expert, associate professor at the Faculty of Architecture and Urban Planning, Technical University Cluj, head of Utilitas Built Heritage Conservation Research and Design Centre, Cluj, Romania.
3 PhD, engineer, historic building conservation specialist, founder and head of Irod M and ConsolideM Ltd., Cluj, Romania.

Rămas-bun Bálint SZABÓ! (1944-2024)

■ *Pe parcursul unei cariere, le-a fost dat puţinor oameni să aducă o schimbare atât de mare în dezvoltarea unui domeniu, precum a adus Bálint SZABÓ în protecţia patrimoniului construit al Transilvaniei. Gândirea sa creatoare de sisteme, personalitatea sa carismatică şi elanul său enorm au făcut posibil ca, în decursul câtorva decenii de la începuturile timide ale reorganizării, un sistem civil bine elaborat de protecţie a monumentelor istorice şi o nouă generaţie de specialişti să susţină cauza protecţiei patrimoniului construit al Transilvaniei.*

Începuturile

■ Bálint SZABÓ s-a născut la 9 aprilie 1944 la Cluj. Pentru familia sa, timp de câteva generaţii, viaţa intelectuală activă s-a împletit cu servirea comunităţii, cu acţiuni constante în spiritul transilvanismului. Strămoşii săi pe ambele ramuri au fost secui liberi, iar predecesorii săi învăţători, profesori, avocaţi, economişti şi organizatori comunitari. Tatăl său, Gyula SZABÓ, a fost profe-

1 Dr., inginer, specialist în conservarea clădirilor istorice, etnograf, consultant în conservarea clădirilor istorice pentru Biserica Unitariană Maghiară, Cluj, România.
2 Dr., inginer, specialist în conservarea clădirilor istorice, expert tehnic, conferenţiar la Facultatea de Arhitectură şi Urbanism, Universitatea Tehnică Cluj, director al societăţii Utilitas Centru de cercetare, proiectare în domeniul reabilitării patrimoniului, Cluj, România.
3 Dr., inginer, specialist în conservarea clădirilor istorice, director – fondator al Irod M şi ConsolideM Srl., Cluj, România.

Búcsú SZABÓ Bálinttól (1944–2024)

■ *Csak nagyon keveseknek adatik meg, hogy életpályájuk során olyan nagy változást hozzanak egy szakterület fejlődésében, mint amilyet SZABÓ Bálint az erdélyi épített örökség védelme terén. Rendszerteremtő gondolkodásmódja, karizmatikus személyisége, hatalmas lendülete lehetővé tette, hogy az újraszerveződés bátortalan kezdeteitől, néhány évtized leforgása alatt, egy sokrétű, jól kidolgozott civil műemlékvédelmi rendszer, majd új szakember-generáció álljon ki az erdélyi épített örökség védelmének ügyéért.*

A kezdetek

■ SZABÓ Bálint 1944. április 9-én született Kolozsváron. Családja számára a tevékeny értelmiségi lét több generáción keresztül összefonódott a köz szolgálatával, a transzilvanizmus eszméiért való állandó cselekvéssel. Ősei mindkét ágon szabad székelyek, felmenői több nemzedék óta tanítók, tanárok, ügyvédek, közgazdászok, közösségszervezők voltak. Édesapja, SZABÓ Gyula magyar–német–román szakos tanár volt. Anyai nagyapja, SZENTIMREI

1 Dr., mérnök, műemlékvédelmi szakmérnök, néprajzkutató, a Magyar Unitárius Egyház műemlékvédelmi tanácsadója, Kolozsvár, Románia.
2 Dr., mérnök, műemlékvédelmi szakmérnök, tartószerkezeti szakértő, Kolozsvári Műszaki Egyetem Építészeti és Városrendezési Kar docense, az Utilitas épített örökségvédelmi kutató-tervező központ igazgatója, Kolozsvár, Románia.
3 Dr., mérnök, műemlékvédelmi szakmérnök, az Irod M és a ConsolideM Kft.-k. alapító igazgatója, Kolozsvár, Románia.

Hungarian, German and Romanian language and literature. His maternal grandfather, Jenő SZENTIMREI was a poet, writer, journalist, theatre historian, member of the Helikon group of writers, and one of the outstanding figures of the cultural life in Cluj in the interwar period. His mother, Judit SZENTIMREI, was an artisan and an ethnographer; as a fellow researcher to ethnographers Károly KÓS and Jenő NAGY, she carried out research on the folk art of the Casin, Târnava Mică, Csángó Land, Rimetea, Sălaj, Ţara Bârsei, Câmpia Transilvaniei regions. Accompanying her mother on her field trips as a schoolchild, Bálint SZABÓ visited the Romanian regions of Zărand and Valea Jiului, and the Saxon regions of Sibiu, Târnava and Ţara Bârsei, along the Székelys from Caşin as well. His family was a neighbour to the KÓS family not only in Cluj, but also on the hills of Stana (Commune of Almaşu, Sălaj County); the Szentimrei villa in Stana, designed by Károly KÓS, illustrates well the spiritual kinship between the two families. Such a network of relationships obviously determined the life-path of Bálint SZABÓ and his brothers, and their direct connection with the cultural life of Transylvania.

Bálint SZABÓ graduated in 1961 the Brassai Sámuel Highschool, the successor of the Unitarian College in Cluj, and obtained his university degree at the Faculty of Civil Engineering[4] of the Technical University in Cluj in 1966. Until 1968, he worked as a structural engineer at the Building Trust of Cluj at the construction works of the sugar factory of Oradea, then, between 1968 and 1974, he led execution works at the Construction Company of Sfântu Gheorghe (Covasna County). In 1974 he returned to Cluj as a research engineer of the Technical University. He advanced gradually in his academic career, from being a research engineer to becoming a lecturer, an assistant professor, then, from 1979, associate professor at the Department of Reinforced Concrete Planning. In 1984 he sustained

4 Its official name at that time was the Polytechnical Institute.

sor, preda limbile maghiară, germană şi română. Bunicul său matern, Jenő SZENTIMREI, poet, scriitor, jurnalist, istoric de teatru, membru al grupului de scriitori Helikon, a fost una dintre personalităţile definitorii ale vieţii culturale clujene între cele două războaie mondiale. Mama sa, Judit SZENTIMREI, creator artizanal, etnograf, a cercetat arta populară din Caşin, Valea Târnavei Mici, regiunea Ceangăilor din Moldova, Rimetea, Sălaj, Ţara Bârsei, Câmpia Transilvaniei în colaborare directă cu etnografii Károly KÓS şi Jenő NAGY. Însoţind-o pe mama sa, Bálint SZABÓ, a cutreierat la vârsta şcolară regiunile româneşti Zărand şi Valea Jiului şi cele săseşti Sibiu, Valea Târnavelor şi Ţara Bârsei, respectiv regiunea secuilor din Caşin. Familia sa era vecină cu familia KÓS atât la Cluj, cât şi printre dealurile din Stana (comuna Almaşu, judeţul Sălaj). Károly KÓS a proiectat vila „Szentimrei" din Stana, ceea ce indică clar afinitatea spirituală dintre cele două familii. Un astfel de sistem de relaţii predestina desigur şi cariera lui Bálint SZABÓ şi a fraţilor săi, conexiunea lor directă cu viaţa culturală a Transilvaniei.

În 1961, Bálint SZABÓ a absolvit Liceul „Brassai Sámuel", şcoala succesoare a Colegiului Unitarian din Cluj, iar în 1966 a obţinut diploma universitară la Facultatea de Construcţii a Universităţii Tehnice[4] din Cluj. Până în 1968 a lucrat ca inginer constructor la Trustul de Construcţii Cluj, participând la construirea fabricii de zahăr din Oradea, apoi între 1968 şi 1974 a condus şantierele Trustului de Construcţii Montaj din Sfântu Gheorghe (judeţul Covasna). În 1974, s-a întors la Cluj şi s-a angajat ca inginer cercetător la Universitatea Tehnică. A avansat treptat în cariera universitară, devenind preparator, asistent, iar din 1979 lector la Catedra de construcţii din beton armat. Aici şi-a susţinut doctoratul în 1984, ca apoi, din 1998 până la pensionarea sa, să predea ca profe-

4 Denumirea oficială de atunci: Institutul Politehnic.

Jenő költő, író, újságíró, színháztörténész, a helikoni írók csoportjának tagja, a két világháború közötti kolozsvári művelődési élet egyik meghatározó személyisége. Édesanyja SZENTIMREI Judit iparművész, néprajzkutató, aki KÓS Károly és NAGY Jenő néprajzkutatók közvetlen munkatársaként kutatta a Kászon, Kis-Küküllő mente, a moldvai csángó vidék, Torockó, Szilágyság, Barcaság és az Erdélyi Mezőség népművészetét. Édesanyját elkísérve, SZABÓ Bálint iskolásként bejárta a zarándi, Zsil-völgyi román, a szebeni, Küküllő menti és barcasági szász, illetőleg a kászoni székely vidéket is. Családja nemcsak a kolozsvári Rákóczi úton, de a sztánai dombok között is szomszédja volt a KÓS családnak, a sztánai Szentimrei-villa KÓS Károly által tervezett épület, jól jelezve a két család értékrendjének szellemi rokonságát. Egy ilyen kapcsolatrendszer természetesen predesztinálta SZABÓ Bálint és testvéröccsei életpályáját, az erdélyi művelődési élethez való közvetlen viszonyát.

SZABÓ Bálint 1961-ben a kolozsvári Unitárius Kollégium utódintézményében, a Brassai Sámuel Líceumban érettségizett, majd a Kolozsvári Műszaki Egyetem Építőmérnöki Karán[4] szerzett egyetemi oklevelet 1966-ban. 1968-ig a Kolozsvári Építőipari Tröszt építőmérnökeként a nagyváradi cukorgyár építésén dolgozott, majd 1968 és 1974 között a Sepsiszentgyörgyi Építőipari Vállalat kivitelezéseit vezette. 1974-ben, a Műszaki Egyetem kutatómérnökeként tért vissza Kolozsvárra. Fokozatosan haladt az egyetemi szakmai életpálya lépcsőin: kutatómérnök, tanársegéd, majd 1979-től adjunktus a Vasbetontervezés Tanszéken. 1984-ben ugyanitt megvédte doktori fokozatát, majd 1998-tól visszavonulásáig az egyetem Építészeti és Városrendezési Tanszékén professzorként tanított.

A rendszerváltás SZABÓ Bálint életpályájában is nagy változást hozott. Egyrészt az egyetemen belül a mérnökképzést biztosító Vasbeton

4 Akkori hivatalos nevén: Műszaki Intézet.

his doctoral thesis at the same department, and from 1998 until his retirement he was a professor at the Faculty of Architecture and Urban Planning of the university.

The regime change in 1989 also brought an important shift in the career of Bálint SZABÓ. He transferred from the Civil Engineering Faculty to the Faculty of Architecture and Urban Planning, where he taught courses related to the theory of structures. It was due to him that courses on historic load-bearing structures and on historic building conservation were introduced into the curriculum.

The more substantial change was related to his professional interests, a change that determined his subsequent lifepath. Starting from 1991, his work was aimed at reorganizing historic building conservation in Transylvania. His name can be linked to the founding of institutions, the launching of educational programs, the creation of scientific forums, and of course the conservation and protection of a great number of historic buildings and ensembles. His person was the common element in all these projects. He initiated, organized, taught, set up teams for specific tasks, urged decision-makers to ensure funding, connected and capacitated institutions. In almost all cases he was able to have an impelling effect on his professional environment, to involve other people, to organize and lead their work. In what follows, we, his former disciples, try to present his complex professional career that unfolds simultaneously in many directions. We certainly know that that we can only attempt to achieve this goal, the whole picture is far more complex. Our endeavour is to emphasize the role of Bálint SZABÓ in all these areas, though his role was inevitably interlinked with the main events of the three-decades long history of built heritage conservation in Transylvania. Presenting all important events on a larger scale surpasses the framework of this paper. Thus, we do not intend to follow an accurate timeline of the events, nor to present and evaluate the work of colleagues who had an active and decisive involvement in certain projects, just as

sor la Facultatea de Arhitectură şi Urbanism.

Schimbarea regimului a adus modificări majore şi în cariera lui Bálint SZABÓ. În cadrul universităţii a trecut de la Catedra Construcţii de Beton Armat, care asigura formarea inginerilor, la Facultatea de Arhitectură şi Urbanism, unde a predat discipline legate de teoria structurilor. Lui i se atribuie integrarea în planul de învăţământ a disciplinelor care vizează structurile portante istorice şi reabilitarea clădirilor istorice.

Preocuparea sa profesională a fost afectată de o schimbare mai mare şi mai importantă, definind cariera sa în continuare. Din 1991, activităţile sale s-au împletit cu reorganizarea protecţiei monumentelor istorice din Transilvania, cu numele său asociindu-se înfiinţarea de instituţii, iniţierea unor procese educaţionale, crearea de forumuri ştiinţifice şi, bineînţeles, restaurarea şi protejarea numeroaselor clădiri şi ansambluri istorice. Personalitatea sa este elementul comun în această serie de evenimente multiple. A iniţiat, a organizat, a predat, sarcinilor le-a atribuit echipe, a încurajat factorii de decizie în asigurarea de fonduri financiare, a interconectat instituţii încurajându-le munca. În aproape toate cazurile, a reuşit să stimuleze mediul profesional, să organizeze şi să gestioneze munca acestora. În cele ce urmează, (noi, foştii săi studenţi, apoi colegi de breaslă) încercăm să prezentăm această carieră profesională complexă, desfăşurată simultan în mai multe direcţii, conştienţi fiind de faptul că nu putem decât să ne străduim să înţelegem şi să facem înţeleasă întreaga sa operă. Efortul nostru se concentrează asupra rolului personal al lui Bálint SZABÓ, chiar dacă acest rol este inevitabil legat de cele mai importante evenimente din ultimele trei decenii ale istoriei protecţiei monumentelor istorice din Transilvania, a căror prezentare obiectivă ar fi, în mod firesc, o sarcină care depăşeşte cadrul acestei lucrări. Astfel, nu dorim să urmărim cronologia exactă a evenimentelor, nici să descriem şi să evaluăm munca colegilor care au



■ ***Fig. 1.*** *La prima întâlnire pentru protecția monumentelor istorice din Bazinului Carpatic, Seregélyes (Ungaria), 1991. © József SEBESTYÉN*

■ ***Fig. 1.*** *At the first meeting for historic building conservation in the Carpathian Basin, Seregélyes (Hungary), 1991. © József SEBESTYÉN*

■ ***1. ábra.*** *Az első Kárpát-medencei műemlékvédelmi találkozón, Seregélyes (Magyarország), 1991. © SEBESTYÉN József*

Tanszékről váltott az Építészet és Városrendezés Tanszékre, ahol szerkezetelmélettel kapcsolatos tantárgyakat tanított. Személyéhez köthető a történeti tartószerkezetek és a történetiépület-helyreállítás oktatását célzó tantárgyak tantervbe illesztése.

A nagyobb, fontosabb változás szakmai érdeklődését érintette, és ezáltal meghatározta további szakmai életútját. Tevékenysége 1991-től összefonódott a műemlékvédelem erdélyi újraszervezésével, nevéhez köthető intézmények alapítása, oktatási folyamatok elindítása, tudományos fórumok létrehozása és természetesen számos történeti épület és épületegyüttes helyreállítása, védelme. E több szálon futó történéssorban személye a közös elem. Kezdeményezett, szervezett, tanított, csapatot állított a feladatok mögé, anyagi alapok biztosítására ösztönözte a döntéshozókat, összekapcsolta és munkára sarkallta az intézményeket. Szinte minden esetben képes volt ösztönzőleg hatni szakmai környezetére, többeket bevonni és azok munkáját megszervezni, irányítani. Az alábbiakban (mi, volt tanítványai) kísérletet te-

we do not wish to detail the extent to which one or the other contributed to the birth, unfolding or continuation of an achievement. We will only enumerate the processes initiated by Bálint SZABÓ, constantly emphasizing the fact that although he was always present as the initiator, and in most cases also as an organizer and leader, the achieved results were due to the cooperation of a large number of colleagues, and to the association for a shorter or longer period of time of several people, sometimes even independently from the initiator.

Tusnad

■ In 1991 Bálint SZABÓ attended the Built Heritage Protection Conference and Training for professionals in the Carpathian Basin organized by the National Heritage Institute of Hungary[5] in Ráckeve. Upon returning home he decided to organize, with the help of professionals from Hungary and Romania, a training course in heritage conservation for the dozens of professionals at home, who were becoming increasingly enthusiastic for built heritage protection, after decades of political ban in the field. That is how in the winter and the spring of 1992, with the help of his former colleagues from Sfântu Gheorghe (Covasna County), his fellow professor colleagues, and the already established NGOs[6] the conference series were started in Băile Tuşnad, first as a vocational training. The series of events later became the outstanding scientific forum in the region in built heritage protection.[7]

5 At that time, it was called National Inspectorate for Monument Protection.

6 First of all, the Keöpeczi Sebestyén József Society for Monument Protection in Sfântu Gheorghe (Covasna County) needs to be mentioned here.

7 The following professionals also took part in the initial organising of the conference series originally launched as a crash course, first of all, Sándor BENCZÉDI, who played a key role in the development of the content concept, as well as Károly and Izabella HLAVATHY, Antal PÁL, and Hajnal PÉTER, employees of construction companies in the Háromszék region which were supporting the conference series at the time and whose leaders, including Attila TULIT, László

participat activ şi decisiv la acestea, nici să detaliem care a fost rolul lor în crearea, dezvoltarea sau continuarea uneia sau alteia dintre realizări. Ne vom mulţumi să enumerăm procesele iniţiate de Bálint SZABÓ, accentuând că, deşi a fost întotdeauna prezent ca iniţiator intelectual şi de multe ori ca organizator şi coordonator, rezultatele obţinute se datorau în fiecare caz cooperării unui număr mare de colegi, muncii lor comune, de lungă sau scurtă durată şi uneori deja independentă de iniţiator.

Tuşnad

■ În 1991, Bálint SZABÓ a participat la conferinţa şi formarea continuă în protejarea monumentelor istorice din Bazinul Carpatic, la Ráckeve, Ungaria, organizată de Oficiul pentru Protecţia Monumentelor Istorice din Ungaria.[5] Întors acasă, a decis ca, după deceniile de blocaj politic, să organizeze cursuri de protecţie a monumentelor istorice pentru zecile de profesionişti entuziasmaţi de acest domeniu, cu ajutorul unor lectori din Ungaria, în primul rând, dar şi din ţară. Astfel, în iarna şi primăvara anului 1992, cu ajutorul foştilor săi colegi din Sfântu Gheorghe (judeţul Covasna), al partenerilor universitari şi al organizaţiilor profesionale neguvernamentale care funcţionau deja la acea vreme,[6] la Băile Tuşnad a început o serie de conferinţe, iniţial ca şi curs de formare profesională,[7] care

5 Pe atunci Inspectoratul Naţional al Monumentelor Istorice.

6 Amintim în primul rând Societatea „Keöpeczi Sebestyén József" pentru Protecţia Monumentelor din Sfântu Gheorghe, judeţul Covasna.

7 În organizarea seriei de conferinţe pornită ca şi curs intensiv de formare s-au implicat multe persoane dintre care amintim: în primul Sándor BENCZÉDI, care a jucat un rol esenţial în dezvoltarea conceptului de conţinut ştiinţific, precum şi Károly şi Izabella HLAVATHY, Antal PÁL şi Hajnal PÉTER, angajaţi ai unor companii din industria construcţiilor din judeţul Covasna ce sprijineau în acea perioadă seria de conferinţe şi ai căror administratori, printre care îi amintim pe Attila TULIT, László RIGÓ, István ANTAL şi István NAGY, au fost colegi de universitate şi/ sau foşti colegi de muncă ai lui Bálint SZABÓ.

szünk e bonyolult és számos szálon egyszerre kibontakozó szakmai életpálya bemutatására, tudatában annak, hogy a teljes kép megértésére és megértetésére csak törekedhetünk. Igyekezetünk arra irányul, hogy SZABÓ Bálint személyes szerepére összpontosítsunk, bár ez óhatatlanul összekapcsolódik az erdélyi műemlékvédelem elmúlt három évtizedes történetének legfontosabb eseményeivel, melyek tárgyilagos bemutatása természetesen ezen írás kereteit messze meghaladó feladat lenne. Így számos ponton nem kívánjuk követni sem az események pontos kronológiáját, sem ismertetni és értékelni a bennük tevékenyen és meghatározóan részt vevő kollégák munkáját, sem azt részletezni, hogy kinek milyen mértékű szerepe volt egyik vagy másik megvalósítás létrejöttében, kibontakoztatásában vagy továbbvitelében. Megelégszünk a SZABÓ Bálint által elindított folyamatok felsorolásával, hangsúlyozva, hogy bár szellemi kezdeményezőként mindig, szervezőként, irányítóként legtöbbször jelen volt, az elért eredmények minden esetben nagyszámú munkatárs hosszabb vagy rövidebb ideig tartó közös és némelykor a kezdeményezőtől immár független együttműködésének gyümölcsei.

Tusnád

■ 1991-ben SZABÓ Bálint részt vett Ráckevén a magyarországi állami műemlékvédelmi hivatal[5] Kárpát-medencei szintű műemlékvédelmi konferenciáján és továbbképzésén. Hazatérve eldöntötte, hogy a több évtizedes politikai zárlat után a műemlékvédelem iránt fokozottan lelkesedő több tucat hazai szakember számára főleg magyarországi és hazai előadók segítségével műemlékvédelmi képzést fog szervezni. Így indult 1992 telén–tavaszán egykori sepsiszentgyörgyi munkatársai, egyetemi tanártársai és az akkor már működő szakmai civil

5 Akkor Országos Műemlékvédelmi Felügyelőség (OMF).

Whenever speaking about the Tusnad phenomenon, besides Bálint SZABÓ, we need to stress out the equally important role of Sándor BENCZÉDI (1952–2024).[8] Their complementary personalities, (Bálint SZABÓ was a man of synthesis, Sándor BENCZÉDI was a man of details and analysis), but also their professional and friendly relationship made this series of events an essential and iconic phenomenon in the Carpathian Basin.

Nearly at the same time, he initiated the establishment of a specialist design studio as well, but perhaps we can state that regarding the re-establishment of the organizational framework of built heritage conservation, a devenit ulterior forul profesional definitoriu pentru viaţa ştiinţifică a protecţiei monumentelor istorice din regiune. Când vorbim despre fenomenul Tuşnad, pe lângă numele lui Bálint SZABÓ, trebuie să menţionăm la egalitate şi cel al lui Sándor BENCZÉDI (1952–2024)[8], nu doar datorită caracterului lor profesional complementar (Bálint SZABÓ vedea imaginea globală, sintetiza, Sándor BENCZÉDI era omul detaliilor, a analizei), dar şi prin intermediul relaţiilor lor profesionale şi al prieteniei, au reuşit să ridice profilul calitativ al seriei de evenimente.

Aproape paralel cu demararea cursului de formare, a iniţiat şi deschiderea unui birou de proiectare specializat, iar astăzi putem afirma că seria de conferinţe internaţionale de la Tuşnad[9] a oferit terenul propice

szervezetek segítségével[6] Tusnádfürdőn első ízben szakképzés formájában az a konferenciasorozat, mely később a térség műemlékvédelmi tudományos életének meghatározó szakmai fóruma lett.[7] Ha a Tusnád-jelenségről beszélünk, SZABÓ Bálint neve mellett BENCZÉDI Sándor (1952–2024)[8] szerepét azonos hangsúllyal szükséges megemlítenünk, nemcsak egymást kiegészítő habitusuk (SZABÓ Bálint az átfogó kép, a szintézis, BENCZÉDI Sándor a részletek, az analízis embere), de

RIGÓ, István ANTAL and István NAGY, who were university and/ or former work colleagues of Bálint SZABÓ. Among the organizers in the early period, in addition to the Transylvanian Museum Association's Building and Construction Group, we have to mention the Faculty of Architecture of the Technical University in Cluj and the National Committees of the ICOMOS in Romania, Hungary and Germany.

8 Sándor BENCZÉDI architect, construction engineer in the field of monument protection was, starting with 1992, the vice-president of the organizing committee of the series of professional conference marked with the brand: Tusnad. He was the programme coordinator of Keöpeczi Sebestyén József Society for Monument Protection, the member of the Romanian and Hungarian National Committees of the ICOMOS, and of the ECOVAST. He was the founding member and later the vice president of the Transylvania Trust Foundation and of the Society of the Transylvanian Monument Restorers. He was continuously teaching, lecturing diploma works from 1998 at the postgraduate academic program regarding monument protection in Cluj, started by the Babeş–Bolyai University and the Transylvania Trust Foundation.

His awarded works are the restoration of the Church on the Hill in Sighişoara which was granted with the Europa Nostra and the Grigore Ionescu-Awards, and the restoration of the Stag House in Sighişoara which was granted with the Nicolae Ghica-Budeşti Award. His oeuvre was awarded in 2001 by the Hungarian National Heritage Ministry with the Schönvisner István Award. In 2013 he got the professional award of the Kelemen Lajos Society for Monument Protection, and in 2013 the Orbán Balázs Prize for his monument protection activities in the Székely Land, granted by the Keöpeczi Sebestyén József Society for Monument Protection.

Printre organizatorii perioadei iniţiale, pe lângă Grupul de Construcţii al Asociaţiei Muzeelor Transilvane, este de menţionat Departamentul de Arhitectură al Universităţii Tehnice din Cluj, precum şi Comitetele Naţionale ICOMOS ale celor trei ţări: România, Ungaria şi Germania.

8 Sándor BENCZÉDI, arhitect specializat în conservarea monumentelor istorice, a fost vicepreşedintele comitetului de organizare al seriei de conferinţe internaţionale Tuşnad. A fost coordonator de programe al Asociaţiei de Protecţie a Monumentelor „Keöpeczi Sebestyén József", membru al Comitetelor Naţionale ICOMOS din România şi Ungaria, precum şi a ECOVAST. A fost membru fondator şi vicepreşedinte al Fundaţiei Transylvania Trust precum şi al Asociaţiei Restauratorilor de Monumente Istorice din Transilvania. A ţinut cursuri şi a coordonat lucrări de absolvire în mod permanent din anul 1998 la cursurile postuniversitare de protecţie a monumentelor organizate la Cluj.

Lucrările sale onorate şi cu premii internaţionale sunt: restaurarea Bisericii din Deal din Sighişoara, distins cu premiul „Europa Nostra" respectiv premiul „Grigore Ionescu", şi restaurarea Casei cu Cerb din Sighişoara, onorat cu premiul „Nicolae Ghica-Budeşti". Activitatea sa a fost recunoscut cu premiul „Schönvisner István" de către Ministerul Patrimoniului Naţional Maghiar în anul 2001. În anul 2013 a fost laureat cu premiul profesional de la Societatea de Protecţia a Monumentelor „Kelemen Lajos", precum şi cu premiul „Orbán Balázs", acordat de către Societatea „Keöpeczi Sebestyén József" Pentru Protecţia Monumentelor, pentru activitatea sa de protecţie a monumentelor din Ţinutul Secuiesc.

9 La început, s-a numit *Teoria şi practica protecţiei monumentelor istorice*, apoi, din 2000, *Teoria şi practica reabilitării*

6 Elsősorban a sepsiszentgyörgyi Keöpeczi Sebestyén József Műemlékvédő Társaságot szükséges kiemelni.

7 A gyorstanfolyamként induló konferenciasorozat kezdeti szervezési munkájában több szervezet és magánszemély vett részt, elsősorban BENCZÉDI Sándor, aki kulcsszerepet játszott a tartalmi koncepció kialakításában, továbbá HLAVATHY Károly és Izabella, PÁL Antal és PÉTER Hajnal, akik a konferenciasorozatot akkoriban támogató háromszéki építőipari cégek munkatársai voltak, melyek vezetői, többek között, TULIT Attila, RIGÓ László, ANTAL István és NAGY István, SZABÓ Bálint egyetemi és/vagy egykori munkatársai voltak. A kezdeti időszak szervezői között az Erdélyi Múzeum-Egyesület Építő-Szerelő Csoportja mellett a Kolozsvári Műszaki Egyetemet, valamint három ország: Románia, Magyarország, Németország ICOMOS Nemzeti Bizottságait szükséges megemlíteni.

8 BENCZÉDI Sándor építész, műemlékvédelmi szakmérnök 1992-től szervezőbizottsági alelnöke a szakmai rendezvénysorozatnak. Programkoordinátora volt a Keöpeczi Sebestyén József Műemlékvédelmi Egyesületnek, tagja a Román és a Magyar ICOMOS Nemzeti Bizottságoknak, valamint az ECOVAST-nak. Alapító tagja, majd alelnöke volt a Transylvania Trust Alapítványnak és az Erdélyi Műemlék-restaurátorok Egyesületének. A Babeş–Bolyai Tudományegyetem és a Transylvania Trust Alapítvány által közösen szervezett kolozsvári műemlékvédelmi posztgraduális képzésen 1998-tól folyamatosan előadásokat tartott, szakdolgozatokat vezetett.

Díjakkal is elismert munkái az Europa Nostra nagydíjjal és Grigore Ionescu-díjjal kitüntetett segesvári Hegyi templom, valamint a Nicolae Ghica-Budeşti-díjas, szintén segesvári Szarvas-ház helyreállítása. Munkásságát 2001-ben a Nemzeti Kulturális Örökség Minisztériuma Schönvisner István-díjjal tüntette ki. 2013-ben a Kelemen Lajos Műemlékvédelmi Társaság szakmai díját, majd szintén 2013-ban a Keöpeczi Sebestyén József Műemlékvédelmi Társaság székelyföldi műemlékvédelmi tevékenységéért az Orbán Balázs-díjat vehette át.

the Tusnad conference series ensured the proper resource for expertise.[9] The initial impetus was given by the euphoric spirit installed following the regime change and nourished by transborder professional and cultural (re)connections, both on national and international levels. Many factors contributed to the success of this initiative. First of all, the event addressed each specific field of built heritage protection. It served the intercultural and interethnic dialogue. In this respect it is an important fact that the conference series ensured the possibility for central bodies of heritage protection to enlarge their international network, and to become familiar with the expert knowledge and experience available, first in Hungary, then more and more extensively in Europe. At the same time, the conference series put a great emphasis on the engagement of young people (at the beginning of their professional career, but also university students), and on the continuous training and enlargement of the range of professionals.

Already at its beginning, the event tried to grasp the pulse and trends in the field. The choice of topics took into consideration, besides the Romanian context, the international directions of the profession.[10] Like the overall orga-

pentru asigurarea profesionalismului în ceea ce priveşte reorganizarea protecţiei monumentelor istorice. Elanul iniţial a rezultat din atmosfera euforică a regăsirilor profesionale şi culturale transfrontaliere, naţionale şi internaţionale, după schimbarea regimului. Mai mulţi factori importanţi au contribuit la succesul iniţiativei. În primul rând evenimentul a abordat toate domeniile protecţiei patrimoniului. Poate un rezultat şi mai semnificativ a fost pornirea unui dialog între specialiştii majoritari şi minoritari din ţară, adică etatizarea (la acea vreme în primul rând la nivel de intenţii şi obiective) grupului entuziast de specialişti maghiari, care dorea să devină partener egal al organizaţiilor centrale în renaşterea activităţilor profesionale din domeniu. În acest sens, o circumstanţă esenţială a fost că acest forum a asigurat atunci pentru organizaţiile centrale de stat ale protecţiei monumentelor istorice extinderea accentuată a contactelor şi relaţiilor internaţionale, în privinţa înţelegerii reciproce a cunoştinţelor şi experienţelor profesionale, în primul rând cu Ungaria, mai târziu şi cu alte ţări europene. Totodată, seria de conferinţe a pus mare accent pe implicarea tinerilor (proaspăt absolvenţi, dar şi studenţi), respectiv pe formarea continuă şi extinderea grupului profesioniştilor.

Evenimentul, deja din primii ani, s-a străduit să intercepteze pulsul proceselor profesionale. Pe lângă adaptarea la realitatea românească, alegerea temelor a luat în considerare şi tendinţele internaţionale ale profesiei.[10]

szakmai kapcsolatuk, illetve barátságuk révén tudták megkerülhetetlenné emelni a rendezvénysorozatot a Kárpát-medencében.

A képzés indításával szinte párhuzamosan egy szakosodott tervezőiroda megnyitását is kezdeményezte, de talán ma már kijelenthetjük, hogy a műemlékvédelem szervezeti újjáépítése terén a megfelelő táptalajt, a szakmaiság biztosítását a Tusnád nemzetközi konferenciasorozat adta[9]. A kezdeti lendületet a rendszerváltás utáni euforikus, határokon átívelő nemzeti és nemzetközi szakmai és kulturális egymásra találások hangulata teremtette meg. A kezdeményezés sikeréhez több fontos körülmény is hozzájárult. Kiemelt fontossággal bírt, hogy a rendezvény a műemlékvédelem valamennyi szakterületét megszólította. Talán ennél is jelentősebb eredmény, hogy párbeszédet teremtett a hazai többségi és kisebbségi szakemberek között, azaz tematizálta, hogy létezik (igaz, ekkor elsősorban szándék és célkitűzések szintjén) egy erős, lelkes, erdélyi magyar műemlékvédelmi szakembercsoport, mely az akkor még szintén formálódó, újjászülető központi műemlékvédelem egyenrangú partnere kívánt lenni. Ilyen vonatkozásban fontos körülmény, hogy e fórum hangsúlyosan biztosította akkor a központi műemlékvédelmi állami szervezetek számára is a nemzetközi kapcsolatrendszer bővítését, kezdetben elsősorban a magyarországi, majd később az egyre szélesedő európai szakmai tudás és tapasztalat megismerését. A konferenciasorozat ugyanakkor nagy hangsúlyt helyezett a fiatalok (pályakezdők, valamint egyetemisták) bevonására, a szak-

9 Initially it was called *Conference Series on Theoretical and Practical Issues of Monument Conservation* (then, from 2000, *Conference Series on Theoretical and Practical Issues on Built Heritage Conservation*), until the event of *Tusnad 30,* organized in 2022. The secretary of the organizing committee, then program coordinator was Dorottya MAKAY, for 8 years (1995–2003), then (from 2003), for more than 20 years Imola KIRIZSÁN, coordinating an organizer team of varying composition; between 1997 and 2005 the economic management was ensured by Csilla HEGEDÜS.

10 Between 1993 and 1994: general topics; 1995: *The Change of Attitude towards Monument Protection from the Venice Charter to Present*, 1996: *Castles and Mansions from Eastern Europe*, 1997: *Ecclesiastical Built Heritage Conservation*; 1998: *Historic Towns*, 1999: *Vernacular Architecture*. The 2000 and 2001 editions aimed at awareness raising, through the following topics: *Built Heritage and Society*, and *Integrated Protection of the Built Heritage. 2003: Historic Building Conservation – Compatibility Issues,* 2005: *Realistic Approach to Built Heritage*, 2007: *Global Protection of Histor-*

patrimoniului construit, până la evenimentul *Tuşnad 30* organizat în 2022. Secretarul şi managerul de program al comitetului de organizare al seriei de conferinţe, a fost Dorottya MAKAY timp de 8 ani (1995–2003), apoi (din 2003) mai bine de 20 de ani Imola KIRIZSÁN. Ele au condus echipe de personal organizatoric cu compoziţie variabilă, managementul economic între 1997 şi 2005 fiind condus de Csilla HEGEDÜS.

10 1993–1994 tematică generală, 1995: *Evoluţia abordării protecţiei monumentelor istorice de la Carta din Veneţia până în noul mileniu*, 1996: *Soarta castelelor în Europa Centrală şi de Est*, 1997: *Patrimoniul arhitectural eclesiastic,* 1998: *Protecţia oraşelor istorice,* 1999: *Patrimoniul arhitectural vernacular,* 2000–2001

9 Kezdetben a *Műemlékvédelem elméleti és gyakorlati kérdései* (majd 2000-től az *Épített örökség elméleti és gyakorlati kérdései*) megnevezést viselte, a 2022-ben megszervezett *Tusnád 30* eseményig. A konferenciasorozat szervezőbizottságának titkára, majd programvezetője kezdetben nyolc évig (1995–2003) MAKAY Dorottya, majd immár több mint húsz éve (2003-tól) KIRIZSÁN Imola, változó összetételű szervezői és lebonyolító csapatot vezetve. A gazdasági irányítást 1997 és 2005 között HEGEDÜS Csilla vezette.

nisation, the configuration of the complex and expansive theoretical framework of the topics was the result of a teamwork, in which many domestic and foreign professionals took part.[11] Most of the conferences were concluded with the formulation of recommendations, among which many are even today referenced on an international level. The conferences ensured that speakers could deliver their lectures in four languages thanks to translation, in the name of the multicultural character of Transylvania; thus, besides Romanian and Hungarian, German translation was also ensured, and of course for the sake of the international character, English as well. At the beginning, plenary sessions were held, but the increasing number of lectures started to prolong into the hours after dinner as well. The four- or five-days long conference included field trips, exhibitions, then roundtable discussions and workshops. From 1997, in two parallel sections, even more than a hundred lectures were delivered, which were published in volumes, until 1998 issued after, since 1999 published preliminary to the event. In quantitative terms, the series reached its peak in 1998, when the number of participants was over 300, representing more than a dozen countries. After the turn of the millennium, when the negotiations for the integration of Romania into the EU were launched, and when EU funding programmes for the conservation of built heritage were started after 2007, many more investments of larger scale

ical Towns, 2009: *The Vernacular and the Multicultural Dialogue*, 2011: *Fortresses Once Again in Use*, 2013: *Contemporary Conveniences in Historic Buildings*, 2014: *Contemporary Management for Built Heritage Protection*, 2016: *Reconstruction of Monuments and Sites*, 2018: *Trends and Tendencies*, 2022: *Sustainability of the Cultural Heritage*.

11 Here is a non-exhaustive list: Ádám ARNÓTH, Iván BALASSA M., Károly BUGÁR-MÉSZÁROS, Miklós CSERI, Peter DERER, Tamás FEJÉRDY, János GYURKÓ, Călin HOINĂRESCU, Miklós HORLER, Gyula ISTVÁNFI, András KOVÁCS, Cristoph MACHAT, Zsolt MÁTHÉ, Ferenc MENDELE, Sergiu NISTOR, Tamás PINTÉR, Radu POPA, Mihály RÁDAY, András ROMÁN, György SEBESTYÉN, József SEBESTYÉN, Béla SISA, Sanda VOICULESCU, Gábor WINKLER, Mihály ZÁDOR.

Ca şi în cazul organizării conferinţei în ansamblu, dezvoltarea sistemului ideologic amplu şi complex al temelor a însemnat desigur un efort de echipă, în care şi-au adus contribuţia mulţi specialişti din ţară şi străinătate.[11] Un număr semnificativ de conferinţe s-au încheiat cu formularea recomandărilor, dintre care unele încă reprezintă şi azi puncte de referinţă la nivel internaţional. În numele multiculturalismului transilvănean, cu ajutorul traducerii simultane, seria de conferinţe a oferit pe o lungă perioadă de timp o ocazie de vorbire a lectorilor în patru limbi. Pe lângă limbile română şi maghiară, s-a menţinut şi traducerea în germană, comunicarea fluidă internaţională fiind asigurată desigur prin limba engleză. Iniţial, sesiunile au fost plenare, dar numărul tot mai mare a prelegerilor a ajuns să extindă programul şi după cină, până târziu. Seria de prelegeri de patru până la cinci zile a fost completată iniţial cu una sau două zile de excursii de studiu, expoziţii, apoi mese rotunde şi ateliere de lucru (workshop). Începând din 1997, în două secţiuni paralele, au fost susţinute mai bine de o sută de prelegeri, dintre care câteva zeci au fost publicate ulterior în volum până în 1998, iar apoi din 1999 volumul cu prelegeri apărea deja la

cu scopul sensibilizării societăţii, întâi *Patrimoniul construit şi societatea*, apoi *Protecţia integrată a patrimoniului construit*, 2003: *Reabilitarea clădirilor istorice – probleme de compatibilitate*, 2005: *Incursiune în realităţile reabilitării patrimoniului construit*, 2007: *Protecţia globală a oraşelor istorice*, 2009: *Arhitectura vernaculară în regiuni multiculturale*, 2011: *Fortificaţii cu folosinţă actualizată*, 2013: *Confort contemporan în clădiri istorice*, 2014: *Managementul contemporan al protecţiei patrimoniului*, 2016: *Reconstrucţia monumentelor şi siturilor istorice*, 2018: *Trenduri şi tendinţe*, 2022: *Sustenabilitatea patrimoniului cultural*.

11 Iată câteva nume, fără pretenţia exhaustivităţii: Ádám ARNÓTH, Iván BALASSA M., Károly BUGÁR-MÉSZÁROS, Miklós CSERI, Peter DERER, Tamás FEJÉRDY, János GYURKÓ, Călin HOINĂRESCU, Miklós HORLER, Gyula ISTVÁNFI, András KOVÁCS, Christoph MACHAT, Zsolt MÁTHÉ, Ferenc MENDELE, Sergiu NISTOR, Tamás PINTÉR, Radu POPA, Mihály RÁDAY, András ROMÁN, György SEBESTYÉN, József SEBESTYÉN, Béla SISA, Sanda VOICULESCU, Gábor WINKLER, Mihály ZÁDOR.

embergárda folyamatos képzésére, szélesítésére.

A rendezvény már kezdeti éveiben is igyekezett a szakmai folyamatok pulzusát megragadni. A témaválasztás a romániai valósághoz való alkalmazkodás mellett a szakma nemzetközi irányvonalait is szem előtt kívánta tartani.[10] Ahogy a konferenciák szervezésének egésze, úgy a tematikák bonyolult és szerteágazó eszmerendszerének kialakítása is természetesen csapatmunka volt, melyben fontos szerepet vállalt számos hazai és külhoni szakember.[11] Számos konferencia ajánlások megfogalmazásával zárult, melyek közül nem egy ma is nemzetközi szintű hivatkozási alap. A konferenciasorozat szinkronfordítás segítségével sokáig négy nyelven biztosított megszólalási lehetőséget, az erdélyi multikulturalizmus nevében fenntartva a román és magyar nyelv mellett a német fordítást is, az angol nyelv pedig természetesen a nemzetközi véráramhoz való kapcsolódást jelentette. Az ülések kezdetben plenárisak voltak, de az egyre több előadás már

10 1993–1994: általános témák, 1995: *A műemlékvédelmi szemlélet alakulása a Velencei Chartától napjainkig*, 1996: *Kastélysors Kelet-Közép-Európában*, 1997: *Egyházi építészeti örökség*, 1998: *Történeti városok védelme*, 1999: *Népi építészeti örökség*, 2000–2001: a társadalom érzékenyítését célzó témák, először *Épített örökség és társadalom*, majd *Az épített örökség integrált védelme, 2003: Történeti épületek felújításának kompatibilitás kérdései*, 2005: *Az épített örökség felújításának sokszínű valóságos arca*, 2007: *Történeti városok átfogó védelme*, 2009: *Többnemzetiségű régiók népi építészete*, 2011: *Várak, erődítések újra használatban*, 2013: *Kortárs komfort történeti épületekben*, 2014: *Az építettörökség-védelem kortárs menedzsmentje*, 2016: *A műemlékek és műemléki helyszínek rekonstrukciója*, 2018: *Trendek és tendenciák*, 2022: *A kulturális örökség fenntarthatósága*.

11 A teljesség igénye nélkül: ARNÓTH Ádám, BALASSA M. Iván, BUGÁR-MÉSZÁROS Károly, CSERI Miklós, DERER Peter, FEJÉRDY Tamás, GYURKÓ János, HOINĂRESCU Călin, HORLER Miklós, ISTVÁNFI Gyula, KOVÁCS András, MACHAT Cristoph, MÁTHÉ Zsolt, MENDELE Ferenc, NISTOR Sergiu, PINTÉR Tamás, POPA Radu, RÁDAY Mihály, ROMÁN András, SEBESTYÉN György, SEBESTYÉN József, SISA Béla, VOICULESCU Sanda, WINKLER Gábor, ZÁDOR Mihály.

in conservation became available. Due to the accelerating pace of life and the many engagements of the professionals, the conference series changed as well, as they became shorter, they were organised in new locations, and biannually.[12]

The Tusnad conference series was a project which aimed to embrace the multi-disciplinarity of heritage conservation. Bálint SZABÓ, being also a structural engineer, formulated the need for the targeted presentation of the results of his specific field, the conservation of historic load-bearing structures. The Historic Load-bearing Structures Conference Series, launched with this aim in 1997, and similar in many aspects to the Tusnad conference series, but on a smaller scale, was organized in Cluj, initially annually, later biannually.[13]

The diversity of the topics, the significance of the invited co-organizing[14]

12 2005 Baia Mare, 2007 Sibiu, 2009 Rimetea and Colţeşti, 2011 Alba Iulia and Şimleu Silvaniei, 2013 Bistriţa. The latest editions took place in Cluj (2014, 2016, 2018 and 2022).

13 In this case too, the first two editions of 1997 and 1998 proposed general topics, while the subsequent editions focused on special issues. 1999: *Historic Roof Structures*, 2000: *Historic Slab Structures*, 2001: *Historic Masonry Structures*, 2002: *Durability of Historic Structures*, 2003: *Historic Structures and Disasters*, 2004: *Heritage Values of Historic Structures*, 2005: *Traditional and Innovative Materials and Techniques in the Conservation of Historic Structures*, 2006: *The Safety of Historic Load-Bearing Structures*, 2007: *Emergency Interventions on Load-bearing Structures*, 2008: *Historic Timber Structures*, 2010: *Historic Load-bearing Structures in Ruins – Fortress Engineering*, 2012: *Historic Load-bearing Structures and the Society*, 2013: *Exceptional Historic Load-bearing Structures, Exceptional Interventions on Historic Load-bearing Structures*, 2015: *Applicability of Technical Regulations*, 2017: *Protection of Historic Load-bearing Structures against Disasters*, 2019: *Quality in restoration*.

14 The first editions were organized within the Building-installing Group of the Transylvanian Museum Society. At the beginning the permanent organizers were the Transylvania Trust Foundation (1996), the Society of Monument Restorers of Transylvania (1997) and the Keöpeczi Sebestyén József Society for Monument Protection, later the Transsylvania Nostra Foundation (2007), the first two and the latter being civil and social professional organizations established at the initiative of Bálint SZABÓ.

deschiderea conferinţei. Seria de conferinţe şi-a atins apogeul în 1998, când numărul participanţilor a depăşit 300 de persoane, iar numărul ţărilor reprezentate a depăşit 12. De la începutul mileniului, odată cu demararea programelor de preaderare ale României la Uniunea Europeană, şi ca urmare a proiectelor de finanţare UE din 2007 iniţiate în domeniul restaurării patrimoniului construit, au devenit posibile mai multe investiţii ample de reabilitare. Accelerarea generală a vieţii şi suprasolicitarea specialiştilor au avut ca rezultat schimbări şi în cadrul seriei de conferinţe, noua cale însemnând locaţii noi[12] şi întâlniri organizate la doi ani, cu o durată mai scurtă.

Seria de conferinţe Tuşnad etala deplina pluridisciplinaritate a protecţiei monumentelor istorice. Pretenţia concentrării asupra unui domeniu de specialitate mai restrâns, şi anume a structurilor portante istorice, descrierea şi prezentarea rezultatelor acestuia, a fost formulată cu pasiunea şi dedicarea inginerului proiectant de structuri, Bálint SZABÓ. Astfel, în 1997 a fost demarată seria de conferinţe *Structuri portante istorice*, în mod asemănător cu cea de la Tuşnad, dar la o scară mai redusă, la Cluj, iniţial anual, apoi bienal.[13]

12 2005 Baia Mare, 2007 Sibiu, 2009 Rimetea-Colţeşti, 2011 Alba Iulia şi Şimleul Silvaniei, 2013 Bistriţa. În continuare evenimentele s-au desfăşurat la Cluj (2014, 2016, 2018 şi 2022).

13 Şi în acest caz ediţiile din 1997 şi 1998 au avut tematică generală, urmate de conferinţe cu teme restrânse pe un anumit domeniu: 1999: *Şarpante istorice*, 2000: *Structuri de planşee istorice*, 2001: *Structuri portante istorice de zidărie*, 2002: *Durabilitatea structurilor portante istorice*, 2003: *Structuri portante istorice şi calamităţi*, 2004: *Moştenirea structurilor portante istorice – Istoria structurilor portante*, 2005: *Tehnici tradiţionale şi inovatoare în reabilitarea structurilor portante istorice*, 2006: *Siguranţa structurilor portante istorice*, 2007: *Intervenţii de primă necesitate la structuri portante istorice*, 2008: *Structuri istorice din lemn*, 2010: *Structuri portante istorice în ruine – Ingineria fortificaţiilor*, 2012: *Structurile portante istorice şi societatea*, 2013: *Structuri portante istorice speciale. Intervenţii speciale*, 2015: *Aplicabilitatea reglementărilor tehnice*, 2017: *Protecţia structurilor portante istorice în situaţii de urgenţă*, 2019: *Calitatea în restaurare*.

a vacsora utáni órákat is kitöltötte. A négy-öt napnyi előadás-sorozat kezdetben egy-, majd kétnapnyi szakmai kirándulással, kiállításokkal, majd kerekasztal-beszélgetésekkel és műhelyfoglalkozásokkal bővült. 1997-től két párhuzamosan zajló szekcióban akár százat is meghaladó előadás hangzott el, ezekből több tucat 1998-ig utókötet, majd 1999-től előkötet formájában jelent meg. A konferenciasorozat számokban 1998-ban érte el csúcsát, amikor a 300-at is meghaladta a résztvevők és tucatot a képviselt országok száma. Az ezredforduló után, Románia európai uniós előcsatlakozási programjainak beindulásával, majd 2007-től az épített örökség helyreállítása terén beindult EU-s finanszírozási projektek hatására sokkal több és nagyobb helyreállítási beruházás vált lehetővé. Az általánosan felgyorsuló élet, a szakemberek elfoglaltsága hatására a konferenciasorozat is változott: rövidebb időtartamban, új helyszíneken, kétévente szervezett találkozások jelentették az új utat.[12]

A Tusnád konferenciasorozat a műemlékvédelem teljes pluridiszciplinaritását zászlójára tűző rendezvény volt. SZABÓ Bálint tartószerkezet-tervező mérnöki lelkében megfogalmazódott az igény ezen szűkebb szakterület, a történeti tartószerkezettan eredményeinek fókuszált ismertetésére, bemutatására. Az e célból 1997-ben indított, a Tusnádhoz sokban hasonlító, ám kisebb léptékű Történeti Tartószerkezetek konferenciasorozatot kezdetben évente, majd kétévente rendezték meg Kolozsváron.[13]

12 2005: Nagybánya, 2007: Nagyszeben, 2009: Torockó–Torockószentgyörgy, 2011: Gyulafehérvár és Szilágysomlyó, 2013: Beszterce. Ezt követően a rendezvényekre Kolozsváron került sor (2014, 2016, 2018, 2022).

13 Ebben az esetben is az első két konferencia, 1997-ben és 1998-ban, általános tematikákkal foglalkozott, majd itt is egy-egy kérdéskör került nagyító alá. 1999: *A történeti fedélszerkezetek*, 2000: *A történeti födémszerkezetek*, 2001: *A falazott történeti tartószerkezetek*, 2002: *A történeti tartószerkezetek időtállósága*, 2003: A *történeti tartószerkezetek és a katasztrófák*, 2004: *A történeti tartószerkezetek öröksége*, 2005: *Hagyományos és innovatív technikák a történeti szerkezetek helyreállításában*, 2006: *A történeti tartószerkezetek*

bodies,[15] the gradual consolidation both in content and perspective of these two event-series reflect well the mentality of Bálint SZABÓ, aimed at synthetizing, comprehending the full picture, involving each actor, and ensuring that results are made available for the larger public. This mentality is the main asset of his heritage.

The Utilitas

■ Nearly at the same time when the course in built heritage conservation was launched, in December 1991, Bálint SZABÓ established Utilitas Ltd., a company engaged in the design of load-bearing structures at the beginning, later in built heritage conservation in general. The name of the design studio refers to one of the three requirements of buildings as stated by the Roman engineer and architect VITRUVIUS: *Utilitas, Firmitas, Venustas*[16] (VITRUVIUS 1988:38). The first principle, Utilitas refers to the utility and convenience of buildings, thus for the founder, utility became the guiding principle of the new company.

In Bálint SZABÓ's view, research, planning, teaching, and scientific work were inextricably linked vocations. He always selected colleagues who felt dedicated to the cause of built heritage conservation, thus, following the initial period of quest, within a few years the enterprise got almost entirely engaged in serving the conservation of the built heritage, up until the present, during the 33 years of its existence. The company set off modestly, initially consisting of three persons.[17] In the beginning

15 The Romanian, Hungarian and German ICOMOS National Committees should be mentioned as associate organisations, along with the ICOMOS International Committee of Historic Towns in 1998 and the Szentendre Open Air Ethnographic Museum (Hungary) in 1999.

16 See: VITRUVIUS, Marcus Pollio, *Ten Books on Architecture*. I.3.2. Hungarian edition: Képzőművészeti Publisher, 1988, Budapest.

17 These were Éva EKE, Annamária HALÁSZ, Ilona NAGY, then Mária KÓSA and the newly graduated colleagues joined: Attila CSURKA, Árpád FURU, Imola KIRIZSÁN, Ádám MAKSAY and in the third wave Dorottya MAKAY, Judit MÁRTON, Zsolt NAGY, Emese OLOSZ as well.

Diversitatea subiectelor, reprezentativitatea organizatorilor[14] şi a organizaţiilor partenere[15] invitate, consolidarea treptată a conţinutului şi perspectivei celor două evenimente reflectă concepţia lui Bálint SZABÓ bazată pe sinteză amplă, dorind să pătrundă imaginea globală, să implice toţi actorii, să disemineze rezultatele. Această viziune a rămas cel mai important pilon al moştenirii sale.

Utilitas

■ Aproape concomitent cu organizarea cursului de protecţia monumentelor istorice, în decembrie 1991, Bálint SZABÓ a înfiinţat o firmă cu numele Utilitas srl, care iniţial se ocupa de structuri portante, iar ulterior de proiectarea generală a restaurării monumentelor istorice. Denumirea biroului de proiectare a fost împrumutată din antichitate, de la VITRUVIU, inginer şi arhitect roman, care a stabilit cele trei cerinţe care trebuie respectate de o construcţie: *Utilitas, Firmitas, Venustas*[16] (VITRUVIUS 1988:38). Primul principiu, Utilitas, se referă la utilizarea, utilitatea clădirii, din punctul de vedere al fondatorului, principiul de bază al noii firme era utilitatea.

În viziunea lui Bálint SZABÓ, cercetarea, proiectarea, educaţia, activitatea ştiinţifică sunt vocaţii care se împletesc şi sunt inseparabile. Totdeauna îşi alegea angajaţii astfel încât aceştia să susţină cu profesionalism

14 Primele evenimente au fost organizate în cadrul Grupului de construcţii-instalaţii al Asociaţiei Muzeului Ardelean. Organizatorii permanenţi iniţial au fost Fundaţia Transylvania Trust (1996), Asociaţia Restauratorilor de Monumente Istorice din Transilvania (1997) şi Societatea „Keöpeczi Sebestyén József" pentru Protecţia Monumentelor, apoi Fundaţia Transsylvania Nostra (2007), primele două şi cea din urmă sunt organizaţii civile profesionale iniţiate de Balint SZABÓ.

15 Ca şi co-organizatori trebuie să menţionăm comisiile ICOMOS din România, Ungaria şi Germania, iar pe lângă ei în 1998 Comisia Internaţională a Oraşelor Istorice ICOMOS, iar în 1999 Muzeul Etnografic în aer liber din Szentendre (Ungaria).

16 Vezi: VITRUVIUS, Marcus Pollio, *Zece cărţi de arhitectură*. I.3.2. Ed. în limba maghiară: Editura Képzőművészeti, 1988, Budapesta.

A témák sokszínűsége, a meghívott szervező,[14] társszervezetek reprezentativitása[15], a két rendezvény fokozatos tartalmi és perspektívabeli erősödése SZABÓ Bálint szélesen szintetizáló, a teljes képet átlátni, minden szereplőt bevonni, az eredményeket közkinccsé tenni kívánó szemléletét tükrözi. Ez a szemlélet máig öröksége legfontosabb pillérét képezi.

Az Utilitas

■ A műemlékvédelmi tanfolyam szervezésével szinte egy időben, 1991 decemberében Utilitas Kft. néven alapított SZABÓ Bálint a kezdetben inkább tartószerkezeti, később általános, műemlékhelyreállítás-tervezéssel foglalkozó céget. A tervezőiroda megnevezésére az ókori római mérnök-építész, VITRUVIUS által az építésben követendő három követelmény: *Utilitas, Firmitas, Venustas*[16] egyikét kölcsönözte (VITRUVIUS 1988:38). Az első alapelv, az *Utilitas*, az épületek hasznosságára vagy használhatóságára utal, tehát a hasznosság vált az alapító szempontjából az új cég vezérelvévé.

biztonsága, 2007: *Gyors beavatkozások történeti tartószerkezetek esetében*, 2008: *Történeti faszerkezetek*, 2010: *Romos történeti tartószerkezetek – Erődítések műszaki vonatkozásai*, 2012: *Történeti tartószerkezetek védelme és a társadalom*, 2013: *Rendhagyó történeti tartószerkezetek. Rendhagyó beavatkozások*, 2015: *Műszaki előírások alkalmazhatósága*, 2017: *Történeti tartószerkezetek védelme katasztrófahelyzetekben*, 2019: *Minőség a restaurálásban*.

14 Az első rendezvényeket az Erdélyi Múzeum-Egyesület Építő-szerelő Csoportja keretében szervezték meg. Az állandó szervezők kezdetben a Transylvania Trust Alapítvány (1996), az Erdélyi Műemlék-restaurátorok Egyesülete (1997) és a Keöpeczi Sebestyén József Műemlékvédő Társaság, majd a Transsylvania Nostra Alapítvány (2007), az első kettő és az utóbbi SZABÓ Bálint kezdeményezésére életre hívott civil-társadalmi szakmai szervezetek.

15 Társszervezetekként meg kell említenünk a román, magyar és német ICOMOS Nemzeti Bizottságokat, mellettük 1998-ban az ICOMOS Történeti Városok Nemzetközi Szakbizottsága, 1999-ben a Szentendrei Szabadtéri Néprajzi Múzeum is fontos szerepet vállalt.

16 Lásd: VITRUVIUS, Marcus Pollio, 1988: Tíz könyv az építészetről. I.3.2. Képzőművészeti Kiadó, Budapest.

the employees worked from home and met only in field trips and work meetings. Since at that time there was no demand for historic building protection, the modest incomes allowed only for a slow infrastructure development, and the structural engineers and architects working at the company were motivated not only by the salary, but the sense of dedication, the fact that they could fulfil a mission that a few years before was on a list of prohibitions, and the fact that they could work on safeguarding our built heritage previously destined to perdition. The young structural engineers were also encouraged by the international dimension of their work created in fact also through their involvement, by the fellowship opportunities, the possibility to continue their studies in Hungary, Slovakia, England, The Netherlands, North America, to deepen their knowledge in specialist areas. Built heritage conservation appeared to be the most attractive adventure a young structural engineer could imagine for their career at the time.

The gradual growth in infrastructure and staff brought along the undertaking of larger and more attractive projects. The Lutheran church in Bistriţa, the Bethlen Gábor High School, then the Reformed church in Aiud, the Bocskai house, the Unitarian church and the János Zsigmond Unitarian High School (the former alma mater of Bálint SZABÓ) in Cluj, the Károlyi castle in Carei, the Báthory fortress in Şimleu Silvaniei, or the Reformed church in Dej, the Apor palace in Alba Iulia, the Virgin Mary Roman Catholic Church (also known as the Calvary Church) of Cluj, honoured in 1998 with the Europa Nostra Award, or the iconic mediaeval buildings in the main square of Baia Mare are just a few among the most significant challenges. Throughout the years, over 400 contracts were signed, this meant more than 100 completed construction works, and 179 expert assessments on load-bearing structures.

During the more than thirty-years-long period, he trained generations of

cauza protecţiei monumentelor istorice, iar după primii ani de căutări, a pus întreg biroul în slujba protecţiei patrimoniului construit, dăinuind aşa în cei 33 de ani de existenţă. Începutul modest a fost cu doar trei angajaţi, urmat de creşterea lentă a numărului acestora.[17] În prima perioadă, se lucra de acasă, iar colegii se întâlneau doar la şedinţe de lucru şi la deplasări pe teren. Având în vedere că la acea vreme nu exista încă piaţă pentru restaurarea monumentelor istorice, dezvoltarea a fost lentă, iar din cauza veniturilor modeste, inginerii şi arhitecţii care lucrau aici erau motivaţi nu de salariu, ci de simţul profesionalismului, de faptul că puteau realiza o misiune care cu câţiva ani în urmă se afla pe lista neagră politică. Acum se putea lucra pentru salvarea patrimoniului arhitectural, care anterior fusese condamnat la dispariţie. Tinerii ingineri au fost încurajaţi şi de reţeaua internaţională de contacte pe care Bálint SZABÓ a dezvoltat-o prin munca sa, oportunităţi de burse, posibilitate de continuare a studiilor şi de specializare în Ungaria, Slovacia, Anglia, Olanda şi America de Nord. Protecţia monumentelor istorice părea a fi pentru cei implicaţi cea mai atractivă aventură.

Creşterea treptată a infrastructurii şi a personalului a dus la asumarea unor proiecte mai ample, mai atractive. Biserica Evanghelică din Bistriţa, Colegiul „Bethlen Gábor” şi biserica fortificată din Aiud, Casa „Bocskai” din Cluj, Biserica Unitariană Centrală şi Colegiul Unitarian „János Zsigmond”, fosta Alma Mater a lui Bálint SZABÓ, Castelul „Károlyi” din Carei, Cetatea „Báthory” din Şimleul Silvaniei sau Biserica Reformată din Dej, Palatul „Apor” din Alba Iulia, Biserica Calvaria Cluj-Mănăştur, distinsă în 1998 cu Premiul Europa Nostra, sau clădirile medievale emblematice ale pieţei centrale din Baia Mare sunt doar câteva dintre marile provocări.

17 La început au colaborat Éva EKE, Annamária HALÁSZ, Ilona NAGY, la care s-au alăturat Mária KÓSA, şi inginerii proaspăt absolvenţi: Attila CSURKA, Árpád FURU, Imola KIRIZSÁN, Ádám MAKSAY, iar în al treilea val: Dorottya MAKAY, Judit MÁRTON, Zsolt NAGY şi Emese OLOSZ.

SZABÓ Bálint szemléletében a kutatás, tervezés, oktatás, tudományos tevékenység összefonódó és egymástól elválaszthatatlan hivatások. Munkatársait mindvégig úgy válogatta, hogy hivatástudattal álljanak a műemlékvédelem ügye mellé, így a vállalkozás a kezdeti útkeresést követően néhány év alatt szinte teljesen az építettörökség-védelem szolgálatába állt és áll ma is, létezése immár 33. évében. A kezdetben háromtagú, majd a munkatársak számát tekintve is lassan gyarapodó vállalkozás szerényen indult.[17] Az alkalmazottak sokáig otthonról dolgoztak, kiszállásokon és munkamegbeszéléseken találkoztak. Tekintettel arra, hogy a műemlék-helyreállításnak akkor még piaca nem volt, a szerény bevételekből lassan haladt az infrastrukturális fejlesztés, az itt dolgozó mérnököket és építészeket nem a bér, hanem a hivatástudat motiválta, az a körülmény, hogy olyan küldetést lehet megvalósítani, amely néhány évvel korábban politikai tiltólistán volt, hogy a korábban pusztulásra ítélt építészeti örökség megmentéséért lehet dolgozni. A fiatal mérnököket ösztönözte az a nemzetközi kapcsolatháló is, amelyet SZABÓ Bálint – tulajdonképpen az ő munkájuk által is – szőtt, az ösztöndíj-lehetőségek, a magyarországi, szlovákiai, angliai, hollandiai, észak-amerikai továbbtanulás, szakosodás lehetősége. A műemlékvédelem tűnt a legvonzóbb kalandnak, amelyet egy kulturális örökségért is lelkesedő kezdő mérnök karrierjében akkor elképzelhetett.

A fokozatos építkezés, infrastrukturális és létszámbeli növekedés együtt járt a nagyobb és vonzóbb tervek felvállalásával. Beszterce evangélikus temploma, a nagyenyedi Bethlen Gábor Kollégium, majd a vártemplom, a kolozsvári Bocskai-ház, a kolozsvári belvárosi unitárius templom és a János Zsigmond Unitárius Kollégium, SZABÓ Bálint egykori alma matere,

17 Kezdetben munkatársak voltak EKE Éva, HALÁSZ Annamária, NAGY Ilona, majd csatlakoztak KÓSA Mária és a frissen végzettek: CSURKA Attila, FURU Árpád, KIRIZSÁN Imola, MAKSAY Ádám és végül harmadik hullámban MAKAY Dorottya, MÁRTON Judit, NAGY Zsolt, OLOSZ Emese.

architects, construction engineers and art historians specialized in built heritage conservation. For the more than 70 people working at the company for shorter or longer periods of time, the studio was a place where they could learn and achieve professional development; it was, as Bálint SZABÓ put it, the school of maturity. He conceived it as a design and research centre and tried to build up its content. It took around ten years until the institution found its home in the house designed by Károly KÓS on Breaza street, a suitable architectural environment in harmony with the activities and goals of the team. He established in the new location an archive, a library and a laboratory specialized in testing of materials.

Until 2007 he led the centre which had by then specialized in the research and design of built heritage conservation by himself and later with a co-owner. In 2018 he handed over the responsibilities entirely,[18] and gradually retired, but kept following the fate of his unfinished projects, and more.

The civil organizations

■ In the first years of the Utilitas design studio it became clear that many segments of built heritage conservation cannot be covered through this form of providing services, and that in many cases the owner of a historic building is unable to finance even the research within the design process preceding restoration. In general, due to the chronic weaknesses in the field of national built heritage protection in Romania, many of the activities that are the preconditions to successful built heritage protection and conservation were entirely absent. It became clear that the civil society of Transylvania, could not address many issues of the intricate field of built heritage protection. Bálint SZABÓ became aware of the fact that besides the already existing civil organizations, there is a need for a professional background institution, which could provide the necessary professional background for the civil organizations.

18 Today the Utilitas design and research centre is led by structural engineer and expert in load-bearing structures Imola KIRIZSÁN.

De-a lungul anilor, au fost semnate peste 400 de contracte, 179 de expertize tehnice pentru diferite construcţii existente, însemnând peste 100 de proiecte executate.

În cei peste treizeci de ani, el a asistat la specializarea unor generaţii de arhitecţi, ingineri şi istorici de artă în reabilitarea monumentelor istorice. Pentru cei peste 70 de angajaţi cu care a lucrat, pe o perioadă mai lungă sau mai scurtă, firma asigura dezvoltare profesională, formare, aşa cum spunea Bálint SZABÓ: „şcoala de maturizare". El reflecta la termenul de „institut", „centru de proiectare şi cercetare", încercând să umple acest cadru cu conţinut. A fost nevoie de aproximativ un deceniu până când firma şi-a găsit sediul în casa proiectată de Károly KÓS de pe strada Breaza, un cadru arhitectural şi cultural în ton cu acele activităţi pe care el le coordona: activităţi de proiectare şi protecţie a patrimoniului construit, înfiinţând aici arhivă, bibliotecă şi laborator specializat în efectuarea de teste pe materiale istorice.

Până în 2007, a condus centrul de cercetare şi proiectare specializat în reabilitarea patrimoniului construit, apoi a împărţit responsabilitatea, iar în 2018 a renunţat la conducere,[18] retrăgându-se treptat, urmărind totuşi soarta proiectelor sale neîncheiate şi nu numai.

Organizaţii neguvernamentale

■ Deja din primii ani de existenţă a biroului de proiectare Utilitas, a devenit clar că multe dintre segmentele protecţiei monumentelor istorice nu pot fi acoperite de acest tip de servicii, precum şi faptul că, în multe cazuri, proprietarul monumentului istoric nu este în măsură să finanţeze sarcinile de cercetare ale studiilor preliminare necesare proiectării. În România, în general din slăbiciunea cronică a organizaţiilor centrale ale protecţiei monumentelor istorice, au lipsit cu desăvârşire o serie de activităţi care ar trebui să fie asigurate de o instituţie profesională, care să asigure fundalul profesional pentru organizaţiile civile.

18 Centrul de proiectare şi cercetare Utilitas astăzi este condus de Imola KIRIZSÁN, expert tehnic de structuri portante.

a nagykárolyi Károlyi-kastély, a szilágysomlyói Báthory-vár vagy a dési református templom, a gyulafehérvári Apor-palota, az 1998-ban Europa Nostra-díjjal kitüntetett kolozsvári Kálvária-templom vagy a nagybányai főtér ikonikus középkori épületei csak néhány a nagyobb kihívások közül. Az évek során több mint 400 szerződés köttetett, ez több mint 100 befejezett kivitelezést, 179 tartószerkezeti szakvéleményt jelent.

A harminc évet meghaladó időszakban a cég műemlék-helyreállításra szakosodott építészek, mérnökök és művészettörténészek generációit nevelte ki, az itt hosszabb-rövidebb ideig együtt dolgozó több mint 70 munkatárs számára a szakmai fejlődés, tanulás, a „felnőtté válás" iskolája volt – ahogy SZABÓ Bálint fogalmazott. Tervező-, kutatóintézetben, -központban gondolkodott, és a név mögé a tartalmat is igyekezett felépíteni. Nagyjából egy évtizedbe telt, mire az intézmény otthonra lelt a KÓS Károly tervezte Brétfű utcai házban, ahol a nagy elől transzilvanista eszmerendszerének folytatását, a kulturális örökség megmentését méltó környezetben tervezhette, álmodhatta tovább, itt archívumot, könyvtárat és anyagvizsgálatok elvégzésére szakosodott laboratóriumot létesített.

2007-ig SZABÓ Bálint egyedül vezette az akkor már építettörökségvédelmi kutatásra, tervezésre szakosodott központot, majd társtulajdonossal, míg 2018-ban teljesen átadta a felelősséget,[18] és fokozatosan visszavonult, de tovább követte be nem fejezett terveinek sorsát – és nemcsak.

A civil szervezetek

■ Az Utilitas tervezőiroda működésének első éveiben már világossá vált, hogy ilyen szolgáltatási formával a műemlékvédelem számos szegmensét nem lehet lefedni, ahogy az is, hogy sok esetben a műemlék-tulajdonosnak nem áll módjában a felújítást megelőző tervezés részét képező kutatási feladatokat sem finanszíroz-

18 Az Utilitas tervező- és kutatóközpontot azóta KIRIZSÁN Imola mérnök, tartószerkezeti szakértő vezeti.

isting ones[19], other specifically targeted civil and social organizations are needed for built heritage protection. There was a need for dynamic civil organizations relying on high-level expertise and personal staff, with well-defined professional objectives. To the initiative of Bálint SZABÓ and his small team launched in 1995,[20] an NGO was established, the Society of Monument Restorers of Transylvania (1997), which aimed to integrate the professionals of 15 counties, to ensure a ground for their much-needed professional dialogue;[21] a foundation was also created, the Transylvania Trust Foundation (1996), with the specific objective to provide assistance for the protection of built heritage of Transylvania in terms of professional, social, or, depending on its means, even financial support.

It was the Transylvania Trust Foundation (TTF) that could deploy its activities more extensively. It undertook tasks related to inventory, research, science, education, and as

19 The cause of the conservation of historic buildings with Hungarian connections was undertaken in Cluj by the Kelemen Lajos Monument Protection Society, founded by Ferenc BALOGH in 1990, and in Covasna County by the Keöpeczi Sebestyén József Monument Protection Society linked to the names of Sándor BENCZÉDI, Attila ZAKARIÁS and Ádám KÓNYA, and in the Partium by the Society of Monuments and Heritage Sites in the Partium and the Banat marked by the name of Géza DUKRÉT. The Hungarian Cultural Society of Transylvania, the Transylvanian Museum Society and the Hungarian Technical Scientific Society of Transylvania are NGOs that deal generally with theoretical problems regarding humanities and technical sciences in several field branches, but were not able to cover the pluridisciplinary approach regarding protection of built heritage.

20 Árpád FURU, Imola KIRIZSÁN, Dorottya MAKAY, Ádám MAKSAY.

21 Like the already existing Uniunea Naţională a Restauratorilor de Monumente Istorice (UNRMI – National Union of Historic Monument Restorers, the founding and leading of which was linked mainly to architect Călin HOINĂRESCU), the society aimed at promoting the work of monument restorers in Transylvania. Probably due to its regional character, it was more difficult to have it registered in Bucharest. Unfortunately, associating it with the content and activity according to its declared mission later proved unrealistic.

ar fi trebuit să asigure premisele succesului protecţiei şi reabilitării monumentelor istorice. Se vedea clar că sfera civilă nu răspundea multiplelor provocări ale problematicii cuprinzătoare privind monumentele istorice. Bálint SZABÓ a conştientizat că este nevoie de mai multe organizaţii ale societăţii civile, – pe lângă cele deja existente[19] –, ale căror activităţi să se concentreze pe patrimoniul construit. Era nevoie de forme de organizare civilă dinamice, cu un înalt nivel de conţinut profesional şi dotate cu infrastructură de personal adecvat, cu obiective profesionale concrete şi bine definite. În 1995, la iniţiativa lui Bálint SZABÓ şi a cercului său apropiat de colegi,[20] a fost iniţiată o asociaţie pentru protecţia monumentelor istorice – Asociaţia Restauratorilor de Monumente Istorice din Transilvania (1997), care dorea să integreze specialişti din 15 judeţe ale ţării, pentru a crea o platformă de dialog profesional şi de reprezentare a intereselor,[21] atât de necesare pentru ei, respectiv o fundaţie – Fundaţia Transylvania Trust

19 Cauza patrimoniului arhitectural cu referinţă maghiară a fost ţintită de Asociaţia „Kelemen Lajos” pentru Ocrotirea Monumentelor, fondată în 1990 de Ferenc BALOGH la Cluj, Societatea „Keöpeczi Sebestyén József”, iniţiată de Ádám KÓNYA, Sándor BENCZÉDI, Attila ZAKARIÁS la Sfântu Gheorghe, judeţul Covasna şi Societatea pentru Monumente şi Locuri Memoriale din Partium şi Banat, înfiinţată de Géza DUKRÉT la Oradea. Organizaţiile civile Asociaţia Societatea Maghiară de Cultură din Transilvania, Asociaţia Muzeului Ardelean şi Societatea Maghiară Tehnico-Ştiinţifică din Transilvania, care se ocupă în general de ştiinţe umaniste şi tehnice pe domenii profesionale, de asemenea, nu au putut să acopere abordarea pluridisciplinară tipică protecţiei patrimoniului construit.

20 Árpád FURU, Dorottya MAKAY, Ádám MAKSAY, Imola KIRIZSÁN.

21 În mod similar cu deja existente Uniunea Naţională a Restauratorilor de Monumente Istorice (UNRMI, înfiinţată şi condusă de arh. Călin HOINĂRESCU), şi ARMIT a dorit să creeze posibilitatea de reprezentare a intereselor restauratorilor de monumente istorice din Transilvania. Din cauza caracterului său regional, probabil, ar fi fost mai greu să se înregistreze în Bucureşti. Este regretabil că nici încărcarea misiunii sale cu conţinut şi activitate nu s-a dovedit a fi o idee realistă.

ni. Egyáltalán, Romániában a központi, állami műemlékvédelem krónikus gyengesége miatt teljességgel hiányzott egy sor olyan tevékenység, amely a sikeres műemlékvédelem, műemlék-felújítás előfeltétele. Látható volt, hogy az erdélyi civil szféra a műemlékvédelem átfogó kérdéskörének számos kihívására nem tud választ adni. SZABÓ Bálint felismerte, hogy a már létezők mellett[19] további olyan civil-társadalmi szervezetekre van szükség, amelyek tevékenységének a középpontjában az épített örökség áll. Dinamikus, magas szintű szakmai tartalommal és személyi infrastruktúrával felvértezett, konkrét és jól meghatározott szakmai célkitűzésekkel rendelkező civil szerveződési formákra volt szükség. 1995-ben SZABÓ Bálint és szűk munkatársi köre kezdeményezésére[20] megalakult egy műemlékvédelmi egyesület: az Erdélyi Műemlék-restaurátorok Egyesülete (1997), mely az ország 15 megyéjének szakembereit kívánta összefogni, a köztük szükségszerű szakmai párbeszéd számára platformot, érdekképviseletet biztosítani[21], és egy alapítvány: a Transylvania Trust

19 A magyar vonatkozású építészeti örökség ügyét vállalta fel a Kolozsváron BALOGH Ferenc által 1990-ben alapított Kelemen Lajos Műemlékvédelmi Társaság és Háromszéken a BENCZÉDI Sándor, ZAKARIÁS Attila és KÓNYA Ádám nevéhez kötődő Keöpeczi Sebestyén József Műemlékvédő Társaság, Partiumban pedig a DUKRÉT Géza neve által fémjelzett Partiumi és Bánsági Műemlékvédő és Emlékhely Társaság. Az Erdélyi Magyar Közművelődési Egyesület (EMKE), az Erdélyi Múzeum-Egyesület (EME) és az Erdélyi Magyar Műszaki Tudományos Társaság (EMT) általánosan bölcsészi és műszaki tudományokkal, szaktestületek keretében foglalkozó civil társadalmi szervezetek, az építettörökség-védelemre jellemző pluridiszciplináris megközelítést szintén nem tudták lefedni.

20 FURU Árpád, KIRIZSÁN Imola, MAKAY Dorottya, MAKSAY Ádám.

21 Az EMRE az akkor már létező Uniunea Naţională a Restauratorilor de Monumente Istorice (rövidítve UNRMI – Műemléki Restaurátorok Országos Szövetsége, melynek alapításában és vezetésében HOINĂRESCU Călin építész vállalt oroszlánrészt) tevékenységéhez hasonlóan erdélyi vonatkozásban kívánta a műemlék-restaurátorok érdekvédelmének lehetőségét megteremteni. Feltehetően regionális jellege miatt nehezebben sikerült Bukarestben bejegyeztetni. Sajnálatos, hogy missziójának megfelelő



■ ***Fig. 2.*** *La conferința internațională Tușnad în compania lui Sándor BENCZÉDI, Băile Tușnad (județul Harghita), 1999. © Utilitas Srl.*
■ ***Fig. 2.*** *At the Tusnad International Conference in the company of Sándor BENCZÉDI, Băile Tușnad (Harghita County), 1999. © Utilitas Ltd.*
■ ***2. ábra.*** *A Tusnád nemzetközi konferencián BENCZÉDI Sándor társaságában, Tusnádfürdő (Hargita megye), 1999. © Utilitas Kft.*



■ ***Fig. 3.*** *În fața Bisericii Calvaria Cluj-Mănăștur, câștigătoare a Premiului Europa Nostra, 1998. © Utilitas Srl.*
■ ***Fig. 3.*** *In front of the Calvary Church in Cluj-Napoca, winner of the Europa Nostra Award, 1998. © Utilitas Ltd.*
■ ***3. ábra.*** *Az Europa Nostra-díjjal kitüntetett kolozsvári Kálvária-templom előtt, 1998. © Utilitas Kft.*

a novel service in our country, it also ensured stewardship over historic buildings.

As the first program of the newly established organization, the Rimetea and Inlăceni Heritage Conservation Projects were launched by applying locally international models, especially from Hungary and Great Britain. The projects aimed at the safeguarding and protection of the representative vernacular architecture of the two villages.[22] By today it became evident that the program achieved its goals during its nearly a quarter of a century long operation, as the architectural integrity of the two villages is preserved and the management of the local built heritage became the main source of income for the two communities.

At the end of the 1990s, under the umbrella of the foundation, the systematic inventory of certain historic building sets begun: the inventory of churches encompassing painted wooden elements, religious frescos dating from the Middle Ages or the

22 The idea of the projects came from András ROMÁN, the main support was offered by the Local Council of the Budapest 5th District (City Center, Leopold City); the main coordinator in Rimetea Project, (awarded with Europa Nostra Medal in 1999) was Árpád FURU, the main administrator in Inlăceni through the auspices of the Monument Protection Office of Ciuc was Márton ALBERT HOMONNAI.

(1996), care își propunea să ofere sprijin profesional, social şi chiar financiar pentru protecţia patrimoniului construit al Transilvaniei, în funcţie de posibilităţi.

Fundaţia Transylvania Trust (FTT) a fost, dintre organizaţiile neguvernamentale, cea care s-a dezvoltat cel mai puternic. Fundaţia s-a angajat în inventariere, cercetare ştiinţifică, educaţie şi, în mod inedit la noi în ţară, în custodia de monumente istorice.

Prima acţiune a noii fundaţii – Programul de protecţie a valorilor Rimetea şi Inlăceni, a fost lansat pentru punerea în practică a modelelor de protecţie internaţionale, maghiare şi britanice, – cu scopul de a salva şi îngriji patrimoniului arhitectural vernacular reprezentativ al celor două comunităţi.[22] Astăzi constatăm că în sfertul de secol de funcţionare, programul şi-a atins scopul, integritatea arhitecturală a celor două sate a fost păstrată, iar gestionarea patrimoniului arhitectural a devenit principala sursă de venit în cele două aşezări.

La sfârşitul anilor 1990, sub egida fundaţiei, a început inventarie-

22 Iniţiatorul a fost András ROMÁN, sponsorul principal fiind Consiliul Local al Sectorului V., Budapesta şi Árpád FURU, coordonatorul pentru Programul de protecţie a patrimoniului din Rimetea (premiat cu Medalia Europa Nostra 1999), iar pentru Inlăceni, sub egida Oficiului de Protecţie a Monumentelor Istorice al judeţului Harghita, coordonator a fost Márton ALBERT HOMONNAI.

Alapítvány (1996), mely feladatkörének az erdélyi épített örökség védelmének szakmai, társadalmi, sőt lehetőségei függvényében anyagi támogatását tűzte ki céljául.

A Transylvania Trust Alapítvány (TTA) tevékenysége bontakozhatott ki erőteljesebben. Inventarizációs, kutatási, tudományos, oktatási és – idehaza újszerűen – műemlékgondnoksági feladatokat vállalt fel.

Nemzetközi, elsősorban magyarországi és brit műemlékvédelmi szakmai modellek helyi gyakorlatba ültetése által az új alapítvány első programjaként indult útjára a Torockó és Énlaka Értékvédő Program, mely a két faluközösség reprezentatív népi építészeti örökségének megmentését és gondozását célozta.[22] Ma már látjuk, majdnem negyedszázados működése alatt célját elérte, a két falu építészeti integritása megmaradt, az építészeti örökséggel való gazdálkodás a két település megélhetésének fő forrása lett.

Az 1990-es évek végén az alapítvány égisze alatt megkezdődött egyes műemlékcsoportok szisztematikus inventarizációja: festett faemlékeket,

tartalommal, tevékenységgel való feltöltése sem bizonyult realisztikus elképzelésnek.

22 Kezdeményező ötletgazdája ROMÁN András, fő támogatója Belváros-Lipótváros Budapest Főváros V. Kerület Önkormányzata, az Europa Nostra éremmel kitüntetett Torockó értékvédő program koordinátora FURU Árpád, énlakai intézője a Csíki Műemlékvédelmi Hivatal égisze alatt ALBERT HOMMONAI Márton volt.

early modern era,[23] and the inventory of the vernacular architectural heritage.[24] A specific task was to develop the inventory of the decaying architectural heritage of Transylvania.[25]

With the aim of its future restoration, and primarily to prevent its complete destruction and disintegration, the Transylvania Trust (TTA) took the Bonţida Bánffy Castle under its care. The scale of the challenge predestined this activity to become the foundation's largest and most complex task and program.[26] The further developments in the castle's fate: a series of urgent interventions, the creation of project documentation, the restitution and involvement of the rightful owner, the opening of a community space, the launching of the monument protection educational centre, the international attention that followed, visits by heads of state, politicians, and princes, the Europa Nostra Grand Prize, then hosting one of the region's most famous festivals, and finally the opening of the space dedicated to preserving the memory of the former owner, Miklós Bánffy, are the result of the dedicated work of many professionals. This work has been successfully led for almost two decades by Bálint Szabó's daughter,

23 The research carried out together with the then existing State Monument Restoration and Conservation Centre in Budapest, Hungary was coordinated by Imola KIRIZSÁN, and at its start Csaba GÉCZY, former director, had a defining role, the professionalism regarding restoration was maintained first of all by Ferenc MIHÁLY and József LÁNGI.

24 The research conducted together with the Ethnographical Museum of Szentendre (Hungary) and with the mentorship of Iván BALASSA M., was coordinated by Árpád FURU.

25 Architectural assessments were made with the implication of students from the Faculty of Architecture and Urbanism of the Technical University of Cluj and of the Technical University of Budapest, for the latter the professional coordination was made by prof. Gyula ISTVÁNFI, the research was coordinated in the first phase by Ádám MAKSAY in cooperation with Ferenc SEBESTÉNY.

26 In the first phase Ádám MAKSAY had an active role, and later the leading and coordination of the program was undertaken by the former economical director, actual president of the Transylvania Trust Foundation, Csilla HEGEDÜS.

rea sistematică a anumitor grupuri de monumente: biserici care deţin componente din lemn pictat, biserici cu picturi murale din epoca medievală şi cea modernă timpurie,[23] precum şi relevarea patrimoniului arhitectural vernacular.[24] O altă direcţie a însemnat inventarierea patrimoniului arhitectural pe cale de dispariţie al Transilvaniei.[25]

FTT a preluat în custodie castelul „Bánffy" din Bonţida, cu scopul conservării monumentului istoric, dorind de fapt să prevină distrugerea şi dispariţia lui completă. Amploarea provocării a predestinat ca aceastã activitate să devină cel mai vast şi complex program al fundaţiei.[26] Evenimentele care au urmat în viaţa castelului, – o serie de intervenţii de urgenţă, elaborarea proiectelor aferente, revendicarea castelului şi implicarea proprietarului de drept, crearea unui spaţiu comunitar, deschiderea centrului de formare în protecţia monumentelor istorice, însoţite de atenţia internaţională, vizita unor şefi de stat, politicieni şi prinţi, Marele Premiu Europa Nostra, apoi locaţie pentru unul dintre cele mai prestigioase festivaluri din regiune, iar în cele din urmă deschiderea unui spaţiu care comemorează fostul proprietar Miklós BÁNFFY, – sunt rezultatul muncii susţinute a multor profesionişti, condusă cu succes,

23 Cercetare comună cu Centrul de Reabilitare şi Restaurare a Monumentelor Istorice Budapesta, al cărui director, Csaba GÉCZY, a avut rol decisiv în demararea ei. A fost coordonată de Imola KIRIZSÁN, cu contribuţia vastă a restauratorilor dintre care menţionăm în primul rând: Ferenc MIHÁLY, Ferenc, József LÁNGI.

24 În colaborare cu Muzeul de Etnografie din Szentendre (Ungaria), relevarea s-a realizat cu îndrumarea profesională a lui Iván BALASSA M. şi a fost coordonată de Árpád FURU.

25 Releveele arhitecturale au fost realizate de către studenţii Facultăţii de Arhitectură şi Urbanism, Cluj, cu implicarea studenţilor arhitecţi ai Universităţii Tehnice din Budapesta, condusă de către profesorul Gyula ISTVÁNFI, iar inventarierea a fost coordonată de Ádám MAKSAY, în colaborare cu Ferenc SEBESTÉNY.

26 În faza iniţială un rol activ a avut Ádám MAKSAY, iar apoi conducerea şi coordonarea programului a fost preluată de Csilla HEGEDÜS, directorul economic de atunci şi actualul preşedinte al Fundaţiei Transylvania Trust.

közép- és kora újkori egyházi falképeket tartalmazó templomok leltározása,[23] valamint a népi építészeti örökség felmérése.[24] Külön irányt jelentett Erdély pusztuló építészeti örökségének felleltározása is.[25]

Műemlékgondozási céllal, tulajdonképpen a teljes pusztulást és széthordást megelőzni kívánva vette gondnokságába a TTA a bonchidai Bánffy-kastélyt. A kihívás mértéke predesztinálta, hogy ez a tevékenység lett az alapítvány legterebélyesebb, legösszetettebb feladata, programja.[26] A kastély további sorsának fordulatai, sürgősségi beavatkozások sora, tervdokumentációk készítése, a visszaigénylés és a jogos tulajdonos bevonása, a közösségi élettér kialakítása, a műemlékvédelmi oktatási központ megnyitása, az ezzel járó nemzetközi figyelem, államfők, politikusok és hercegek látogatása, az Europa Nostra nagydíj, majd a térség egyik legismertebb fesztiváljának befogadása és végül az egykori tulajdonos, BÁNFFY Miklós emlékét ápoló tér megnyitása sok szakember kitartó munkája, melyet már szinte két évtizede SZABÓ Bálint lánya, HEGEDÜS Csilla sikeresen vezet, valamint ő koordinálja a Transylvania Trust Alapítvány teljes tevékenységét is.

23 Az akkor létező budapesti Állami Műemlék-helyreállítási és Restaurálási Központtal (ÁMRK) közös kutatást KIRIZSÁN Imola koordinálta, beindításában meghatározó szerepet játszott GÉCZY Csaba egykori igazgató, a restaurátori szakmaiságot többek között biztosították MIHÁLY Ferenc, LÁNGI József.

24 A Szentendrei Néprajzi Múzeummal közös, BALASSA M. Iván szakmai mentorálásával végzett kutatást FURU Árpád koordinálta.

25 Építészeti felmérések készültek a Kolozsvári Műszaki Egyetem Építészeti Kara diákjainak, valamint az akkori Budapesti Műszaki Egyetem építészhallgatóinak bevonásával, az utóbbi keretében a szakmai irányítást ISTVÁNFI Gyula professzor vállalta, a kutatást az első fázisban MAKSAY Ádám és SEBESTÉNY Ferenc koordinálta.

26 A kezdeti szakaszban tevékeny szerepet vállalt MAKSAY Ádám, majd a program vezetését, koordinálását a Transylvania Trust Alapítvány akkori gazdasági igazgatója, jelenlegi elnöke, HEGEDÜS Csilla vette át.

Csilla Hegedűs, who also coordinates the entire activity of the Transylvania Trust Foundation.

Postgraduate course and training

■ For Bálint SZABÓ, education stood at the basis of his philosophy. First, he took part in specialized trainings, then organized himself such trainings in Cluj. The involvement of the appropriate professional partner organizations was an integral part of his approach. Right at the beginning of the endeavour, it was clear for him that education needs to be available at all levels. First, he intended to also launch in Cluj a postgraduate course for architects and structural engineers in the field of historic building conservation. The model was the one functioning within the Department of Architectural History and Historic Buildings at the Technical University of Budapest. The model had to be adapted to the specific (multicultural and multi-ethnic) context of Romania. The course was launched as a cooperation between the Faculty of History and Philosophy of the Babeş-Bolyai University in Cluj and the Transylvania Trust Foundation. Initially, the organizational tasks, the definition of the scientific content of the course, the organization of the exams were ensured by the foundation,[27] the degree being issued by the university. The postgraduate course, biannual starting with 1998, provided training in Romanian, Hungarian and English, for Romanian and Hungarian classes of architects and structural engineers. Although this course was the first technical postgraduate study available in Hungarian after 1989 in Romania, in the last years, due to the decreasing number of Hungarian applicants, only Romanian groups were

27 The coordinators of the course of monument protection for engineers and architects was assured within the Transylvania Trust Foundation by Tímea BERKI, Zsuzsanna EKE, Klára MAGYARI, Emese OLOSZ, Margit TARR, the curriculum was realised by Bálint SZABÓ, Sándor BENCZÉDI, Christoph MACHAT and Tamás FEJÉRDY.

de peste douăzeci de ani, de fiica lui Bálint SZABÓ, Csilla HEGEDÜS, ea coordonând de asemenea activitatea Fundaţiei Transylvania Trust.

Formare postuniversitară şi profesională

■ Pentru Bálint SZABÓ, educaţia a constituit baza filozofiei sale profesionale, însemnând mai întâi asigurarea participării la cursuri de formare profesională, apoi organizarea acestora cu centrul la Cluj. Implicarea organizaţiilor partenere corespunzătoare pentru activitatea didactică a fost o sarcină program. Bálint SZABÓ şi-a dat seama repede de necesitatea accesibilităţii acestei educaţii la toate nivelurile. În primul rând, a dorit să iniţieze formarea de arhitect şi inginer specialist în protecţia monumentelor istorice la Cluj prin iniţierea şi acreditarea unui curs postuniversitar similar ce funcţiona în cadrul Catedrei de Istoria Arhitecturii şi Monumente Istorice a Universităţii Tehnice din Budapesta pe care mai mulţi colegi l-au absolvit. Cursul a fost acreditat prin cooperarea dintre Facultatea de Istorie şi Filosofie a Universităţii Babeş Bolyai şi Fundaţia Transylvania Trust. Munca organizatorică, stabilirea conţinutului ştiinţific al cursului şi a curiculei au fost asigurate de fundaţie,[27] iar diplomele eliberate de universitate. Începând din 1998 cursul se desfăşoară din doi în doi ani, el oferind iniţial pregătire în limba română, maghiară şi engleză pentru grupe de arhitecţi şi ingineri constructori vorbitori de limbă română, respectiv maghiară. Deşi acest curs s-a dovedit a fi prima pregătire tehnică în limba maghiară din România în perioada postdecembristă, în ultimii ani, din cauza numărului mic de solicitanţi maghiari, cursurile se

27 Pe lângă Bálint SZABÓ, Sándor BENCZÉDI, Christoph MACHAT şi Tamás FEJÉRDY au contribuit substanţial la elaborarea curriculumului. Coordonatorii cursului din cadrul Fundaţiei Transylvania Trust au fost Tímea BERKI , Zsuzsanna EKE, Klára MAGYARI, Emese OLOSZ şi Margit TARR.

Posztgraduális és szakmunkásképzés

■ SZABÓ Bálint számára az oktatás – először a szakképzéseken való részvétel biztosítása, majd később ezek kolozsvári központú megszervezése – szakmai életfilozófiájának alapját képezte. Mindezekhez a tevékenységekhez a megfelelő szakmai partnerszervezetek bevonása programszerű feladat volt. SZABÓ Bálint hamar felismerte, hogy az oktatást minden szinten szükséges elérhetővé tenni. Először a Budapesti Műszaki és Gazdaságtudományi Egyetem Építészettörténeti és Műemléki Tanszékének keretében működő műemlékvédelmi szakmérnökképzést kívánta Kolozsváron is elindítani és a romániai (multikulturális és többetnikumú) közegre alkalmazni. A képzés a Babeş–Bolyai Tudományegyetem Történelem–Filozófia Kara és a Transylvania Trust Alapítvány együttműködése által valósult meg. A szervezési munkát, a kurzus tudományos tartalmának beállítását, a vizsgák megszervezését kezdetben az alapítvány biztosította,[27] az okleveleket az egyetem állítja ki. Az 1998-tól kétévente induló tanfolyam kezdetben román és magyar nyelvű építész- és építőmérnök-profilú csoportok számára román, magyar és angol nyelvű képzést biztosított. E kurzus bizonyult az első magyar nyelvű műszaki képzésnek a rendszerváltás utáni Romániában. Néhány éve a magyar jelentkezők kis száma miatt már csak román csoport indulhat, de továbbra is tanítanak külföldi előadók magyar és angol nyelven. Az akkreditált képzés felértékelődött, ma már a Kárpátokon túli megyékből és a fővárosból is jelentős számban érkeznek hallgatók. A tanfolyam máig lezárult 12 évfolyamán (1998-tól) több mint 250 okleveles végzett van.

27 A műemlékvédelmi szakmérnöki képzés koordinátorai a Transylvania Trust Alapítványon belül BERKI Tímea, EKE Zsuzsanna, MAGYARI Klára, OLOSZ Emese, TARR Margit voltak, a tanterv összeállításában SZABÓ Bálint mellett fontos szerepet vállalt BENCZÉDI Sándor, MACHAT Christoph és FEJÉRDY Tamás.

set up. Lecturers from abroad continue to give lectures. The accredited course acquired wide recognition, and today a significant number of students come from across the Carpathians and from the capital as well. Since 1998, more than 250 trainees acquired their certificates through 12 completed two-year courses.

In 1999, also under the auspices of the Transylvania Trust Foundation, the training in built heritage conservation was launched for craftsmen. The professional relationships established at the Tusnad conferences with British organizations of historic building protection contributed significantly to the initiative. The development of the program was started in 1999, together with the Institute of Historic Building Conservation, Great Britain; in its initial phase it implied study trips, attended by Bálint SZABÓ as well. In the summer of 2000, at the first vocational training entitled ACTT[28], with the contribution of professionals providing theoretical training delegated by the Oxford Brookes University and of British practitioners, 68 craftsmen coming from 17 settlements were trained. The program, now called BHCT moved to the Bánffy castle in 2001,[29] where it became part of the actions aimed at safeguarding the Bánffy castle, as a training series keeping pace with the continuously accelerating social and economic changes.[30] Besides training skilled craftsmen, it also ensures practical ex-

28 ACTT 2000 – Aiud Conservation and Transnational Training Program. Within this program, masons, plasterers, stonemasons and carpenters were trained in specialist fields during two modules of 4 weeks each by British professionals and craftsmen, doing practical work on the restoration of a monument, the Bethlen Gábor College in Aiud. The program was supported, among others, by The Headley Trust or The Prince of Wales Foundation, its management was ensured by David BAXTER, Csilla HEGEDÜS, Dorottya MAKAY and Colin RICHARDS.

29 The Built Heritage Conservation Training Centre, functioning in the Bánffy castle of Bonţida, received in 2008 the Europa Nostra Education Training and Awareness-Raising Award Grand Price.

30 An important part of the training is practical work, restoration being carried out by the Pro Restauratio company, its master builders having taken over practical

organizează doar în limbă română, dar şi cu lectori din străinătate. Importanţa acestei formări acreditate a crescut, iar astăzi mulţi cursanţi sosesc din judeţele de dincolo de Carpaţi şi din capitală. Cursul a avut peste 250 de absolvenţi în cele 12 promoţii finalizate până în prezent.

Din 1999, tot sub egida Fundaţiei Transylvania Trust, a fost demarată formarea muncitorilor calificaţi din domeniu. Relaţiile profesionale stabilite la conferinţele de la Tuşnad cu organizaţiile britanice de protecţia monumentelor istorice au contribuit esenţial la această iniţiativă. În 1999 s-au făcut primii paşi în colaborare cu Institutul de Conservare a Clădirilor Istorice din Marea Britanie, însemnând călătorii de studiu, la care a participat şi Bálint SZABÓ. În vara anului 2000, la primul curs de formare a muncitorilor calificaţi, organizat cu denumirea de ACTT[28], au participat 68 de muncitori din 17 localităţi, sub îndrumarea teoretică a specialiştilor delegaţi de Universitatea Oxford Brookes, respectiv partea practică susţinută de muncitori britanici calificaţi în domeniu. Ca urmare a schimbărilor sociale şi economice accelerate, în 2001, programul, sub denumirea de BHCT, s-a mutat la Castelul „Bánffy" din Bonţida,[29] ca serie de cursuri, devenind parte a multiplelor activităţi menite să salveze castelul,[30] oferind

28 ACTT 2000 – Aiud Conservation and Transnational Training Program – Programul Internaţional de Formare Profesională în Restaurare din Aiud, în cadrul căruia, în două module de câte patru săptămâni fiecare, s-a desfăşurat formarea zidarilor, tencuitorilor, pietrarilor şi dulgherilor, care a fost asigurată de specialişti teoreticieni şi meşteri din Anglia pe şantierul lucrărilor de restaurare a unei clădiri monument istoric, Colegiul „Bethlen Gábor" din Aiud. Dintre sponsorii programului, evidenţiem instituţii precum The Headley Trust sau The Prince of Wales`s Foundation. Coordonatori au fost David BAXTER, Csilla HEGEDÜS, Dorottya MAKAY şi Colin RICHARD.

29 Castelul „Bánffy" din Bonţida, ca Centrul de Specializare în Reabilitarea Patrimoniului Construit, a fost distins în 2008 cu premiul mare Europa Nostra pentru "Education Training and Awareness-Raising" (Formarea educaţiei şi conştientizare).

30 Element important al formării este munca practică, restaurarea castelului fiind sarcina firmei Pro Restauratio, echipa aces-

1999-től szintén a Transylvania Trust Alapítvány égisze alatt műemlékvédelmi szakmunkásképzés indult. Kezdeményezéséhez sokban hozzájárultak a Tusnád konferenciákon a brit műemlékvédelmi szervezetekkel szövődő szakmai kapcsolatok. A nagy-britanniai Institute of Historic Building Conservationnel közös ilyen irányú programépítés 1999-től indult, kezdetben tanulmányutakat jelentett, melyeken SZABÓ Bálint is részt vett. 2000 nyarán az ACTT[28] címmel rendezett első, szakmunkásképző tanfolyamon az Oxford Brookes Egyetem által delegált elméleti oktatást biztosító szakemberek és gyakorló brit szakmunkások segítségével 17 településről érkezett 68 szakmunkás képzésére került sor. A program BHCT néven már 2001-től a bonchidai Bánffy-kastélyba költözött,[29] ahol az egyre gyorsuló társadalmi és gazdasági változásokat követő tanfolyamsorozatként a Bánffy-kastély megmentését célzó tevékenységsorozat részévé vált,[30] a szakmunkások képzése mellett egyben gyakorlati tapasztalatokat biztosítva mind az egyetemi alapképzésben, mind a továbbképzésben részt vevők számára.[31] Ennél a program-

28 ACTT 2000 – Aiud Conservation and Transnational Training Program – a Nagyenyedi Nemzetközi Műemlék-felújítási Szakmunkásképző Program, melynek keretében kétszer egy-egy 4 hetes modul alatt kőművesek, vakoló kőművesek, kőfaragók és ácsok szakosítását biztosították angliai elméleti szakemberek és mesterek egy műemlék épület, a nagyenyedi Bethlen Gábor Kollégium helyreállítási munkálatainak folyamán. A program támogatói közül kiemelünk olyan intézményeket, mint a The Headley Trust vagy The Prince of Wales Foundation. A program vezetői ekkor: BAXTER David, HEGEDÜS Csilla, MAKAY Dorottya és RICHARDS Colin voltak.

29 A bonchidai Bánffy-kastély Nemzetközi Épített Örökségvédelmi Oktatási Központként 2008-ban Europa Nostra, oktatásért Education Training and Awareness-Raising (Oktatás-képzés és tudatosságnövelés) díjban részesült.

30 A képzés fontos eleme a gyakorlati munka, a helyreállítást a Pro Restauratio cég végzi, amelynek mesterei átvették a gyakorlati oktatás irányítását a kezdetekben szükségszerűen bevont brit szakemberektől.

31 Az oktatási programsorozatot a Transylvania Trust Alapítvány részéről HEGEDÜS Csilla vezeti. A kezdeti évek munkájában, rövidebb, hosszabb ideig részt vettek az ACTT-programot vezető szakemberek.

periences to those attending university or postgraduate studies.[31] It is to be emphasized regarding this program as well, that planting the seed resulted not only in a wide-spreading tree, but a woodland, the program being a decade ahead of its time. By today, thanks to the team working at the foundation, the courses and programs organized by the Transylvania Trust Foundation range from projects involving children and students, to trainings to tourist guides, and being part of international projects, engaging many thousands of people throughout the years.

In 2007, further enlarging the palette of NGOs dedicated to built heritage conservation, Bálint SZABÓ founded the Transsylvania Nostra Foundation, with three main tasks: it took over the organizing of scientific conferences, the deployment of certain research projects and undertook as an objective to launch a scientific journal of built heritage conservation entitled *Transsylvania Nostra*, which became the main publication opportunity of issues related to the practice and research in conservation.[32] Unlike other similar international journals, the articles are published in two languages, as next to a language in use in Transylvania (Romanian, German or Hungarian), the full text of the articles is published in English as well.

Academic career, research, publications

■ In the meantime, the academic career of Bálint SZABÓ advanced as well. He earned the title of professor in 1998. As such, he could clearly see that efficient built heritage protection cannot be envisaged without well-trained professionals. He made

training from the British craftsmen initially involved.

31 The training program is led by Csilla HEGEDÜS of the Transylvania Trust Foundation. In the first years the professionals engaged in the ACTT program were involved as well. Márton BIKFALVI leads the training in specific skills.

32 The first editor-in-chief was Enikő TAKÁCS (VÁKÁR); her work was taken over until present day by Katalin JÁNOSI.

pe lângă formarea muncitorilor calificaţi, experienţă practică atât pentru studenţi universitari, cât şi pentru cei de la cursurile de specializare postuniversitară anterior amintite.[31] Referitor la acest program, trebuie specificat că plantarea seminţei iniţiale s-a soldat nu numai cu un arbore falnic, dar până astăzi chiar cu un mic crâng, cu mai mult de un deceniu înaintea timpului său. Cursurile şi programele organizate de echipa pasionată şi dedicată a Fundaţiei Transylvania Trust cuprind astăzi o gamă largă de activităţi, de la implicarea copiilor şi şcolarilor, până la formarea ghizilor turistici, participarea la programe internaţionale, care au mobilizat mii de oameni de-a lungul anilor.

Extinzând în continuare gama profesională a organizaţiilor neguvernamentale pentru protecţia monumentelor istorice, în 2007, Bálint SZABÓ a înfiinţat Fundaţia Transsylvania Nostra, cu trei sarcini principale: organizarea conferinţelor ştiinţifice, desfăşurarea anumitor programe de cercetare şi editarea unei reviste ştiinţifice pentru protecţia monumentelor istorice cu titlul Transsylvania Nostra, devenind platforma principală de publicare pentru practica şi cercetarea legată de reabilitări.[32] Spre deosebire de alte reviste ştiinţifice internaţionale, articolele de aici sunt publicate în două limbi – pe lângă o limbă transilvăneană (română, germană sau maghiară), textul integral al articolelor poate fi citit şi în limba engleză.

Carieră universitară, cercetare, publicaţii

■ Între timp, desigur, cariera universitară a lui Bálint SZABÓ a continuat să se dezvolte. În calitatea sa de

tuia a preluat conducerea instruirii practice de la specialiştii britanici, implicarea cărora a fost necesară la început.

31 Seria de programe educaţionale din partea Fundaţiei Transilvania Trust este condusă de Csilla HEGEDÜS. În primii ani de activitate au fost implicaţi specialiştii care au condus programul ACTT.

32 Primul redactor-şef a fost Enikő TAKÁCS (VÁKÁR), funcţia este continuată de Katalin JÁNOSI.

nál is kiemelendő, hogy a kezdeti mag elültetése nemcsak terebélyes fát, de kisebb ligetet eredményezett mára, ebben a témában is több mint egy évtizeddel megelőzve korát. Mára a Transylvania Trust által szervezett tanfolyamok és programok a gyermekek, iskolások bevonásától az idegenvezető-képzésig, nemzetközi programokban való részvételig, az alapítványi munkát végző csapatnak köszönhetően, az évek során sok ezer embert megmozgató tevékenységpalettával bővült.

2007-ben, tovább gazdagítva a műemlékvédelmi civil szervezeti szakmai kínálatot, SZABÓ Bálint megalakította a Transsylvania Nostra Alapítványt, amelynek három fő feladata lett: átvette a tudományos konferenciák szervezését, egyes kutatási programok lebonyolítását, valamint célkitűzésként vállalta a *Transsylvania Nostra* néven megjelenő műemlékvédelmi tudományos folyóirat létrehozását, mely a helyreállítási gyakorlatok és kutatások publikálásának elsődleges platformjává vált.[32] Más nemzetközi tudományos folyóiratoktól eltérően a cikkek itt két nyelven jelennek meg – a három erdélyi nyelv valamelyike mellett (román, német vagy magyar) a cikkek teljes szövege angolul is olvasható.

Egyetemi karrier, kutatás, publikációk

■ Időközben természetesen SZABÓ Bálint egyetemi karrierje is tovább épült. 1998-ban elérte a professzori fokozatot. Gyakorló tanárként világosan látta, hogy nem képzelhető el hatékony műemlékvédelem megfelelő, jól képzett szakembergárda nélkül. Munkatársai számára „kötelezővé" tette az állandó képzést, a doktori programokban és a nemzetközi tapasztalatcseréken való részvételt. 1994 és 1996 között, akkori munkatársaival közösen, SZABÓ Bálint is elvégezte a Budapesti Gazdasági és Műszaki Egyetem Építészettörténe-

32 Első főszerkesztője TAKÁCS (VÁKÁR) Enikő, utódja a mai napig JÁNOSI Katalin.

continuous learning "compulsory" to his colleagues, urging them to participate in doctoral studies and international exchanges of experience. Between 1994 and 1996, together with his then colleagues, Bálint SZABÓ also attended the postgraduate course for architects and structural engineers specialized in historic building protection organized at the Department of Architectural History and Built Heritage of the Technical University of Budapest. Later on, he supported all of his colleagues in attending specialized courses, initially in Budapest (1996–1998), then, from 1998, in Cluj.

From the beginning, Bálint SZABÓ was aware that scientific activity requires publications, library, repository of designs, archive. Since 1993, he made efforts to ensure that his colleagues have the opportunity to publish their work in several languages. The path to achieve this was to register the Utilitas publishing house with all required authorizations, thus enabling the publication of the many high-quality lectures delivered at conferences and of many scientific or science-promoting books dedicated to certain topics. Among the latter, we need to mention the series of booklets entitled *Erdélyi Műemlékek* (Transylvanian Monuments), the volume entitled *Száz erdélyi műemlék* (Hundred Saxon Monument Buildings; 2007, published by Utilitas, author Attila WEISZ), or the volume entitled *Műemlékvédelem Torockón* (Built Heritage Protection in Rimetea; 2006, published by Utilitas, author Árpád FURU). Starting from 2007, the already mentioned *Transsylvania Nostra* specialist journal could be published in three languages; the journal, issued in a high-quality print and with a state-of-the-art design publishes the scientific news in Transylvania and the region. Following the model of the *Erdélyi Műemlékek* series, three booklets entitled *Moştenire Transilvăneană* (Transylvanian Heritage) were published. The first issues of the *Caiete Icomos* series (ICOMOS booklets) were also published by Utilitas. Up to the present, 56 volumes for

profesor practicant, el a constatat că protecţia eficientă a monumentelor istorice este de neconceput fără o echipă adecvată de specialişti bine pregătiţi. Pentru angajaţii săi a impus „obligatoriu" formarea permanentă, participarea la programe de doctorat şi schimburi internaţionale de experienţă. Între 1994 şi 1996, împreună cu colegii săi de atunci, Bálint SZABÓ a urmat cursurile de formare a arhitecţilor şi inginerilor specializaţi în domeniul protecţiei patrimoniului, care funcţiona în cadrul Catedrei de Istoria Arhitecturii şi Monumente Istorice a Universităţii Tehnice din Budapesta, apoi şi-a ajutat colegii de mai târziu cu aceste studii, iniţial la Budapesta (1996–1998) apoi, din 1998, la Cluj.

Încă de la începuturi, SZABÓ Bálint a fost conştient că viaţa ştiinţifică profesională nu se poate desfăşura fără publicaţii, bibliotecă, arhivă şi arhivă de proiecte corespunzătoare. Din 1993, a depus eforturi pentru a oferi colegilor săi posibilitatea de a publica sub diferite forme, în mai multe limbi. Calea urmată a fost înregistrarea şi autorizarea Editurii Utilitas, asigurând astfel publicarea unui număr mare de prelegeri de înaltă calitate susţinute la conferinţele profesionale, precum şi a unor volume dedicate temelor ştiinţifice sau de popularizare a ştiinţei. Dintre acestea din urmă, merită menţionate seria de broşuri *Erdélyi Műemlékek* (*Monumentele istorice ale Transilvaniei*), volumul de colecţie *Száz erdélyi műemlék* (*O sută de monumente istorice din Transilvania*) (2007, Editura Utilitas, autor Attila WEISZ) şi *Protecţia monumentelor istorice la Rimetea* (2006, Editura Utilitas, autor Árpád FURU). Începând cu anul 2007, s-a lansat revista profesională trilingvă, intitulată *Transsylvania Nostra*, care oferă informaţii despre rezultatele ştiinţifice ale domeniului din Transilvania şi din regiune, într-o versiune tipărită la nivel calitativ contemporan. După modelul *Erdélyi Műemlékek* au fost editate trei publicaţii în cadrul seriei *Moştenirea Culturală Transilvăneană*. Au apărut şi primele numere ale publicaţiei

ti és Műemléki Tanszéke keretében szervezett műemlékvédelmi szakmérnökképzést, majd a megfelelő továbbtanuláshoz hozzásegítette későbbi munkatársait is, kezdetben Budapesten (1996–1998), majd 1998-tól Kolozsváron.

SZABÓ Bálint a kezdetektől tudatában volt annak, hogy szakmai tudományos élet publikációk, megfelelő könyvtár, tervtár, archívum nélkül nem fejthető ki. 1993-tól erőfeszítéseket tett, hogy különböző formákban biztosítsa szakembertársai számára a több nyelven történő publikálás lehetőségét. A járható út az Utilitas Kiadó bejegyzése és engedélyeztetése volt, biztosítva ezáltal a szakmai konferenciákon elhangzott, nagyszámú minőségi előadás megjelentetését, az egyes témáknak szentelt tudományos vagy tudomány-népszerűsítő kötetek megjelentetését. Ez utóbbiak sorában említést érdemel az *Erdélyi Műemlékek* füzetsorozat, a *Száz erdélyi műemlék* gyűjteményes kötet (2007, Utilitas Kiadó, szerkesztő és szerző WEISZ Attila) vagy a *Műemlékvédelem Torockón* (2006, Utilitas Kiadó, szerző FURU Árpád). 2007-től a már említett, háromnyelvű *Transsylvania Nostra* szakmai folyóirat megjelentetése is megvalósulhatott, mely a kornak megfelelő minőségi nyomdai kivitelben ad hírt Erdély és a térség tudományos eredményeiről. Az *Erdélyi Műemlékek* mintájára jelent meg három kiadvány *Moştenire Transilvăneană* (Erdély öröksége) címmel. A *Caiete Icomos* (Icomos Füzetek) első számai is az Utilitas Kiadó gondozásában láttak napvilágot. Az Utilitas Kiadó gondozásában máig 56 ismeretterjesztő és 120 tudományos kiadvány jelent meg.

SZABÓ Bálint a rendszerépítés mellett maga is tevékenyen és fáradhatatlanul vett részt a műemlékvédelmi tudományos munkában. Fő kutatási területe a történeti tartószerkezetek elmélete volt, ezen belül a történeti fedélszerkezetek. Ebben a témában elsősorban az egyetemi oktatást szolgáló kötetei váltak szélesebb körben ismertté. A történeti fedélszerkezetek sajátosságainak, az egyes korokra jellemző rendsze-

non-professionals and 120 scientific publications were issued by Utilitas.

Besides managing all these activities, Bálint SZABÓ himself performed scientific work tirelessly. His main field of research was the theory of historic load-bearing structures, more specifically historic roof structures. In this topic, mainly his volumes supporting university education became more widely known. He involved some of his doctoral students and colleagues in the research regarding the specificities of historic roof structures and systems typical for certain eras. The doctoral theses supervised by him examined topics like the typology of roof structures, Romanesque, Gothic and Baroque roof structures, conservation of castles, historic reinforced concrete structures and masonries.[33]

He consistently published his works in several languages, in Hungarian, Romanian and possibly in English as well. Often, in the name of the idea of multiculturalism, he made efforts to provide German translations as well. One of his main works, the specialist dictionary published in four languages, in several editions, and including descriptions and detailed drawings of load-bearing structures also served the cause of transcending language barriers in the field. The volumes authored or co-authored by him: *Bevezetés a történeti*

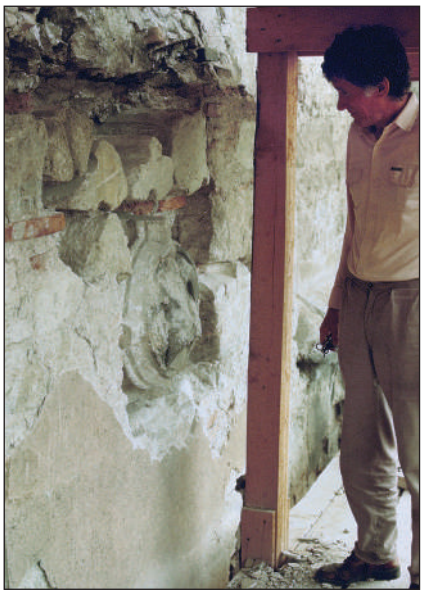
33 George Dan DACIN (*On the Theory of the Restoration of Transylvanian Castles and Mansions*, 4 May, 2012), Imola KIRIZSÁN (*On the Rehabilitation of the Gothic Roof Structures Arranged in Frames, from Transylvania*, 6 October 2012), Graţiela Ligia ANDREICA (*On the Compatibility of Mortars Used for the Restoration of Historic Masonries*, 31 October 2012), Dorottya MAKAY (*The Baroque Structural Concept. Contributions to the Research on Historic Roof Structures of Baroque Character*. 18 October 2013), Petrică Horaţiu SUĂTEAN (*On the Theory of the Restoration of Romanesque Historic Roof Structures*, 31 October 2013), Anca DURGHEU (*On the Theory of the Restoration of Historic Reinforced Concrete Load-bearing Structures of Transylvanian Buildings Dating from the End of the 19th and Beginning of the 20th Centuries*. 29 September 2015), Adrian TUDOREANU-CRIŞAN (research ongoing regarding the Eclectic roof structures).

Caiete ICOMOS tot la editura Utilitas. Până în prezent au fost editate 56 de lucrări de popularizare şi 120 de publicaţii ştiinţifice de către Editura Utilitas.

Pe lângă multiplele sale îndeletniciri, Bálint SZABÓ a participat activ şi neobosit şi în activitatea ştiinţifică, domeniul său principal de cercetare fiind teoria structurilor portante istorice, orientat în primul rând spre structurile istorice de şarpante. Volumele sale pe această temă, adresate în primul rând învăţământului universitar, au devenit cele mai cunoscute. În cercetarea particularităţilor şarpantelor istorice, caracteristice fiecărei epoci, el a implicat atât colegi, cât şi câţiva doctoranzi. Tezele de doctorat conduse de el, se ocupă ca tematică de câte un grup de structuri istorice de şarpante – cu caracter romanic, gotic şi baroc, de reabilitarea castelelor şi de cea a structurilor istorice din beton armat şi zidărie.[33]

Lucrările şi volumele sale au fost publicate în mod consecvent în mai multe limbi, în maghiară, română şi, dacă era posibil, în engleză. În spiritul ideii transilvanismului, nu de puţine ori a făcut eforturi şi pentru traducerea şi în limba germană. Una dintre lucrările sale principale a vizat echivalarea terminologiei profesionale între limbi, seria de dicţiona-

33 George Dan DACIN (*Contribuţii la teoria reabilitării castelelor şi conacelor din Transilvania*, 4 mai 2012), Imola KIRIZSÁN (*Contribuţii la teoria reabilitării şarpantelor istorice cu caracter gotic ordonate în sisteme planare din Transilvania*, 6 octombrie 2012), Graţiela Ligia ANDREICA (*Contribuţii cu privire la compatibilitatea mortarelor în intervenţie asupra zidăriilor istorice*, 31 octombrie 2012), Dorottya MAKAY (*Conceptul structural baroc. Contribuţii la cercetarea şarpantelor istorice având caracter baroc*, 18 octombrie 2013), Petrică Horaţiu SUĂTEAN (*Contribuţii la teoria reabilitării şarpantelor istorice cu caracter romanic*, 31 octombrie 2013), Anca DURGHEU (*Contribuţii la teoria reabilitării structurilor portante istorice din beton armat aferente clădirilor de la sfârşitul secolului XIX începutul secolului XX din Transilvania*, 15 septembrie 2015), Adrian TUDOREANU-CRIŞAN (cercetare doctorală în curs de desfăşurare în domeniul structurilor de şarpante eclectice).



■ ***Fig. 4.*** *În timpul expertizării Bisericii Evanghelice din Bistriţa, 1993.© Utilitas Srl.*
■ ***Fig. 4.*** *During the expert opinion survey of the Lutheran Church in Bistriţa, 1993. © Utilitas Ltd.*
■ ***4. ábra.*** *A besztercei evangélikus templom szakvéleményezésekor, 1993. © Utilitas Kft.*

reknek a kutatásába több doktoranduszát, kollégáját is bevonta. Az általa vezetett doktori dolgozatok az egyes fedélszerkezet-csoportok, román kori, gótikus és barokk jellegű fedélszerkezetek, a kastélyok helyreállításának, a történeti vasbeton szerkezetek és falazatok helyreállításának tematikáját vizsgálják. [33]

Munkáit, köteteit következetesen több nyelven, magyarul, románul és lehetőleg angolul is közzétette.

33 DACIN George Dan (*Adalékok az erdélyi kastélyok és udvarházak helyreállításának elméletéhez*, 2012. május 4.), KIRIZSÁN Imola (*Adalékok az erdélyi sík rendszerekbe szervezett gótikus jellegű történeti fedélszerkezetek helyreállításának elméletéhez*, 2012. október 6.), ANDREICA Graţiela Ligia (*Adalékok a történeti falazatok helyreállításához használt habarcsok kompatibilitásához*, 2012. október 31.), MAKAY Dorottya (*A barokk tartószerkezeti koncepció. Adalékok a barokk jellegű fedélszerkezetek kutatásához*. 2013. október 18.), SUĂTEAN Petrică Horaţiu (*Adalékok a román kori jelleggel bíró történeti fedélszerkezetek helyreállításának elméletéhez*, 2013. október 31.), DURGHEU Anca (*Adalékok az erdélyi XIX. század végi, XX. század eleji épületekhez tartozó vasbeton történeti tartószerkezetek helyreállításának elméletéhez*, 2015. szeptember 29), TUDOREANU-CRIŞAN Adrian (folyamatban lévő doktori kutatás eklektikus fedélszerkezetek témakörében).

tartószerkezetek felújítás elméletébe (Introduction to the Theory of the Restoration of Historic Load-bearing Structures; 1998, Utilitas publishing house, author Bálint SZABÓ), *A történeti tartószerkezetek mechanikai kialakítása* (The Mechanical Conformation of Historic Load-bearing Structures; 2003, Utilitas publishing house, authors Bálint SZABÓ, Imola KIRIZSÁN, Horea MANIU, Ildikó KIRIZSÁN), *Történeti tartószerkezetek illusztrált szakszótára* (Illustrated Dictionary of Historic Load-bearing Structures; 2004, Utilitas publishing house, author Bálint SZABÓ), *Történeti tartószerkezetek illusztrált szakszótára* (Illustrated Dictionary of Historic Load-bearing Structures; 2005, Utilitas publishing house, Kriterion publishing house, author Bálint SZABÓ), *Történeti tartószerkezeti beavatkozások illusztrált szakszótára* (Illustrated Dictionary of Interventions on Historic Load-bearing Structures; Volume I and II; 2008, Utilitas publishing house, author Bálint SZABÓ), *Történeti fedélszerkezetek illusztrált szakszótára* (Illustrated Dictionary of Historic Roof Structures; 2011, Utilitas publishing house, authors Bálint SZABÓ, Imola KIRIZSÁN), *Történeti tartószerkezeti beavatkozások* (Interventions on Historic Load-bearing Structures; 2012, Utilitas publishing house, author Bálint SZABÓ).

Professional policy

■ An important part of the scientific work of Bálint SZABÓ was his endeavour to influence practice in the field, as determined by national regulations. In the mid-1990s, he had already noticed the gaps in the national law regarding historic buildings. Technical specifications were properly detailed only regarding new buildings and load-bearing structures, and the results of the national research centres provided grounds for development only in this regard. He achieved several accomplishments in the development of the assessment methodology for historic load-bearing structures, and in transposing the new results into regulations. He could not have achieved

re în patru limbi, cu conţinut bogat de descrieri, desene şi ilustraţii, a urmat mai multe versiuni şi ediţii. Publicaţii marcate de numele său sunt: *Introducere în teoria reabilitării structurilor de rezistenţă istorice* (1998, Editura Utilitas, autor Bálint SZABÓ), *Terminologia conformării mecanice a structurilor portante istorice* (2003, Editura Utilitas, autori Bálint SZABÓ, Imola KIRIZSÁN, Horea MANIU, Ildikó KIRIZSÁN), *Dicţionar ilustrat de structuri portante istorice* (2004, Editura Utilitas, autor Bálint SZABÓ), *Dicţionar ilustrat de structuri portante istorice* (2005, Editura Utilitas, Editura Kriterion, autor Bálint SZABÓ), *Dicţionar ilustrat de intervenţii la structuri portante istorice* (Vol. I. şi II., 2008, Editura Utilitas, autor Bálint SZABÓ), *Dicţionar ilustrat de şarpante istorice* (2011, Editura Utilitas, autori Bálint SZABÓ, Imola KIRIZSÁN), *Intervenţii la structuri portante istorice* (2012, Editura Utilitas, autor Bálint SZABÓ).

Politica profesională

■ Un capitol important din activitatea ştiinţifică a lui Bálint SZABÓ este efortul său de a influenţa practica profesională definită de legislaţia naţională. Deja la mijlocul anilor 1990, a observat deficienţele legislaţiei naţionale în privinţa clădirilor istorice, deoarece standardele inginereşti erau elaborate corespunzător numai pentru clădiri şi structuri noi de rezistenţă, iar rezultatele institutelor naţionale de cercetare asigurau îmbunătăţiri temeinice doar pentru acestea. Lui i se atribuie unele progrese în domeniul dezvoltării metodologiei expertizelor tehnice cu privire la structurile portante istorice şi de adoptare a noilor rezultate în legislaţia tehnică. Toate acestea nu s-ar fi realizat fără ca Bálint SZABÓ să fi fost permanent prezent în prima linie a politicii de protecţie a patrimoniului naţional, în unele comitete locale şi în cel naţional, pentru a susţine hotărât şi categoric inovaţiile necesare în metodologia profesională şi în responsabilitatea

Nemritkán, a transzilvanizmus eszméjének jegyében a német fordításért is erőfeszítéseket tett. A szakmai terminológia nyelvek közötti átjárhatóságát szolgálta egyik főműve, a négynyelvű tartószerkezeti, leírásokat, rajzokat gazdagon tartalmazó, több változatot és kiadást megért szakszótársorozata. Nevével fémjelzett kiadványok: *Bevezetés a történeti tartószerkezetek felújításelméletébe* (1998, Utilitas Kiadó, szerző SZABÓ Bálint), *A történeti tartószerkezetek mechanikai kialakítása* (2003, Utilitas Kiadó, szerzők SZABÓ Bálint, KIRIZSÁN Imola, Horea MANIU, KIRIZSÁN Ildikó), *Történeti tartószerkezetek illusztrált szakszótára* (2004, Utilitas Kiadó, szerző SZABÓ Bálint), *Történeti tartószerkezetek illusztrált szakszótára* (2005, Utilitas Kiadó, Kriterion Kiadó, szerző SZABÓ Bálint), *Történeti tartószerkezeti beavatkozások illusztrált szakszótára* (I. és II. kötet) (2008, Utilitas Kiadó, szerző SZABÓ Bálint), *Történeti fedélszerkezetek illusztrált szakszótára* (2011, Utilitas Kiadó, szerzők SZABÓ Bálint, KIRIZSÁN Imola), *Történeti tartószerkezeti beavatkozások* (2012, Utilitas Kiadó, szerző SZABÓ Bálint).

Szakmapolitika

■ Fontos fejezete SZABÓ Bálint tudományos munkájának, hogy erőfeszítéseket tett a szakmai gyakorlatot meghatározó országos szabályozás befolyásolására. Már az 1990-es évek derekán felfigyelt a hazai jogszabályok történeti épületekkel kapcsolatos hiányosságaira. A mérnöki szabványok csupán az új épületek és tartószerkezetek vonatkozásában voltak megfelelően kidolgozottak, az állami kutatóintézetek eredményei csupán ezek számára biztosítottak megalapozott irányelveket. SZABÓ Bálint számos sikert könyvelhetett el a történeti épületek tartószerkezeti szakvéleményezése módszertanának fejlesztése, valamint az új eredmények törvényerőre való emelése területén. Nem valósulhatott volna meg mindez anélkül, hogy folyamatosan ne lett volna jelen az

all this without being permanently present in the first line of national policymaking regarding historic buildings, in local and national committees, in order to stand up firmly for the methodological renewal of the field, and for the accountability of fulfilling quality requirements.

How was all this extensive work possible? Bálint SZABÓ always had in view the overarching goal to comprehend, understand, diagnose everything and then devise solutions for all issues – also, to actually implement them. He constantly shared his analyses of specific topics with his colleagues, making them understand why action was needed at that point and in that manner. His contribution in professional debates were in fact statements, delivered with a tremendous energy, in his strong and dynamic tone. He knew that one of the keys to success was immediate and fast action and the proper drive. His charismatic character, the optimistic energy he emanated had an instant effect on his environment, and urged others to act, create, and many times to deliver on an extraordinary level. For his employees and colleagues, work carried out overtime, the permanent readiness and focused work appeared to be natural attitudes. His spirited elan was overwhelming and discouraging for some at a first encounter, only to make them enthusiastically join the common cause afterwards. He always had ideas for actions and projects, sharing them regularly with openness. When he was warned that his inventive ideas, once disclosed, might be used and implemented first by others instead of his own team, he generously shrugged: "Even better – he used to say –, at least it gets done. Anyway, no one should fear that I wouldn't have new ideas for new actions, as I already have more than we can accomplish!" He often recalled the words of János BOLYAI, uttering them as his motto: *"out of nothing I created a new, different world"*[34], reminding his environ-

34 János BOLYAI formulated this in his letter written on 3 November 1823 to his father, mathematician Farkas BOLYAI about his revolutionary ideas [free translation (editor's note)].

privind controlul cerinţelor de bază ale calităţii.

Cum a fost posibilă această muncă imensă şi diversă? Bálint SZABÓ purta în el constant scopul maximalist de a cuprinde, de a înţelege, de a diagnostica totul, apoi de a găsi soluţia problemei. Totodată să o şi rezolve. A împărtăşit cu colegii săi aproape cu fiecare ocazie analizele sale situaţionale, făcându-i să înţeleagă de ce trebuie să se acţioneze tocmai aşa şi tocmai atunci. Dezbaterile sale profesionale erau realizări pe care le susţinea energic, cu intonaţie puternică şi dinamică. A fost conştient de faptul că unul dintre secretele succesului era acţionarea imediată, rapidă, înfăptuită cu elan corespunzător. Caracterul său carismatic şi impulsul optimist pe care-l emana aveau de obicei impact imediat asupra celor din jur, încurajându-i să acţioneze, să creeze şi, adesea, să obţină performanţe remarcabile. Pentru subordonaţii şi colegii săi se părea firesc să lucreze peste orele de program contractuale, să fie tot timpul în alertă şi concentrare peste puteri. Elanul său enorm, la prima întâlnire, pe unii îi şoca şi îi descuraja, pentru ca să ajungă ulterior să susţină cu însufleţire cauza comună. Întotdeauna avea idei referitoare la acţiuni şi proiecte, pe care le expunea în mod regulat. Când cei din jur l-au avertizat că ideile sale inovatoare ar putea fi folosite şi implementate de alţii, înaintea lui şi în locul echipei sale, el dădea generos din mână: „cu atât mai bine"– spunea, „măcar se va realiza, şi oricum nu trebuie să se îngrijoreze nimeni că nu voi avea o nouă idee, pentru o nouă acţiune, cu mult peste cea ce putem realiza!" În discursurile sale, susţinea adesea ca motto, cuvintele lui János Bolyai: *„Am creat din nimic o lume nouă, diferită"*[34] – reamintind că în Transilvania există tradiţia, conform căreia golul (hiatul) nu înspăimântă, ci inspiră. Din punctul de vedere al rezul-

34 Formularea provine din scrisoarea lui János BOLYAI din 3 noiembrie 1823, adresată tatălui său, matematicianul Farkas BOLYAI [traducere liberă (notă editor)].

országos műemlékvédelmi szakmapolitika első vonalában, az egyes helyi és országos bizottságokban, hogy hangos és határozott szóval kiálljon a szakma módszertani újításaiért, a minőség alapkövetelményeinek számonkérhetőségéért.

Hogy volt lehetséges ez a hatalmas szerteágazó munka? SZABÓ Bálint előtt folyamatosan ott lebegett a maximalista cél, lehetőleg mindent átlátni, megérteni, diagnosztizálni, majd megoldást találni. És meg is oldani. Folyamatos helyzetelemzéseit szinte minden alkalommal megosztotta munkatársaival, megértetve, hogy miért épp úgy és miért épp akkor kell cselekedni. Szakmai vitái tulajdonképpen kinyilatkoztatások voltak, melyeket hatalmas energiával, erős, dinamikus hanghordozással adott elő. Tudatában volt annak, hogy a siker egyik titka az azonnali, gyors cselekvés és megfelelő lendület. Karizmatikus alkata, a belőle áradó optimista lendület környezetére általában azonnali hatással volt, másokat is cselekvésre, alkotásra, sokszor kiemelkedő teljesítményre ösztönzött. Beosztottjai, munkatársai számára természetesnek tűnt a szerződéses munkaórákon felüli munkavégzés, az állandó készenlét és erő feletti összpontosítás. A belőle áradó hatalmas lendület egyeseket első találkozáskor megrendített, elbátortalanított, hogy aztán később lelkesen a közös ügy mellé álljanak. Cselekvésre, projektekre vonatkozó ötletei mindig voltak, és ezeket rendszeresen megosztotta. Amikor környezetéből arra figyelmeztették, hogy újító gondolatait esetleg majd mások előtte felhasználják, és csapata helyett mások valósítják meg, nagyvonalúan legyintett: „Annál jobb – mondta –, legalább megvalósul, és különben is nem kell attól senkinek félni, hogy ne legyen új ötletem új cselekvésre, bőven több annál, amit meg tudunk valósítani!" Többször hangoztatta, beszédeiben mottóként emlegette BOLYAI János szavait: *„semmiből egy új, más világot teremtettem"*[34] –

34 BOLYAI János 1823. november 3-án levelet írt újító gondolatairól apjának, BOLYAI Farkas matematikusnak, ennek egyik sorában fogalmazott így.

ment that in Transylvania hiatus traditionally does not scare, but inspires. From the perspective of the results of his work, the validity of the above statement is unquestionable.

The most apparent are perhaps the more than 100 historic building conservation projects carried out between 1992 and 2018, the planning of which is linked to his name. The improved quality of regulatory requirements regarding built heritage protection is also significant. But perhaps the most important result is the range of professionals engaged in built heritage conservation, Bálint SZABÓ extensively contributing to the development of this community and to the creation of a social need for this field. His achievements largely surpass the tasks he could fulfil within the time and power given to him. His thinking was systemic, he created systems. He trained professionals, he managed organizations and institutions, which could further develop and follow their call, perhaps also because as a teacher, Bálint SZABÓ could live and follow the words of Loránd EÖTVÖS: *"The autonomy of the thought can be encouraged only by the education that comes from teachers, who themselves think freely."*[35]

In the summer of this year, Bálint SZABÓ departed from our world forever, but his lifepath, given its complexity, its system and institution-building character, cannot be regarded as closed: his former colleagues and disciples, and those who graduated from the courses he created represent today a significant part of the range of professionals in built heritage conservation in Transylvania, and the organizations he established continue to fulfil the vision and goals once determined by him.

35 Loránd EÖTVÖS: Commencement Address at the Royal Hungarian University, Budapest, 15 September 1891.

tatelor muncii sale, cele prezentate mai sus sunt univoc veridice.

Poate cele mai vizibile roade sunt restaurările de monumente istorice, în număr de peste 100, executate în perioada 1992–2018, proiectarea acestora fiind legată într-o formă sau alta de numele său. Este importantă şi schimbarea calitativă a sistemelor oficiale de cerinţe aferente protecţiei monumentelor istorice. Dar poate cel mai însemnat rezultat al său este contribuţia la crearea şi funcţionarea echipei de specialişti în protecţia patrimoniului construit, precum şi la dezvoltarea cererii sociale în această direcţie. Rezultatele activităţilor lui Bálint SZABÓ depăşesc cu mult sarcinile rezolvabile de el însuşi, în limitele puterii şi a timpului personal. El avea viziunea sistemelor, a creat sisteme. A cultivat profesionişti, a condus organizaţii şi instituţii care au putut să se dezvolte în continuare, urmându-şi vocaţia, deoarece Bálint SZABÓ a fost capabil să trăiască ca profesor şi să urmeze afirmaţia lui Loránd EÖTVÖS: *„Autonomia în gândire poate fi însuşită doar prin învăţare de la un profesor care gândeşte autonom."*[35]

Bálint SZABÓ a părăsit lumea noastră pentru totdeauna în această vară, dar, prin complexitatea personalităţii sale, prin rolul său de constructor de profesii şi de fondator de instituţii, cariera sa continuă. Foştii săi colaboratori, discipoli sau absolvenţi ai instituţiilor educaţionale pe care le-a înfiinţat reprezintă astăzi o pondere semnificativă din personalul specializat în domeniul protecţiei monumentelor din Transilvania, iar activitatea organizaţiilor pe care le-a creat continuă să urmeze viziunea şi obiectivele sale.

35 Loránd EÖTVÖS: Discurs inaugural la Universitatea Regală Maghiară, Budapesta, 15 septembrie.

emlékeztetőül, hogy Erdélyben immár hagyománya van annak, hogy az üresség (a hiány) nem megijeszt, hanem inspirál. Munkásságának eredményei szempontjából a fenti sorok valóságtartalma egyértelmű. Leginkább látható talán az az 1992–2018 között kivitelezett több mint 100 műemlék-helyreállítás, melyek tervezése valamilyen formában nevéhez kötődik. Fontos a műemlékvédelemhez való hivatalos követelményrendszerek minőségi megváltozása is. De talán a legfontosabb eredmény az az építettörökség-védelmi szakembergárda, melynek létrejöttéhez és működéséhez, az ilyen irányú társadalmi igény kialakításához hozzájárult. SZABÓ Bálint tevékenységének eredményei messze túlmutatnak a saját maga által személyi erő- és időkeretek között megoldható feladatokon. Rendszerben látott, rendszereket teremtett. Szakembereket nevelt, szervezeteket, intézményeket működtetett, ezek tovább fejlődhettek, és követik hivatásukat, talán azért is, mert SZABÓ Bálint tanárként élni és követni tudta EÖTVÖS Loránd szavait: *„A gondolkozásban önállóságot csak az olyan tanárnak tanítása adhat, a ki maga önállóan gondolkozik."*[35]

SZABÓ Bálint 2024 nyarán örökre elhagyta világunkat, de életpályája, összetettségénél, szakmaépítő, intézményteremtő jellegénél fogva, nem tekinthető lezártnak: egykori munkatársai, tanítványai vagy az általa létrehozott oktatási intézmények végzősei képezik ma az erdélyi műemlékvédelem szakembergárdájának jelentős hányadát, az általa létrehozott szervezetek működése pedig tovább halad víziója, egykor meghatározott célkitűzései szerint.

35 EÖTVÖS Loránd: *Székfoglaló beszéd a Királyi Magyar Tudományegyetemen*. Budapest, 1891. szeptember 15.

■ Dragoș Șerban Ion ȚIGĂNAȘ[1]

Bálint György SZABÓ, Architect of the Built Heritage Engineering in Transylvania[2]

■ *Writing about a personality with a remarkable multifaceted career, in honor of a significant milestone birthday, is a challenge that goes beyond merely outlining an extensive curriculum vitae. Where should the emphasis be placed when it exceeds concrete data? I would begin with a remark about the character of the person I am writing about now: diversity and convergence in their pursuits. A range of directions and tools perfectly subordinated to a higher purpose: the culture of conserving the built historical heritage of Transylvania.*

An aristocrat of conservation

■ I remember an exhibition in the early ‘90s dedicated to the state of heritage in Transylvania. On the walls of the Art Museum in Cluj-Napoca were displayed black-and-white photographs of abandoned and deteriorated Transylvanian castles, palaces, and mansions. It was all indescribably sad. The agricultural cooperatives, orphanages, and psychiatric sanatoriums that had occupied the noble residences during communism left behind architecture emptied of meaning after such improper and barbaric use. However, it became clear within just a few years that the greatest harm to a house is to be of no use to anyone, to be abandoned. In the years that followed, the trials for their restitution to the descendants of former owners kept many of these wonderful buildings and ensembles in a state of suspended responsibility, exacerbating their deterioration. At that time, I had not yet met Professor Bálint SZABÓ. I only felt that the entire collection of architecture, which I had learned about in the recently graduated university as being definitive for the historical course of this art in Romania, was in crisis. I felt that the built history

1 Conf. PhD. arch. habil, Dean of the Faculty of Architecture and Urbanism, Cluj-Napoca, Romania.
2 This article was written in April 2024 [ed. note].

Bálint György SZABÓ, arhitect al ingineriei patrimoniului construit din Transilvania[2]

■ *Să scrii despre o personalitate cu o carieră multifaţetată remarcabilă, omagiind aniversarea unei vârste rotunde, este o provocare care trece dincolo de a pune pe note un curriculum vitae foarte bogat. Unde să pui accentele care excedă cu mult datele concrete? Aş începe cu o remarcă asupra caracterului personalităţii celui despre care scriu acum: diversitate şi convergenţă a preocupărilor. Un evantai de direcţii şi instrumente perfect subordonate unui scop înalt: cultura restaurării patrimoniului istoric construit din Transilvania.*

Un aristocrat al restaurării

■ Îmi aduc aminte, la începutul anilor ’90, de o expoziţie dedicată stării patrimoniului din Transilvania. Pe pereţii Muzeului de Artă din Cluj-Napoca erau expuse fotografii în alb şi negru ale castelelor, palatelor şi conacelor transilvănene abandonate şi degradate. Totul era de o tristeţe de nepronunţat. Cooperativele agricole, casele de copii orfani şi sanatoriile de boli psihice care ocupaseră reşedinţele nobiliare în timpul comunismului au lăsat în urma lor o arhitectură golită de sens după ocupaţia improprie şi barbară. Totuşi, în doar câţiva ani a reieşit clar la iveală faptul că cel mai mare rău pentru o casă este să nu folosească nimănui, să fie abandonată. În anii care au urmat, procesele de retrocedare către urmaşii foştilor proprietari au ţinut multe dintre aceste clădiri şi ansambluri minunate într-o imponderabilitate a responsabilităţilor asumate care le-a accentuat degradarea. Nu îl cunoşteam încă pe domnul profesor Bálint SZABÓ, atunci. Simţeam doar că întreaga colecţie de arhitectură despre care învăţasem la facultatea recent absolvită ca fiind definitorie pentru parcursul istoric al acestei arte în România este în cri-

1 Conf. dr. arh. habil., decan al Facultăţii de Arhitectură şi Urbanism, Cluj-Napoca, România.
2 Acest articol a fost redactat în aprilie 2024 [notă ed.].

ză. Simţeam că istoria construită are nevoie de un nou ordin cavaleresc de experţi care sacrifică orice pentru a câştiga lupta cu timpul, banii şi ireversibilitatea degradărilor excesive. În anii aceia, în care fiecare încerca să îşi găsească direcţia în noua societate postcomunistă, să înţeleagă ce misiune să îşi atribuie şi cum să o ducă la îndeplinire, din politehnica clujeană apare un nou cavaler al restaurării. La treizeci de ani de la absolvirea construcţiilor civile, Bálint SZABÓ se întoarce pe băncile universitare pentru a studia restaurarea monumentelor, păşind astfel ferm pe calea care avea să îl consacre ca aristocrat al salvării patrimoniului construit. Îmi imaginez un astfel de titlu nobiliar acordat de o autoritate monarhică a domeniului celor care au servit interesele patrimoniului construit abandonat. Bálint SZABÓ ar fi fost unul dintre primii recipienţi ai unei astfel de înnobilări.

Creator de instrumente de restaurare

■ Probabil că Bálint SZABÓ şi-a dat seama devreme că, pentru a exista o practică consistentă a restaurării, care se anunţa ca un adevărat război de gherilă, nu e suficientă doar propria forţă implicată. Trebuia creat un întreg ecosistem de cunoaştere, acţiune, suport, promovare, educare şi diseminare, de politici şi proiecte, o adevărată mişcare în lumea constructorilor, dar care trebuia extinsă către mai multe nişe profesionale. Bálint SZABÓ a avut viziunea necesară. A ştiut să construiască instrumentele de producţie ale acestui ecosistem, cu răbdare şi consecvenţă. A combinat teoria şi practica, educaţia şi cercetarea, dialogul şi publicaţia ştiinţifică. A creat firme care să lucreze efectiv în restaurare: Pro Restauratio. A înfiinţat o structură lucrativă complexă, interdisciplinară, Centrul de Proiectare în domeniul Reabilitării Patrimoniului Construit. A înfiinţat asociaţia profesională care să îi adune împreună pe cei cu interese convergente în acest domeniu, Asociaţia Restauratorilor de Monumente Istorice din Transilvania. A condus o structură care să genereze şi să atragă resurse pentru domeniul restaurării, Fundaţia Transilvania Trust. A înfiinţat fundaţia Transsylvania Nostra. A construit un cadru pentru teoria şi ştiinţa restaurării prin simpozioanele de teoria şi practica restaurării şi simpozioanele de structuri portante istorice. A creat cursuri universitare pentru studenţi sub titlul *Patologia şi terapeutica construcţiilor*, considerând intervenţia restauratorului ca un act medical subtil. *Asanarea structurilor portante istorice* este o metodologie de abordare transmisă teoretic. A conceput şi elaborat dicţionare ilustrate pentru structuri portante istorice, intervenţii la structuri portante istorice şi şarpante istorice, investigând, clasificând şi explicitând această zonă de întâlnire între istorie, inginerie, arhitectură şi tehnologie.

needed a new chivalric order of experts who would sacrifice everything to win the battle against time, financial constraints, and the irreversibility of excessive degradation. In those years, when everyone was trying to find their direction in the new post-communist society, to understand what mission to undertake and how to accomplish it, a new knight of restoration emerged from the Polytechnic University of Cluj. Thirty years after graduating in civil engineering, Bálint SZABÓ returned to the university to study historic building conservation, firmly stepping onto the path that would establish him as an aristocrat of the preservation of built heritage. I imagine such a noble title being granted by a monarchical authority of the field to those who have served the interests of abandoned built heritage. Bálint SZABÓ would have been one of the first recipients of such ennoblement.

Creator of conservation tools

■ Bálint SZABÓ likely realized early on that a consistent practice of conservation, which promised to be a true guerrilla war, required more than just his own involvement. It was necessary to create an entire ecosystem of knowledge, action, support, promotion, education, dissemination, policies, and projects – a genuine movement within the construction world that needed to extend to various professional niches. Bálint SZABÓ had the necessary vision. He knew how to build the production tools for this ecosystem with patience and consistency. He combined theory and practice, education and research, dialogue and scientific publication. He established companies to actively work in restoration, such as Pro Restauratio. He founded a complex, interdisciplinary working structure, the Centre for Design in the Rehabilitation of Built Heritage. He established a professional association to bring together those with convergent interests in this field, the Association of Historic Building Conservationists of Transylvania. He led a structure to generate and attract resources for the restoration field, the Transylvania Trust Foundation. He founded the Transsylvania Nostra Foundation. He created a framework for the theory and science of conservation through the conferences on the theory and practice of conservation and the conferences on historical load-bearing structures. He developed university courses for students under the title *Pathology and Therapeutics of Constructions*, viewing the conserver's intervention as a subtle medical act. *The Treatment of Historical Load-bearing Structures* is a methodology taught theoretically. He conceived and elaborated illustrated dictionaries for historic load-bearing structures, interventions on historical load-bearing structures, and historical roofs, investigating, classifying, and explaining this intersection of history, engineering, architecture, and technology.

From the Vitruvian triad, he chose *"utilitas"*

■ The three magical words that have defined architecture for over two millennia, left to us by the Roman Marcus VITRUVIUS POLLIO even before Jesus Christ, are *firmitas*, *utilitas*, and *venustas*. Bálint SZABÓ chose *utilitas*, not *firmitas*, which refers to the stability ensured by the structural engineer in our days, nor *venustas*, the beauty provided by the architect. *Utilitas* is the purpose, the role, the reason that gives meaning to building. *Utilitas* is for people. The utility of a historic building is not an end in itself. Museification is not a solution. Built heritage must be used because it was created for people. They must rediscover the joy of utility beyond mere contemplation.

An atlas of conservation works

■ Aiud, Alba Iulia, Arcuş, Ardud, Baia Mare, Bistriţa, Bonţida, Bucureşti, Carei, Câmpia Turzii, Cluj-Napoca, Daia, Dej, Deva, Dragu, Feldioara, Gheorgheni, Gherla, Lupşa, Mesentea, Mugeni, Mukaceva (Ucraina), Năsăud, Oradea, Posmuş, Satu Mare, Sfântu Gheorghe, Sighetul Marmaţiei, Sighişoara, Timişoara, Zalău. These are cities and towns, capitals, and villages that we may not have heard of or passed through, all sharing the same common denominator. These are the conservation works in which Bálint SZABÓ participated. These are the communities that received the revived monuments for use, to be represented and enjoyed by them along with all those who will visit and use them.

Emeritus Professor of the school of architecture in Cluj

■ Bálint SZABÓ joined the ranks of great personalities in the culture of building who have demonstrated that the distinction between architects and engineers need not be abrupt. He showed that each of these professionals should ideally possess qualities of the other to be truly complete. He became an engineer of architecture and an architect of engineering, with both roles dedicated exclusively to buildings of value, enshrined as the built heritage of Transylvania and the world. Starting from the faculty of civil engineering, he progressed to the faculty of architecture, which adopted and embraced him as a fundamental professor for multiple generations of architects. He inspired and reinforced their interest in the conservation and restoration of heritage from both scientific and practical perspectives. During his academic tenure at the university, Bálint SZABÓ left a lasting imprint on the Cluj school of architecture with strong characteristics of heritage education. He was part of the select group of professors that any strong faculty

Din triada vitruviană a ales *„utilitas"*

■ Cele trei cuvinte magice care definesc arhitectura de peste două milenii, lăsate de romanul Marcus VITRUVIUS POLLIO încă dinainte de Iisus Hristos sunt *firmitas*, *utilitas* şi *venustas*. Bálint SZABÓ a ales *utilitas* nu *firmitas*, care trimite către stabilitatea asigurată de inginerul structurist, în zilele noastre şi nici *venustas*, frumuseţea dată de arhitect. *Utilitas* este scopul, rolul, noima care dă sens construirii. *Utilitas* este pentru oameni. Utilitatea monumentului istoric nu este ceva în sine. Muzeificarea nu este o soluţie. Patrimoniul construit trebuie să fie folosit pentru că a fost creat pentru oameni. Aceştia trebuie să redescopere bucuria utilităţii dincolo de contemplaţie.

Un atlas al lucrărilor de restaurare

■ Aiud, Alba Iulia, Arcuş, Ardud, Baia Mare, Bistriţa, Bonţida, Bucureşti, Carei, Câmpia Turzii, Cluj-Napoca, Daia, Dej, Deva, Dragu, Feldioara, Gheorgheni, Gherla, Lupşa, Mesentea, Mugeni, Mukaceva (Ucraina), Năsăud, Oradea, Posmuş, Satu Mare, Sfântu Gheorghe, Sighetul Marmaţiei, Sighişoara, Timişoara, Zalău. Acestea sunt localităţi mari sau mici, capitale şi sate de care poate nu am auzit sau prin care nu am trecut niciodată, toate având acelaşi numitor comun. Aici sunt lucrările de restaurare la care a participat Bálint SZABÓ. Aici sunt comunităţile care au primit spre utilizare monumentele renăscute, pentru a fi reprezentate şi a se bucura de ele împreună cu toţi cei care le vor vizita şi folosi.

Profesor emerit al şcolii de arhitectură clujene

■ Bálint SZABÓ s-a alăturat marilor personalităţi ale culturii construirii care au demonstrat că distincţia între arhitecţi şi ingineri nu trebuie făcută abrupt. Că fiecare dintre cei doi trebuie să aibă generic ceva din celălalt pentru a fi cu adevărat complet. El a devenit un inginer al arhitecturii şi un arhitect al ingineriei, ambele posturi dedicate exclusiv clădirilor de valoare, consacrate ca patrimoniu construit al Transilvaniei şi al lumii. Pornit din facultatea de construcţii civile, a evoluat către cea de arhitectură care l-a adoptat şi capturat ca profesor fundamental pentru mai multe generaţii de arhitecţi cărora le-a inspirat şi consolidat interesul pentru conservarea şi restaurarea patrimoniului din perspectivă ştiinţifică şi practică, deopotrivă. A reuşit pe perioada activităţii academice de la catedră, să amprenteze şcoala de arhitectură clujeană cu trăsături puternice ale educaţiei de patrimoniu. A făcut parte din grupul restrâns de profesori pe care orice facultate puternică îi distinge ca fiind cei pe care nu

îi vei uita niciodată după studenţie, nu doar pentru că disciplina predată se definea prin seriozitate, dar mai ales pentru modul în care a contribuit la naşterea de pasiuni pentru lucrul cu arhitectura istorică de mare valoare.

El însuşi, posibil subiect de cercetare

■ Am convingerea că ceea ce a construit Bálint SZABÓ în spaţiul real şi în cel mental şi-a găsit deja continuatorii. Mai cred că în timp, tineri cercetători ai generaţiilor următoare se vor apleca spre realizările atât de consistente ale maestrului Bálint SZABÓ. Personalităţile de acest fel se disting prin ceea ce au făcut, prin rezultate, dar rămâne întotdeauna de cercetat întreaga lume a motivaţiilor, a deciziilor şi acţiunilor tactice care fac ca strategiile să se transforme în proiecte şi acestea să conducă la realizări. Opera lui Bálint SZABÓ este subiect de teză de doctorat, de monografie şi de fundament al unei culturi solide a restaurării contemporane a monumentelor istorice. Opera sa devine ea însăşi patrimoniu şi istorie şi mă întreb ce răsplată poate fi mai bună?

A scos la lumină spaþiile nevăzute din şarpantele istorice

■ Pentru mine această formă de arheologie structurală este poate cea mai fascinantă consecinţă a muncii profesorului Bálint SZABÓ. Structurile acoperişurilor sunt cel mai frecvent ascunse vederii celor care vizitează clădirile excepţionale, fiind ca un schelet acoperit de muşchi, ţesuturi şi piele, fundamental dar invizibil din exterior. A făcut ca frumuseţea, inventivitatea şi importanţa acestor părţi nevăzute ale construcţiilor să devină parte din spectacolul intelectual şi artistic pe care îl oferă şarpantele istorice. A deschis sipetele cu comori spaţiale ferecate pentru admiratorul de rând al goticului, renaşterii şi barocului din Transilvania. Acoperişurile sunt carenele inversate ale corăbiilor care navighează prin timp. Bálint SZABÓ le-a explorat, le-a înţeles mai mult decât structural şi static, transformându-le în obiect de descoperit şi admirat. Ele sunt parte din cultura construirii din epocile realizării lor.

Tuşnad, un loc transformat din substantiv propriu în unul comun

■ Simpozioanele de Teoria şi Practica Reabilitării Patrimoniului Construit au început la Tuşnad în 1992. Locul a fost consacrat şi grupul de participanţi interesaţi a construit un fel de club relevant cu întâlniri de cea mai mare importanţă în calendarele anuale ale conservării patrimoniului. Dacă eşti apărător, cercetător, misionar,

distinguishes as those you will never forget after graduation. This distinction wasn't just because the subjects he taught were defined by seriousness, but especially due to how he fostered passions for working with highly valuable historical architecture.

Himself, possible subject of research

■ I am convinced that what Bálint SZABÓ has built, in both the real and mental spaces, has already found its successors. I also believe that over time, young researchers from future generations will turn their attention to the substantial achievements of Master Bálint SZABÓ. Personalities of this kind are distinguished by what they have done, by their results, but there is always the need to explore the entire world of motivations, decisions, and tactical actions that turn strategies into projects and lead to accomplishments. Bálint SZABÓ's work is a subject for doctoral theses, monographs, and a foundation for a solid culture of contemporary conservation of historic buildings. His work itself becomes heritage and history, and I wonder, what better reward could there be?

He brought to light the unseen spaces in historical roof structures

■ For me, this kind of structural archaeology is perhaps the most fascinating consequence of Professor Bálint SZABÓ's work. Roof structures are often hidden from view for those who visit exceptional buildings, like skeletons covered in muscle, tissues, and skin – fundamental yet invisible from the outside. He made the beauty, inventiveness, and importance of these unseen parts of buildings part of the intellectual and artistic spectacle offered by historical roof structures. He unlocked the gates to spatial treasures locked away for the ordinary admirer of Transylvanian Gothic, Renaissance, and Baroque architecture. Roofs are the inverted hulls of ships navigating through time. Bálint SZABÓ explored them, understood them beyond their structural and static aspects, transforming them into objects to be discovered and admired. They are part of the construction culture of their eras.

Tuşnad, a place transformed from a proper noun into a common one

■ The Conference Series on Theoretical and Practical Issues on Built Heritage Conservation began in Tuşnad in 1992. The place became renowned, and the group of interested participants formed a kind of relevant club with meetings of utmost importance in the annual calendars of heritage conservation. Whether you were a

defender, researcher, missionary, expert, specialist, or lover of heritage, you had to go to Tuşnad every season to meet with the most important theories, projects, actions in the field, and the people behind them, of course. The Tuşnad conference series became ingrained in professional consciousness. They were so influential that whenever, for any reason, they were organized elsewhere, they were still referred to as Tuşnad. Tuşnad was held in Oradea, Cluj-Napoca, or elsewhere. Organizers and participants would discuss "Where will the tuşnad be this year?" For me, it's still a demonstration of the depth and consistency of dedication to heritage by the person we are honouring today.

Our Transylvania, but in Latin

■ "The architect is a mason who has learned Latin." I don't know if Bálint SZABÓ had this saying in mind when he founded *Transsylvania Nostra*, a foundation and magazine consistently dedicated to none other than the protection of built heritage. Out of the entire collection that deserves a place in your library, to be read and reread as needed, this issue dedicated to the anniversary of the visionary founder is perhaps the most valuable. The statement no longer needs to be proven.

Castles, but not of sand

■ The years go by, but the heritage remains. Castles, palaces, churches, and edifices that bear witness to the cultures and continuity of communities, revitalized directly through the involvement of Professor Bálint SZABÓ or indirectly through his disciples, together form a world. It's our Transylvania, offered to all. On this anniversary, we celebrate the passion, dedication, knowledge, professionalism, generosity, efficiency, creativity, and vision of a professional, this architect of engineering and policy of heritage in our Transylvania. Happy anniversary!

expert, specialist sau iubitor al patrimoniului trebuia să mergi în fiecare sezon la Tuşnad, să te întâlneşti cu cele mai importante teorii, proiecte şi acţiuni din domeniu şi cu oamenii din spatele lor, bineînţeles. Simpozioanele Tuşnad au intrat în conştiinţa profesională. Au fost atât de puternice încât atunci când, din orice motiv, ele au fost organizate altundeva, au fost numite tot Tuşnad. S-a ţinut Tuşnad la Oradea, la Cluj-Napoca sau altundeva. Organizatorii şi participanţii discutau despre „unde va fi tuşnadul anul acesta?". Pentru mine e încă o demonstraţie de profunzime şi consistenţă a dedicaţiei pentru patrimoniu a celui pe care îl aniversăm acum.

Transilvania noastră, dar în limba latină

■ „Arhitectul e un zidar care a învăţat limba latină". Nu ştiu dacă Bálint SZABÓ s-a gândit la acest dicton când a fondat *Transsylvania Nostra*, fundaţie şi revistă consecventă dedicată cui altcuiva decât protecţiei patrimoniului construit? Din toată colecţia pe care merită să o ai în bibliotecă, să o poţi citi şi reciti la nevoie, numărul acesta dedicat aniversării fondatorului vizionar este poate cel mai valoros. Afirmaţia nu mai trebuie demonstrată.

Castele, dar nu de nisip

■ Anii trec dar patrimoniul rămâne. Castelele, palatele, bisericile şi edificiile martor ale culturilor şi continuităţii comunităţilor, care au primit viaţă nouă direct prin implicarea profesorului Bálint SZABÓ sau indirect prin cea a discipolilor săi, alcătuiesc deja împreună o lume. E Transilvania noastră, oferită tuturor. La această aniversare celebrăm pasiunea, dedicaţia, ştiinţa, profesionalismul, generozitatea, eficienţa, creativitatea, viziunea unui profesionist, acest arhitect al ingineriei şi politicii patrimoniului construit din Transilvania noastră. La mulţi ani!

■ Andrew SHEPHERD[1]

Bálint SZABÓ şi eu[2]

■ Am avut onoarea de a vizita Transilvania cu ocazia primei Tabere de restaurare de la Castelul Bánffy din vara anului 2002. Transilvania Trust organizase tabere acolo în anul precedent şi reabilitase corpul de clădire al bucătăriei, aflat în stare avansată de degradare şi consolidase „Turnul înclinat din Bonţida". Acea consolidare era încă acolo la ultima mea vizită din 2022!

Am fost recrutat de David BAXTER, pe atunci reprezentantul pentru Proiecte Externe al IHBC[3].

La finalul zilelor în care dimineaţa am ţinut cursuri de conservare participanţilor taberei, am întrebat cum aş putea ajuta în orice alt mod. Mi s-a înmânat un teanc de planşe arhitecturale care descriau posibila transformare a clădirii principale a Castelului Bánffy într-un hotel. Mi s-a cerut să le verific şi apoi să le prezint lui Bálint SZABÓ.

Până în ziua de azi, Bálint şi cu mine nu avem o limbă comună. De-a lungul anilor ne-am strâns mâinile, am zâmbit şi am reuşit să schimbăm câteva cuvinte de salut în maghiară (eu) şi în engleză (el). Astfel, au fost interpreţi disponibili când, după prânz, a venit momentul să ţin prezentarea despre observaţiile mele asupra propunerii de conversie, la o masă în ceea ce îmi amintesc că era un soare arzător, în afara corpului bucătăriei.

În cuvinte de o silabă – am considerat că desenele frumos realizate, pe care le-am analizat atât de mult, aveau o valoare redusă.

În timp ce vorbeam, vedeam cum feţele celor doi interpreţi – angajaţi ai Utilitas – deveneau din ce în ce mai neliniştite pe măsură ce criticam propunerile colegilor lor în faţa angajatorului lor.

Bálint a ascultat, a pus nişte întrebări şi mi-a mulţumit. Propunerile au fost abandonate la un moment dat. Nu ştiu dacă asta s-a datorat în vreo măsură observaţiilor mele.

Îmi place să mă gândesc că acea căldură a întâlnirilor noastre din toţi anii care au urmat s-a bazat pe un respect reciproc născut din acea întâlnire iniţială.

De-a lungul anilor am aflat mai multe despre poziţia sa plină de curaj în apărarea clădirilor şi locurilor istorice în perioada socialistă, iar respectul şi admiraţia mea au crescut.

Bálint SZABÓ, la mulţi ani cu ocazia împlinirii a 80 de ani!

1 Arhitect, diplomă în conservarea monumentelor istorice, Regatul Unit.
2 Acest articol a fost redactat în februarie 2024 [notă ed.].
3 Institutul de Conservare a Clădirilor Istorice din Marea Britanie.

Bálint SZABÓ and Me[2]

■ I was first privileged to visit Transylvania for the first Restoration Camp at Castle Banffy in the summer of 2002. The Transylvania Trust had held camps there the previous year and brought back the kitchen block from dereliction, as well as shoring the "leaning Tower of Bonţida". That shoring was still in place for my last visit in 2022!

I was recruited by David BAXTER, then the Foreign Projects representative of the IHBC[3].

After I had finished my days of morning conservation lectures to the camp participants, I asked how I might help in any other way. I was handed a sheaf of architectural drawings showing the possible conversion of the main House building into a hotel. I was asked to review them and then make a presentation to Bálint SZABÓ.

To this day Bálint and I have no language in common. Through the years we have clasped hands, smiled and managed to exchange a few words of greeting in Hungarian (me) and the same in English (him). So, there were interpreters to hand when the post lunchtime came when I was to make my presentation about my observations on the conversion proposals, at a table in what I remember was blazing sunshine, outside the kitchen block.

In words of one syllable – I thought there to be little merit in the beautifully rendered drawings I had mulled over for so long.

As I waffled on, I could see the faces of the two interpreters – employees of the Utilitas practice becoming more and more anxious as I rubbished their colleagues' proposals to their employer.

Bálint listened, asked some questions, and thanked me. The proposals were abandoned at some stage. I do not know if that was in any way due to my observations.

I like to think that the warmth of our meetings in all the subsequent years was based on a mutual respect arising from that early encounter.

Over the years I learnt more of his brave stand for historic buildings and places through the socialist era, and my respect and admiration grew.

Happy Eightieth Birthday Bálint SZABÓ!

1 Architect, Dip. Cons., United Kingdom.
2 This article was written in February 2024 [ed. note].
3 Institute of Historic Building Conservation, United Kingdom.

■ Mihaela Ioana AGACHI[1]

A few words about Bálint SZABÓ – the man and the engineer

■ When he is no longer with us, it is the memories that recreate our dear colleague Bálint SZABÓ.

I met him during the projects we collaborated on under the guidance of Professor Mircea MIHĂILESCU. We were young and our collaboration turned into friendship and trust. Bálint always smiled, was friendly, his greeting was a joy, and he brightened our meetings.

There is always talk about the challenging collaboration between architect and engineer. I never felt this while working with Bálint. Thus, our project discussions became a shared effort to achieve something better and more beautiful together. Bálint had a saying, and we would laugh every time he observed that he was the first engineer among architects and the first architect among engineers.

There was much warmth and kindness in the way he spoke. He was efficient in his work, respectful in collaborations, and always strove for a task well done. He never sought the easy path, but rather the one that led to the best results, regardless of effort or compensation. Modest, he never imposed his point of view except to achieve better outcomes.

Always in tune with the current state of the profession and the times, understanding well what was needed, and adapting to the often unpredictable fluctuations of contemporaneity, he demonstrated a vibrant spirit, a lot of initiative, and skill throughout his professional journey.

I often met him on the diploma committees of the Faculty of Architecture and Urban Planning of the Technical University in Cluj-Napoca. He was uncompromising, believing in the teacher's mission to set an example of morality and correctness for future architects, of high standards in their attitude towards their chosen profession.

In recent years, I saw him less and less, as we both retreated within the limitations of age. In those fleeting meetings, the light of his smile, the friendship in his ageless blue eyes.

It's a regret when you no longer see your old colleagues. And now, we meet again only in memories.

1 Emeritus professor, PhD. Habil. Arch. at the Technical University, Cluj-Napoca, Romania.

Câteva cuvinte despre Bálint SZABÓ – omul și inginerul

■ Când nu mai este alături de noi, amintirile sunt cele care îl recreează pe dragul nostru coleg Bálint SZABÓ.

L-am cunoscut cu ocazia proiectelor la care colaboram sub conducerea profesorului Mircea MIHĂILESCU. Eram tineri, colaborarea s-a transformat în prietenie şi încredere. Bálint zâmbea întotdeauna, era prietenos, salutul său era o bucurie, luminând întâlnirile.

Se vorbeşte mereu despre dificila colaborare între arhitect şi inginer. Nu am simţit deloc acest fapt lucrând împreună cu Bálint. Astfel, discuţiile despre proiect se transformau în efortul comun de a face împreună mai binele şi frumosul. Bálint avea o vorbă, râdeam de fiecare dată când constata că este cel mai inginer dintre arhitecţi şi cel mai arhitect dintre ingineri.

Multă căldură şi amabilitate era în modul său de a vorbi. Avea eficienţă în muncă, respect în colaborări, străduinţă în realizarea lucrului bine făcut. Niciodată nu căuta calea comodă, ci calea ce ducea la cele mai bune rezultate, indiferent de efort sau de remunerare. Era modest, neimpunându-şi un punct de vedere decât spre a obţine mai binele.

Mereu prezent în actualitatea profesiei şi a timpurilor, înţelegând bine ceea ce este necesar, în funcţie de fluctuaţiile atât de specifice ale contemporaneităţii, a demonstrat un spirit viu, multă iniţiativă şi pricepere în parcursul profesional.

L-am întâlnit deseori în comisiile de diplomă ale Facultăţii de Arhitectură şi Urbanism din UTCN. Era intransigent, credea în misiunea dascălului de a da un exemplu de moralitate şi corectitudine viitorilor arhitecţi, de exigenţă în atitudinea faţă de profesia aleasă.

În ultimii ani, l-am văzut din ce în ce mai rar, retraşi în limite de vârstă. În fugitivele întâlniri, lumina zâmbetul lui, prietenia din ochii albaştri fără vârstă.

E o părere de rău când nu te mai revezi cu vechii colegi. Iar acum, ne revedem doar prin amintiri.

1 Prof. emerit. dr. habil. arh. la Universitatea Tehnică, Cluj-Napoca, România.

■ Ildiko MITRU[1]

Cine a fost, este și va fi Bálint SZABÓ

Who Was, Is and Will Be Bálint SZABÓ

■ Membru al Uniunii Naţionale a Restauratorilor de Monumente Istorice (1995)

Preşedintele Asociaţiei Restauratorilor de Monumente Istorice din Transilvania (1995)

Vicepreşedinte al Comitetului Naţional ECOVAST (1996)

Membru în Comitetul Naţional ICOMOS din 1996, vicepreşedinte (2006)

Membru de onoare al Asociaţiei Oamenilor de Ştiinţă în Construcţii (Ungaria) (1999)

Membru în Comisia Naţională a Monumentelor Istorice (1999-2001, 2005- 2010)

Membru în Comisia Zonală Cluj (2002- 2006)

Preşedintele Comisiei Zonale Sibiu (2006-2010)

Membru în Comitetul de organizare al Fundaţiei Pro Patrimoniu (2000)

Preşedintele Fundaţiei Transilvania Trust (2001)

Privilegiul de a-l avea Preşedinte al Fundaţiei Transsylvania Nostra (2007)

Membru în Comitetul Naţional UNESCO (2008)

… şi multe, multe altele

■ Ce privilegiu să te întâlneşti cu o persoană cu un astfel de palmares impresionant, să poţi să lucrezi şi să te bucuri de energia şi ambiţia lui nemărginită, un om capabil să depăşească orice obstacol, dornic de a căuta fără încetare perfecţiunea şi de a performa. Toate acestea sunt indiscutabil atributele unei personalităţi cu vocaţie de lider şi mentor. Sunt una din sutele de persoane care am avut şansa de a lucra, implicit de a învăţa măcar o câtime din imensele daruri cu care s-a înzestrat după o muncă asiduă, fără nici o concesie. Ca pentru foarte mulţi dintre noi, anul 1990 a însemnat eliberarea de toate constrângerile absurde ale sistemului ce părea de neînvins, a marcat un nou început plin de speranţe. În domeniul monumentelor istorice, aspru răvăşit de mintea bolnavă a unui dictator care a anulat legile de protejare a patrimoniului, care a demantelat întregul sistem de protejare consolidat cu mari eforturi de-a lungul timpului, anulând astfel întregul corp de specialişti în restaurare. Erau atât de multe de făcut şi atât de multă neştiinţă. Nu exista legislaţie, nu exista personal calificat şi eram copleşiţi de responsabilitatea actului de intervenţie asupra patrimoniului, unde eroarea este inadmisibilă asemenea chirurgiei, putând scurta viaţa şi distruge iremediabil valoarea. Practic, aveam nevoie de educaţie.

Şi atunci a apărut fenomenul Tuşnad, despre care azi ştim doar că este un simpozion prestigios de teoria şi practica reabilitării patrimoniului construit, dar care pentru mine, unul din cei peste 80 de participanţi, a fost colacul de salvare. Să ne aducem aminte că la acea vreme se desena

1 Arhitect, asociat cu arh. Ştefan PASKUCZ în societatea 9 OPTIUNE Srl., Baia Mare, România.

■ Member of the National Union of Historic Building Conservation Practitioners (1995)

President of the Association of Historic Building Conservation Practitioners in Transylvania (1995)

Vice-president of ECOVAST National Committee (1996)

Member of ICOMOS National Committee since 1996, vice-president (2006)

Honorary member of the Association of Construction Scientists (Hungary) (1999)

Member of the National Commission for Historic Buildings (1999-2001, 2005-2010)

Member of Cluj Regional Commission (2002-2006)

President of Sibiu Regional Commission (2006-2010)

Member of the Organisation Committee of Pro Patrimoniu Foundation (2000)

President of Transilvania Trust Foundation (2001)

Privilege to have him president of Transsylvania Nostra Foundation (2007)

Member of UNESCO National Committee (2008)

… and many, many other

■ What a privilege to meet a person with such an impressive track record, to be able to work with and enjoy his boundless energy and ambition, a man capable of overcoming any obstacle, relentlessly striving for perfection and performance. All these are unquestionably the attributes of a personality with the vocation of a leader and mentor. I am one of hundreds of people who have had the chance to work with him, and thus to learn at least a little of the immense gifts he acquired after hard work, without any compromise. As for so many of us, the year 1990 meant freedom from all the absurd constraints of a system that seemed unbeatable, it marked a new beginning full of hope. In the field of historic buildings, harshly ravaged by the sick mind of a dictator who cancelled the laws protecting heritage, who dismantled the entire system of protection that had been consolidated with great efforts over the years, thus nullifying the entire body of conservation specialists. There was so much to do and so much ignorance. There was no legislation, there were no qualified staff, and we were

1 Architect, associated with arch. Ştefan PASKUCZ in the company 9 OPTIUNE Ltd., Baia Mare, Romania.

overwhelmed by the responsibility of the act of intervening on heritage, where error is as inadmissible as in surgery, because it can shorten life and irreparably destroy value. Basically, we needed education.

And that's when the Tuşnad phenomenon emerged, which is only known today as a prestigious symposium on the theory and practice of built heritage rehabilitation, but which for me, one of the more than 80 participants, was a life jacket. Let's remember that at that time we used to draw on tracing paper, there were no computers within everyone's reach, we did our research in the library, which was also drained, we communicated by landline telephone, and faxes were a rarity. I do not know all the details that helped to create the preconditions for the coagulation of the event. Mr. SEBESTYEN József[2] shed some light in his article in *Transsylvania Nostra* journal, issue 4/2022.[3] What is certain is that out of the 14 participants from Romania in the programme "Protecting Monuments in the Carpathian Basin - Building Relationships and Lifelong Education" in Ráckeve (Hungary) from 3-24 November 1991, PROFESSOR Bálint SZABÓ felt how he could help us, at a time when there was no education in the field, and the courses abroad were not yet accessible.

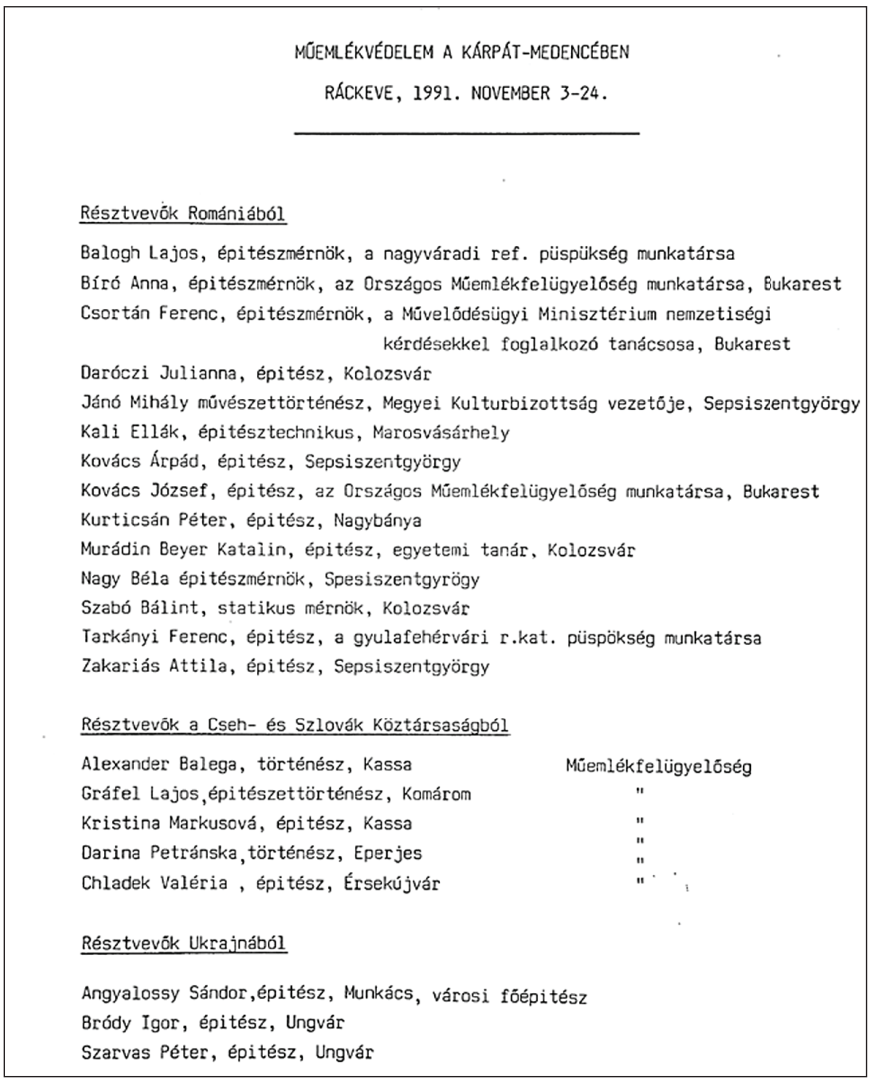
It was he who modelled the course he took in Hungary and was able to replicate it in Romania. In a year with a bitter winter, at the Ciucaş Hotel, we did not leave the building for a week, totally absorbed by the speeches of the lecturers, all experienced and performing in restoration, chosen from all fields. The list of lecturers is below.

Gheorghe SEBESTYEN: (History of architecture between poetry and art)
SEDLMAYR János: (Hungarian monument protection practice in recent decades)
ROMÁN András: (Changes, shifts of emphasis in monument protection worldwide)
Augustin POPA: (About the calculation of the founding ground for the restoration of historic buildings)
Cornelia MĂGUREANU: (About the calculation of the footing for the restoration of historic buildings)
Ilona VALTER: (Excavations at an early Arpadian glass workshop)
Mihály ZÁDOR: (Experience of preserving porous stone surfaces with the ZKF method)
Ernő TÓTH: (Biological pests in wooden structures at historic monuments)

2 Architect, civil engineer specialised in the protection of historic buildings, associate professor at the Faculty of Architecture and Civil Engineering Ybl Miklós of Saint Stephen University in Budapest.

3 The lecture "Historic Buildings and Heritage Protection in the Carpathian Basin, Retrospective 1989-1995" was delivered on 17 November 2022 at the International Conference on Theoretical and Practical Issues of Heritage Construction and Conservation.

pe calc, nu existau computere la îndemâna fiecăruia, ne documentam la bibliotecă, care şi ea era secătuită, comunicam prin telefonul fix, fax-urile erau o raritate. Nu cunosc toate detaliile care au contribuit la crearea premiselor coagulării evenimentului. Mi-a făcut puţină lumină dl. József SEBESTYÉN[2] în articolul din nr. 4/2022 al revistei *Transsylvania Nostra*.[3] Cert este că din cei 14 participanţi din România la programul „Protejarea Monumentelor din Bazinul Carpatic - construire relaţiilor şi educaţia continuă" de la Ráckeve (Ungaria) din 3–24 noiembrie 1991, PROFESORUL Bálint SZABÓ a simţit cum ne poate ajuta, într-un moment în care nu exista educaţie pentru domeniu, iar cursurile din străinătate nu ne erau încă accesibile.



MŰEMLÉKVÉDELEM A KÁRPÁT-MEDENCÉBEN

RÁCKEVE, 1991. NOVEMBER 3-24.

Résztvevők Romániából

Balogh Lajos, építészmérnök, a nagyváradi ref. püspükség munkatársa
Bíró Anna, építészmérnök, az Országos Műemlékfelügyelőség munkatársa, Bukarest
Csortán Ferenc, építészmérnök, a Művelődésügyi Minisztérium nemzetiségi kérdésekkel foglalkozó tanácsosa, Bukarest
Daróczi Julianna, építész, Kolozsvár
Jánó Mihály művészettörténész, Megyei Kulturbizottság vezetője, Sepsiszentgyörgy
Kali Ellák, építésztechnikus, Marosvásárhely
Kovács Árpád, építész, Sepsiszentgyörgy
Kovács József, építész, az Országos Műemlékfelügyelőség munkatársa, Bukarest
Kurticsán Péter, építész, Nagybánya
Murádin Beyer Katalin, építész, egyetemi tanár, Kolozsvár
Nagy Béla építészmérnök, Spesiszentgyrögy
Szabó Bálint, statikus mérnök, Kolozsvár
Tarkányi Ferenc, építész, a gyulafehérvári r.kat. püspökség munkatársa
Zakariás Attila, építész, Sepsiszentgyörgy

Résztvevők a Cseh- és Szlovák Köztársaságból

Alexander Balega, történész, Kassa	Műemlékfelügyelőség
Gráfel Lajos,építészettörténész, Komárom	"
Kristina Markusová, építész, Kassa	"
Darina Petránska,történész, Eperjes	"
Chladek Valéria , építész, Érsekújvár	"

Résztvevők Ukrajnából

Angyalossy Sándor,építész, Munkács, városi főépitész
Bródy Igor, építész, Ungvár
Szarvas Péter, építész, Ungvár

■ ***Fig. 1.*** *Lista participanților la programul de la Ráckeve (Ungaria). © József SEBESTYÉN, extras din articolul apărut în nr. 4/2022 al revistei* Transsylvania Nostra
■ ***Fig. 1.*** *List of participants in the Ráckeve programme (Hungary). © József SEBESTYÉN, excerpt from the article in issue 4/2022 of* Transsylvania Nostra *journal*

2 Arhitect, inginer constructor specializat în protecţia clădirilor istorice, conferenţiar la Facultatea de Arhitectură şi Construcţii Civile Ybl Miklós de la Universitatea Sfântul Ştefan din Budapesta, Ungaria.

3 Prelegerea „Clădiri istorice şi protecţia patrimoniului în Bazinul Carpatic, retrospectivă 1989–1995" a fost susţinută pe 17 noiembrie 2022 la Conferinţa internaţională privind problemele teoretice şi practice privind construcţia şi conservarea patrimoniului.

El a fost cel care a preluat modelul cursului pe care l-a urmat în Ungaria şi a reuşit să facă o replică a acestuia la noi acasă. Într-un an cu o iarnă năprasnică, la Hotelul Ciucaş, timp de o săptămână nu am ieşit din clădire, total absorbiţi de prelegerile lectorilor, toţi cu experienţă şi performanţă în restaurare, aleşi din toate domeniile. Lista acestora este prezentată mai jos.

Gheorghe SEBESTYEN	(Istoria arhitecturii între poezie şi artă)
János SEDLMAYR	(Practica ungară a protecţiei monumentelor în ultimele decenii)
András ROMÁN	(Schimbări, mutări de accente în protecţia mondială a monumentelor)
Augustin POPA	(Despre calculul terenului de fundare în cazul restaurării clădirilor istorice)
Cornelia MĂGUREANU	(Despre calculul terenului de fundare în cazul restaurării clădirilor istorice)
Ilona VALTER	Săpături la un atelier de sticlărie de la începutul perioadei arpadiene)
ZÁDOR Mihály	(Experienţa conservării suprafeţelor poroase de piatră cu metoda ZKF)
Ernő TÓTH	(Dăunători biologici la structurile din lemn la monumentele istorice)
László KISPAP	(Proiectarea reabilitării monumentelor prin fotogrametrie)
Mihály JÁNÓ	(Date din repertoriul picturii murale medievale din Transilvania)
Zsolt MÁTÉ	(Capitole din domeniul apărării valorii aşezărilor istorice)
Harni HAUTAJARNI	(Criterii pentru evaluarea restaurării)
Béla SISA	(Restaurarea sinagogii din Hódmezővásárhely)
Endre SŰCS	(Clădirea unei cazărmi de la cumpăna secolelor transformată în institut de cercetare)
András HADIK	(Despre un arhitect uitat din Târgu Mureş. Moştenirea lui RADÓ Sándor 1880-1960)
József SEBESTYÉN	(Poarta secuiască, un monument specific al arhitecturii ţărăneşti transilvănene)
Károly ÖRSI	[Grădinile castelelor ungureşti (grădini istorice)]
Lajos KARÁCSONYI	(Păstrarea în viaţă a monumentelor)[4]

■ La deschiderea cursurilor a participat ca şi invitat dl. profesor doctor Radu POPA (care ne-a părăsit în 1993), la vremea aceea vicepreşedinte al Comisiei Monumentelor Istorice, preşedinte al Comisiei mixte româno-maghiare pentru monumente istorice (1991) şi care a salutat invitaţii şi şi-a exprimat admiraţia pentru minorităţi, a căror coeziune era lăudabilă, spre deosebire de dezbinarea cu care se confrunta la Bucureşti.

După cele două săptămâni de curs intensiv, încarceraţi şi organizaţi spartanic cu voia noastră de Bálint, a urmat excursia de studiu la monumentele din Bazinul Carpatic şi evaluarea cursanţilor, finalizată cu o diplomă care şi azi ne onorează. Talentul său deosebit în organizarea competentă şi riguroasă era evident încă de atunci. Cât de înzestrat trebuie să fii să poţi fi dur, sever, necruţător ca pe şantier şi totuşi să rămâi „Bálint”!

După o serie lungă de colaborări, în anul 2002, la Baia Mare, am avut parte de o nouă provocare care ne-a pus la încercare, aceasta fiind a doua întâlnire marcantă pe care am avut-o cu Bálint SZABÓ.

4 Lista participanţilor şi a comunicărilor acestora la cursurile de la Tuşnad în anul 1992.

László KISPAP: (Designing the rehabilitation of monuments using photogrammetry)
Mihály JÁNÓ: (Data from the repertoire of medieval mural painting in Transylvania)
Zsolt MÁTÉ: (Chapters in the field of defence of the value of historic settlements)
Harni HAUTAJARNI: (Criteria for conservation assessment)
Béla SISA: (Hódmezővásárhely synagogue conservation)
Endre SŰCS: (Transforming a turn-of-the-century barracks building into a research institute)
András HADIK: (About a forgotten architect from Târgu Mureş. The legacy of Sándor RADÓ 1880-1960)
József SEBESTYÉN: (The Szekler Gate, a specific monument of Transylvanian peasant architecture)
Károly ÖRSI: [Hungarian castle gardens (historic gardens)]
Lajos KARÁCSONYI: (Keeping monuments alive)[4]

■ The opening of the courses was attended as a guest speaker by Prof. Radu POPA, PhD (who left us in 1993), at that time vice-president of the Commission for Historic Monuments, president of the Romanian-Hungarian Joint Commission for Historic Monuments (1991). He welcomed the guests and expressed his admiration for the minorities, whose cohesion was commendable, unlike the disunity he faced in Bucharest.

After the two weeks of intensive course, where we willingly were incarcerated and spartanly organized by Bálint, followed the study trip to the monuments of the Carpathian Basin and the evaluation of the trainees, completed with a diploma that still honours us today. His great talent for competent and rigorous organization was already obvious there. How gifted you must be to be as tough, severe, and ruthless on a building site and yet remain “Bálint”! After a long series of collaborations, in 2002, in Baia Mare, we faced a new challenge that put us to the test, this being the second remarkable meeting we had with Bálint SZABÓ.

The “MILLENNIUM III Business Centre” project was born out of the concerted effort of a group of people attached to their city, its history and heritage. Initially, a small team, coordinated by the City Hall, sketched out the project scenario and strategy, but the group expanded as the documentation stages progressed. The feasibility, the project data sheet, the economic report and the impact study were finalized in record time to access PHARE 2000 funds. However, it was not until June 2002 that the technical execution documentation was prepared, when the project was able to move from reserves to eligible projects under the PHARE 2000 programme. At that point, the mayor of Baia

4 List of participants and their presentations at the 1992 courses in Tuşnad.

Mare, Cristian ANGHEL, without any hesitation, followed our advice and called Professor Bálint SZABÓ to support us. He was the only one in a position to manage the project professionally, given its complexity, the particularly strict requirements imposed by the funder and the deadlines. The MILLENNIUM III Business Centre is located in the old centre of the medieval town Rivulus Dominarum, more precisely in Libertăţii Square. It consists of a coherent urban and architectural ensemble, shaped over seven centuries. Out of the 23 buildings bordering the old square "Circulus Fori", 3 buildings have been selected as historic buildings. Through the rehabilitation works, we wanted them to become the initiators of a wider future programme for the restoration of the old administrative and commercial nucleus of the city in contemporary language, with respect for conservation techniques. It is organized in a pavilion system with three modules, M1, M2 and M3 respectively, positioned on the eastern side of the square. The distance between the buildings that make up the business centre is not a problem as the square is equipped with an optic fibre network that will allow virtual communication and optimize the information flow. This investment was also intended to reorganize the square, the M4 module. It was to be transformed into a predominantly pedestrian area, which, as part of the project, would accommodate outdoor events organized by the Business Centre. The three buildings, each with a ground floor, first floor, and basement, were in a state imposing consolidation and conservation. Their refurbishment has provided optimal infrastructure for doing business while being a rescue and enhancement intervention for the historic heritage.

General data

- Front office areas, 55 units, 1535,75 sm, total maximum capacity of 263 workstations.
- Conference halls, 4 units, 300,64 sm (for 199, 38, 30, and 12 people, respectively) with appropriate equipment.
- A square of almost 7105 sm, ready to accommodate exhibitions, cultural, tourist events, and leisure activities.
- Parking areas for cars (69 places) and bikes, modern pedestrian facilities, green areas and spaces.
- Specialized shops, and showrooms designed as sale exhibitions (rented on short or medium term) on 743,39 sm.

"The project was carried out in 29 months from the conclusion of the design contract (15 July 2003) to the completion of the works contract (16 December 2004). Between July 2002 and February 2003, the research, design, approval (including the approval of eligibility by PHARE bodies), tendering and contracting of the works, and between February 2003 and December 2004, the research, design, verification and execution works were carried out in parallel. The research work was carried out in parallel, as it was not possible to follow a

Proiectul „Centrul de afaceri MILLENNIUM III" s-a născut din efortul concertat al unui grup de oameni ataşaţi de oraşul lor, implicit de istoria şi patrimoniul acestuia. Iniţial, o echipă restrânsă, coordonată de Primărie, a schiţat scenariul şi strategia proiectului, după care grupul s-a extins odată cu avansarea fazelor de elaborare a documentaţiei. Fezabilitatea, fişa de proiect, raportul economic şi studiul de impact au fost finalizate într-un termen record pentru accesarea fondurilor PHARE 2000 dar, doar în luna iunie 2002 s-a trecut la întocmirea documentaţiei tehnice de execuţie, moment în care s-a ivit posibilitatea ca proiectul să treacă de la rezerve la proiecte eligibile în programul PHARE 2000. Atunci, primarul municipiului Baia Mare, Cristian ANGHEL, fără nicio ezitare, ne-a urmat sfatul şi l-a apelat pe dl profesor dr. ing. Bálint SZABÓ să ne sprijine. Era singurul în măsură să gestioneze profesionist lucrarea, dat fiind complexitatea ei, rigorile deosebit de stricte impuse de finanţator şi termenele fixate.

Centrul de afaceri MILLENNIUM III este amplasat în vechiul centru al oraşului medieval Rivulus Dominarum, mai precis în Piaţa Libertăţii, un ansamblu urbanistic şi arhitectural coerent, conturat de-a lungul a şapte secole. Din cele 23 de clădiri care mărginesc piaţa veche „Circulus Fori", au fost selectate 3 clădiri monument istoric, care prin lucrările de reabilitare ne-am dorit să devină iniţiatorii unui program mai vast, ce se va derula în viitor pentru reconstituirea în limbaj contemporan, cu respectarea tehnicilor de restaurare, a vechiului nucleu administrativ-comercial al oraşului. Este organizat în sistem pavilionar cu trei module M1, M2, respectiv M3, poziţionate pe latura estică a pieţei. Distanţa între corpurile de clădire ce compun centrul de afaceri nu constituie o problemă de funcţionare dacă avem în vedere echiparea pieţei cu o reţea de fibră optică ce va permite comunicarea virtuală şi optimizarea circulaţiei informaţiilor. Prin această investiţie s-a dorit şi reorganizarea pieţei, obiectivul M4, transformarea ei într-un


M1
M2
M3
M4
Muzeul Județean de Istorie și Arheologie
Muzeul Județean de Artă - Centru
Biserica Ortodoxă Sf. Nicolae
Barbarossa
Dolce Vita
Str. Gheorghe Șincai
Str. Dacia
Str. Gheorghe Șincai
Str. Gheorghe Șincai
Str. Gheorghe Șincai

REFERATUL PROIECTANTULUI
asupra activităţii de execuţie desfăşurate pe şantierul
CENTRULUI DE AFACERI «MILLENNIUM III – BAIA MARE»

1. ECHIPA DE CERCETARE-PROIECTARE

Prezentul referat se referă la lucrările desfăşurate pe şantierul Centrului de afaceri «Millennium III – Baia Mare» în baza proiectelor elaborate de Proiectantul General SC UTILITAS SRL conform contractului de proiectare nr. 183/15.07.2002 încheiat cu Primăria Municipiului Baia Mare şi de Proiectanţii de Specialitate angajaţi de Proiectantul General în vederea elaborării proiectelor pe specialităţi. Proiectantul General este atestat de Ministerul Culturii şi Cultelor fiind înscrisă în Registrul Firmelor Autorizare cu nr. 60. Autorii proiectelor, precum-şi a studiilor pe specialităţi sunt, după cum urmează:

(A) PROIECTARE:

Proiectant general:	sc. UTILITAS srl. – Cluj-N.
Expert tehnic atestat MLPTL şi MCC:	prof. dr. ing. Bálint SZABÓ
Director Executiv:	ing. Imola KIRIZSÁN
Proiectant de specialitate arhitectură şi urbanism:	sc. NOUA OPTIUNE srl. – Baia Mare
Şef proiect complex	arh. Ildikó MITRU
Şef proiect de specialitate	arh. Ştefan PASKUCZ
Proiectant de specialitate structuri portante:	sc. UTILITAS srl. – Cluj-N.
Şef proiect de specialitate:	ing. Imola KIRIZSÁN
Proiectanţi:	ing. Ildikó KIRIZSÁN
	ing. Levente BAYKA
	ing. László VASS
	ing. Csaba KISS SZALLÓS
	ing. Rozália DANE
	ing. Péter BOGDANOVITS NAGY
Proiectant de specialitate instalaţii electrice	sc. PIEME srl. – Cluj-N.
Şef proiect de specialitate	ing. Elisabeta SZABÓ
Proiectanţi:	ing. Elek TATÁR
	ing. Katalin BETEGH
	ing. Csaba ZÁHONI
Proiectant instalaţii sanitare, termice	sc. Medinstal srl – Cluj-N.
Şef proiect de specialitate	ing. Magda AMBRUS
Proiectanţi:	ing. Judita VOMIR
	ing. László SEBESTYÉN
Proiectanţi de instalaţii de ventilaţii, climă	sc. SportMarkt srl – Cluj-N.
Şef proiect de specialitate	prof. dr. ing. Tudor POPOVICI
Proiectanţi instalaţii gaz	sc. P&O StarPrest srl. – Baia Mare
Şef proiect de specialitate	ing. Mircea OROS

(B). CERCETARE

Arheologie	sc. DAMASUS srl – Braşov
Coordonator arheologie:	dr. arheolog Dana MARCU ISTRATE
	arheolog Angel ISTRATE
	arheolog Péter SZÖCS
Istoria Artei	sc. UTILITAS srl,
Coordonator istoria artei:	prof. dr. András KOVÁCS
Studiu de parament:	drd. Attila WEISZ
	János FEHÉR
Cercetare de arhivă:	Béla BALOGH
Biologia construcţiei	sc. UTILITAS srl
	drd Anna SZABÓ
	Sc. BIOHARCOM srl – Sibiu
	dr. Livia BUCŞA
Fizica construcţiei	sc FALSZARITÓ kft. – HU
	László KÖVESI
Studiu geotehnic	sc. GEOPROIECT srl – Baia Mare
Ridicare topografică	György HALÁSZ
Pregătirea calculul economic	ing. Károly HLAVATHY
	ing. Izabella HLAVATHY

(C) VERIFICATORI DE PROIECT

Arhitectură	arh. Veronica VILSON
Rezistenţă	ing. Petru RUS
Instalaţii	ing. Luca GÁRBU
Instalaţii electrice	prof. dr. ing. Florin POP

2. TEMA DE PROIECT ŞI
CONDIŢIILE DE DESFĂŞURARE ALE ACTIVITĂŢII DE CERCETARE-PROIECTARE:

Prin tema de proiect s-a solicitat reabilitarea a patru obiective (M_1, M_2, M_3 şi M_4), respectiv trei clădiri monumente istorice şi piaţa Libertăţii. Clădirile sunt: Str. Vasile Lucaciu nr. 2 (Hanul Vulturul Negru), Piaţa Libertăţii nr. 15 (Casa Lendvay) şi nr. 17.

2.1. Ansamblul este un sit istoric deosebit de valoros, obiectivele M_1 (nr. cod: MM-II-m-B-04467), M_2 (nr. cod MM-II-m-B-04462) şi M_3 (nr. cod MM-II-m-B-04460) sunt monumente istorice listate, de asemenea şi Piaţa Libertăţii (nr. cod MM-II-a-A-04432). Sunt de aplicat prevederile Legii nr. 422/2001 privind Protejarea monumentelor istorice şi Legii nr. privind Patrimoniul arheologic

2.2 De-şi preocupările Primăriei Municipiului Baia Mare privind valorificarea potenţialului istoric al centrului vechi sunt permanente, în urma căreia a fost întocmită şi depusă aplicaţia către PHARE din anul 2001, doar din luna iunie 2002 s-a trecut la întocmirea documentaţiei tehnice de execuţie, moment în care s-a ivit posibilitatea, ca proiectul să treacă de la rezerve, la proiecte eligibile în programul PHARE 2000.

2.3. Lucrarea s-a realizat în 29 luni de la încheierea contractului de proiectare (15 iulie 2003) până la finalizarea contractului de execuţie (16 decembrie 2004).

2.4. În perioada iulie 2002 – februarie 2003 s-au derulat în paralel: lucrările de cercetare, proiectare, avizare (inclusiv aprobarea eligibilităţii din partea organelor PHARE), licitaţie de execuţie şi contractarea execuţiei, iar din perioada februarie 2003 – decembrie 2004 lucrările de cercetare, proiectare, verificare şi execuţie.

2.5. Lucrările de cercetare s-au desfăşurat în paralel, ne fiind posibilă respectarea unor succesiuni fireşti ale acestora (releveele, studiul de parament, de arhivă, de istoria artei, arheologic, de biologia şi fizica construcţiilor, studiul topografic, hidro-geologic). Deciziile au fost luate sub presiunea timpului execuţiei în desfăşurare.

2.6. Amplasamentele au fost libere în vederea desfăşurării lucrărilor de cercetare – proiectare – execuţie doar parţial. Astfel a rămas ne-executat o parte din corpul M_{1B} (inclusiv a rămas neeliminat sursa de ape uzate, provenită de la canalizarea menajeră defectuoasă din subsolul acestui corp), din lipsa de colaborare a co-proprietarilor, iar chiriaşii de la obiectivul M_2 au părăsit clădirea în iunie 2003 îngreunând inclusiv desfăşurarea lucrărilor de cercetare-proiectare.

2.7. Starea tehnică a clădirilor s-a înrăutăţit inclusiv pe parcursul desfăşurării lucrărilor. Clădirile au fost inundate adeseori: canalizările menajere şi pluviale istorice au condus – conduc şi azi – apele pluviale – menajere către clădiri, iar cantităţile de ape pluviale introduse în clădiri inclusiv datorită decopertărilor solicitate de reabilitarea fermelor şi ale învelitorilor aferente au majorat timpul necesar proceselor de eliminare a umidităţii din clădiri.

2.8. Lucrările de subzidire şi de fundare au scos la iveală valori arheologice, fiind necesare săpăturile arheologice efectuate de Muzeul Judeţean pe parcursul execuţiei

2.9. Pe durata execuţiei lucrărilor, datorită condiţiilor reale de pe teren, precum-şi în urma solicitării Beneficiarului şi a factorilor implicaţi în avizarea documentaţiilor, proiectul iniţial a fost modificat, după cum urmează: (i) la imobilul M_1, corpul C-D grav avariat şi fără o valoare deosebită, a fost parţial demolat şi refăcut respectând geometria originală; scara de incendiu iniţial exterioară a fost mutată în corpul A, pe latura sudică; s-a renunţat parţial, la corpul B, dat fiind dificultăţile de cooperare cu coproprietarii; (ii) în imobilului M_2 s-a renunţat la utilizarea mansardei, spaţiul restrâns de aici ne justificând cheltuielile de amenajare; s-a modificat reabilitare a planşeului peste subsol (iii) La imobilul M_3, starea tehnică constatată în urma decapărilor a impus intervenţii mult mai ample.

2.10. La obiectivul M4, lucrările de proiectare şi execuţie au fost îngreunate de dificultatea înlocuirii şi modernizării reţelelor din zonă, deţinute, implicit finanţate de către alte instituţii.

3. CONDIŢIILE DE DESFĂŞURARE A EXECUŢIEI

3.1. Obiectivele supuse reabilitării fiind monumente istorice listate, execuţia fiind supusă inclusiv condiţiilor specifice prevăzute de Legea 422/2001 – privind Protejarea monumentelor istorice.

3.2. Execuţia a fost demarată în luna februarie 2003, Antreprenor General fiind sc HARCON sa Budapesta. Execuţia s-a desfăşurat fără personal tehnic de execuţie atestat de MCC.

3.3. Coordonatele tehnice şi tehnologice aferente execuţiei au fost fixate în documentaţiile tehnice, inclusiv în caietele de sarcini. Succesiunea tehnologică ale diferitor faze de execuţie (detaliată în caietul de sarcini – generală CS.SP-01): 1-consolidări fundaţii, 2-consolidări pereţi portanţi, 3-consolidări planşee, 4-consolidări şarpante, respectiv: 1-consolidări, 2-perioadă de aşteptare pentru reaşezarea elementelor portante consolidate, 3-lucrări de finisaj nu s-au respectat întotdeauna, neconformităţile fiind semnalate de la caz la caz.

3.4. Lucrările de consolidare au avut o durată de execuţie mult prea mare faţă de timpul acordat, cu consecinţe negative asupra calităţii lucrărilor de finisaj.

4. CONCLUZII

4.1. Lucrările de cercetare-proiectare, precum şi cele de execuţie s-au desfăşurat de regulă în condiţii acceptabile, neconformităţile fiind semnalate pe parcurs şi soluţionate de la caz la caz.

4.2. Valorificarea patrimoniul construit deosebit de valoros, de care se dispune, este de mare importanţă, programele PHARE având o contribuţie lăudabilă în această direcţie. Este în schimb necesar pregătirea specială a lucrărilor de intervenţii asupra patrimoniul construit, acestea neîncadrându-se în schemele general valabile pentru investiţii.

4.3. Observaţiile privind lucrările de remediere s-au pus la dispoziţia Comisiei de Recepţie, membrii echipei de proiectare participând la finalizarea anexelor la procesul verbal de recepţie.

Baia Mare, 16.12.2004.

Proiectant General,
SC UTILITAS SRL

■ ***Fig. 3.*** *Referatul proiectantului. © Cartea Construcţiei*
■ ***Fig. 3.*** *Designer's report. © Construction Book*

spaţiu preponderent pietonal şi care, în cadrul proiectului, urmează să asigure derularea evenimentelor în aer liber organizate de Centrul de afaceri. Cele trei clădiri, fiecare cu parter, etaj, subsol, erau într-o stare ce necesita lucrări de consolidare şi restaurare. Refuncţionalizarea lor a constituit, pe lângă asigurarea unei infrastructuri optime pentru derularea afacerilor, şi o operaţiune de salvare şi de punere în valoare a patrimoniului istoric.

natural sequence (surveys, building archaeology study, archival, art history, archaeological, construction biology and physics, topographical, hydro-geological research). Decisions were made under the pressure of the ongoing works. The sites were only partially free for the research - design - implementation works. Thus, part of the M_{1B} building

was not completed. Moreover, the source of wastewater from the faulty domestic sewer in the basement of this building was not removed. The works started in February 2003, the General Contractor being HARCON Company Budapest. The works were carried out without the Ministry of Culture and Cults (MCC) certified technical staff.

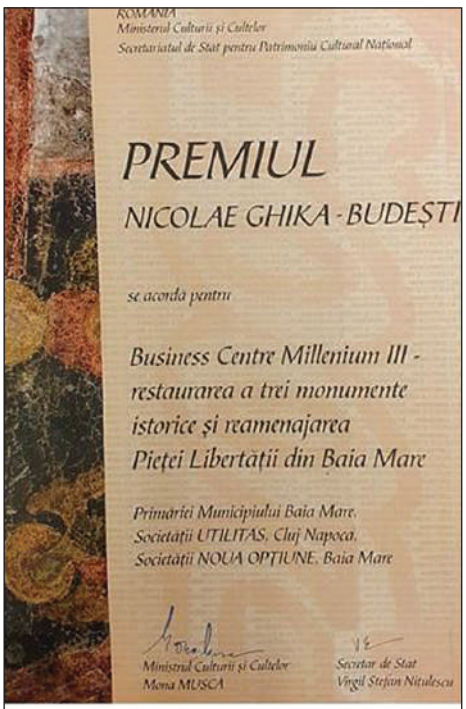
The technical and technological coordinates related to the works were laid down in the technical documentation, including the specifications. The technological sequence of the different phases of execution

Date generale

- Spaţii pentru birouri (front office), 55 de unităţi, în suprafaţă de 1.535,75 mp, cu o capacitate totala maximă de 263 de posturi de lucru.
- Săli de conferinţă, 4 unităţi, în suprafaţă de 300,64 mp (de 199, 38, 30, respectiv de 12 locuri) dotate cu echipamente adecvate.
- O piaţă în suprafaţă de aproape 7.105 mp, pregătită pentru evenimente expoziţionale, culturale, turistice etc. şi loisir.
- Parcări auto (69 de locuri) şi de biciclete, amenajări pietonale moderne, zone şi spaţii verzi.
- Magazine specializate, show-room-uri concepute în sistem de expoziţii cu vânzare (închiriate pe termene scurte sau medii) în suprafaţă de 743,39 mp.

„Lucrarea s-a realizat în 29 de luni de la încheierea contractului de proiectare (15 iulie 2003) până la finalizarea contractului de execuţie (16 decembrie 2004). În perioada iulie 2002-februarie 2003 s-au derulat în paralel: lucrările de cercetare, proiectare, avizare (inclusiv aprobarea eligibilităţii din partea organelor PHARE), licitarea execuţiei şi contractarea ei, iar în perioada februarie 2003-decembrie 2004, lucrările de cercetare, proiectare, verificare şi execuţie. Lucrările de cercetare s-au desfăşurat în paralel, nefiind posibilă respectarea unor succesiuni fireşti ale acestora (releveele, studiul de parament, de arhivă, de istoria artei, arheologic, de biologia şi fizica construcţiilor, studiul topografic, hidro-geologic). Deciziile au fost luate sub presiunea execuţiei în desfăşurare. Amplasamentele au fost libere în vederea desfăşurării lucrărilor de cercetare – proiectare – execuţie doar parţial. Astfel a rămas neexecutată o parte din corpul M_{1B} (inclusiv a rămas neeliminată sursa de ape uzate provenită de la canalizarea menajeră defectuoasă din subsolul acestui corp). Execuţia a fost demarată în luna februarie 2003, Antreprenor General fiind SC HARCON SA Budapesta. Execuţia s-a desfăşurat fără personal tehnic de execuţie atestat de Ministerului Culturii şi Cultelor (MCC).

Coordonatele tehnice şi tehnologice aferente execuţiei au fost fixate în documentaţiile tehnice, inclusiv în caietele de sarcini. Succesiunea teh-





■ ***Fig. 5.*** *Trofeul Culturii 2004 și Premiul Ghica Budești pentru restaurare © Ildiko MITRU*
■ ***Fig. 5.*** *The 2004 Culture Trophy and the Ghica Budești Prize for restoration © Ildiko MITRU*



■ ***Fig. 4.*** *Bálint SZABÓ la una din ședințele săptămânale de coordonare a lucrărilor de execuție (2003-2004). © Ildiko MITRU*
■ ***Fig. 4.*** *Bálint Szabó at one of the weekly works coordination meetings (2003-2004). © Ildiko MITRU*



■ ***Fig. 6.*** *Randarea acoperișului* Pasajului Vulturul Negru *și imagini după finalizarea proiectului de restaurare. © Ildiko MITRU*
■ ***Fig. 6.*** *The* Black Eagle Passage *roof rendering and pictures after the restoration project. © Ildiko MITRU*



■ ***Fig. 7.*** Palatul Vulturul Negru, *1899. © Carte poștală colecția Csongor PETHŐ, https://kepeslapok.wordpress.com/2011/03/21/nagyvarad/, accesat la data de 07.04.2024*
■ ***Fig. 7.*** Black Eagle Palace, *1899. © Postcard from the collection of Csongor PETHŐ, https://kepeslapok.wordpress.com/2011/03/21/nagyvarad/, accessed on 07.04.2024*

nologică a diferitor faze de execuţie a fost detaliată în caietul de sarcini – general CS.SP-01."[5]

Referatul proiectantului, încheiat la finalizarea investiţiei, un act uzual, dar care poartă din nou marca Bálint, fiind riguros, complet, azi un document de arhivă, cu valoare memorială.

Trebuie să recunosc că fără mâna de fier a lui Bálint şi războaiele purtate pe schele, lucrarea nu se finaliza şi nu reuşeam să ne atingem scopul, cel de a fi printre primele încercări de reabilitare urbană şi cel de a crea la nivel local un reper pentru restaurare. Astăzi, după cum se comportă intervenţiile făcute şi datorită calităţii execuţiei şi a mentenanţei pe care o asigură proprietarul, lucrarea poate fi calificată ca o reuşită şi confirmă

5 Extras din referatul proiectantului.

was detailed in the general specifications CS.SP-01."[5]

The designer's report, drafted at the end of the project, a usual document, but which bears again Bálint's mark, being rigorous, comprehensive, is today an archival document, with memorial value.

I have to admit that without Bálint's iron hand and the wars waged on the scaffolding, the works would not have been completed and we would not have been able to achieve our goal of being among the first attempts at urban rehabilitation and creating a local landmark for restoration. Today, the quality of the interventions and the quality of the workmanship and maintenance provided by the owner make the project a success and confirm the distinctions obtained at the time, namely the Nicolae Ghica Budeşti Award and the Grand Trophy, awarded by the Ministry of Culture. The last challenge where Bálint assisted me and reassured me that there would be no problems with the structural component was the rehabilitation of the *Black Eagle Passage* in 2014. This is where Utilitas took on the task of developing the technical expertise and strengthening part of the steel structure. The documentation and investigation phases were followed by the preparation of the documentation for all the phases required by the legislation, and their endorsement, and after the tender was finalized, the supervision of the works was ensured. The consolidation and restoration works lasted for more than two years, more than the time needed to build the passage a century before.

The *Black Eagle* historic building, under code LMI-BH-II-m-A-01086 (in the List of Historical Monuments in Romania), located in Unirii Square, Independenţei and Vasile Alecsandri Streets, is the joint property of the municipality of Oradea, 20 legal entities, and 6 individuals. The building has a built area of 8 505 square meters, of which 1 404 square meters is the special construction of the *Black Eagle Passage*.

On 1 May 1906, the sales contract for the buildings owned by the city hall is completed. Subsequently, the buyers, Dr. Ede KURLANDER and Dr. Emil ADORJÁN, organized a competition for the Black Eagle. The members of the committee that evaluated the projects were the Budapest architects Ödön LECHNER, Samu PECZ, and Zsigmond QUITTNER. The winning design belonged to Marcell KOMOR and Dezső JAKAB. On 19 November 1906, the demolition of the old buildings began, and on 19 March 1907, the works on the new building started. In March 1907 it was also decided that Ferenc SZTARILL would be the building contractor. On 22 November 1907, the building was already roofed, on 16 November 1908 the works were accepted, and in December 1908 the construction was fully completed.

5 Excerpt from the designer's report.



■ ***Fig. 8.*** *Bálint SZABÓ pe şantierul* Vulturul Negru *din Oradea, 09.06.2015. © Vlad POPESCU STURZ*
■ ***Fig. 8.*** *Bálint SZABÓ on the* Black Eagle *construction site in Oradea, 09.06.2015. © Vlad POPESCU STURZ*



■ ***Fig. 9.*** *Bálint SZABÓ investigând structura* Pasajului Vulturul Negru *din Oradea, 24.06.2015. © Vlad POPESCU STURZ*
■ ***Fig. 9.*** *Bálint SZABÓ investigating the structure of the* Black Eagle Overpass *in Oradea, 24.06.2015. © Vlad POPESCU STURZ*



■ ***Fig. 10.*** *Bálint SZABÓ pe şantierul* Vulturul Negru *din Oradea, 09.06.2015. © Vlad POPESCU STURZ*
■ ***Fig. 10.*** *Bálint SZABÓ on the* Black Eagle *construction site in Oradea, 09.06.2015. © Vlad POPESCU STURZ*

astfel distincţiile obţinute la vremea aceea, respectiv Premiul Nicolae Ghica Budeşti şi Marele Trofeu, acordate de Ministerul Culturii.

Cea din urmă provocare la care m-a asistat Bálint şi unde mi-a dat siguranţa că nu vor exista probleme la componenta structurală a fost reabilitarea *Pasajului Vulturul Negru*, în anul 2014. Aici Utilitas a preluat sarcina de a elabora expertiza tehnică şi partea de consolidare a structurii metalice. Faza de documentare şi investigare a fost urmată de elaborarea documentaţiilor pentru toate fazele impuse de legislaţie, de avizarea acestora, iar după finalizarea licitaţiei s-a asigurat supravegherea execuţiei. Lucrările de consolidare şi restaurare au durat peste doi ani, timp care l-a depăşit pe cel necesitat de realizarea investiţiei, acum un secol.

Monumentul istoric *Vulturul Negru*, cod LMI–BH–II–m–A–01086 (în Lista Monumentelor Istorice din România), situat în Piaţa Unirii, str. Independenţei şi str. Vasile Alecsandri, este proprietatea comună a municipiului Oradea şi a unui număr de 20 de persoane juridice şi 6 persoane fizice. Imobilul are o suprafaţă construită de 8.505 mp, din care 1.404 mp o reprezintă construcţia specială a *Pasajului Vulturul Negru*.

La 1 mai 1906 este încheiată tranzacţia de înstrăinare a imobilelor deţinute de primărie, după care cumpărătorii, dr. Ede KURLANDER şi dr. Emil ADORJÁN, au organizat un concurs pentru *Vulturul Negru*, membrii comisiei care au evaluat proiectele fiind arhitecţii budapestani Ödön LECHNER, Samu PECZ şi Zsigmond QUITTNER. Proiectul câştigător era cel elaborat de Marcell KOMOR şi Dezső JAKAB. În 19 noiembrie 1906 a început demolarea clădirilor vechi, iar lucrările la noua construcţie au demarat în 19 martie 1907. Tot în martie 1907 s-a hotărât ca Ferenc SZTARILL să fie antreprenorul clădirii. În 22 noiembrie 1907 construcţia era deja acoperită, a urmat recepţia clădirii la 16 noiembrie 1908, construcţia fiind integral finalizată în decembrie 1908.

Cuvânt de încheiere

■ Bálint SZABÓ, împătimit după trecut, a încercat să facă clădirile nemuritoare şi de cele mai multe ori a câştigat lupta cu timpul, dar ce a reuşit mai cu seamă e să crească o armată întreagă de împătimiţi care să-i urmeze calea şi să-l depăşească aşa cum le stă bine unor ucenici să-şi depăşească maestrul, aşa că BÁLINT, îţi mulţumim, pentru noi vei fi nemuritor.

Closing words

■ Bálint SZABÓ, fond of the past, tried to make buildings immortal and most of the time he won the battle against time, but what he succeeded above all was to raise a whole army of impassioned people to follow his path and surpass him as it is good for an apprentice to surpass their master. So, BÁLINT, thank you! For us, you will be immortal!

■ KÖLLŐ Miklós[1]

Collage Postcard: my Encounters with Professor Bálint SZABÓ, Bálint bácsi

Colaj carte poştală: întâlnirile mele cu profesorul Bálint SZABÓ, Bálint bácsi

Anzix: találkozásaim SZABÓ Bálint professzor úrral, Bálint bácsival

■ Our acquaintance began by calling him Professor and after a while, Bálint bácsi.[2]

■ When I was young, I had a desire that remained unfulfilled. I would have liked to meet my relative, the renowned sculptor Miklós BORSOS, in person. My great-grandfather and his brother, the sculptor Miklós KÖLLŐ, were his father's uncles on his mother's side. In his biography *Visszanéztem félutamból*,[3] he goes into great detail about what sculptor Miklós KÖLLŐ meant to him and the family. I fancied myself ringing the doorbell of his house in Tihany, as Miklós KÖLLŐ, a namesake and relative of the sculptor. This, however, never came to be, as before '89 it was difficult to travel to Hungary, then I became a soldier, and by the time I got discharged in March '90, he had already passed away, in February.

1 Architect, urban designer, specialist in historic building conservation, historic building conservation expert registered by the Romanian Ministry of Culture, Romania.
2 Uncle Bálint [ed. note].
3 Translated as "I looked back halfway", the title is a reference to a popular Hungarian folksong [transl. note].

■ Mai întâi, pentru mine a fost Domnul Profesor, ca să devină Bálint bácsi[2] cu timpul.

■ Trebuie să mă întorc departe în timp, la o poveste neîmplinită din tinereţea mea. Fiind rudă cu renumitul sculptor maghiar Miklós BORSOS, am dorit din suflet să-l întâlnesc personal. În autobiografia sa, *Visszanéztem félutamból*,[3] el descrie în detaliu ce a însemnat sculptorul Miklós KÖLLŐ (fratele străbunicului meu) pentru familia sa şi pentru el. Înstrăinat de regimul comunist din România, îmi imaginam cum aş bate la uşa lui, la Tihany (Ungaria), prezentându-mă ca ruda cu acelaşi nume a sculptorului Miklós KÖLLŐ. Din păcate, acest lucru nu s-a întâmplat. Înainte de 1989, era dificil să pleci în Ungaria, apoi am fost recrutat în armată, iar până să mă eliberez în martie 1990, el murise deja, în februarie.

Din cauza acestei poveşti, am privit mereu cu mare respect pe cei

1 Arhitect, urbanist, specialist în monumente, expert atestat Ministerul Culturii în domeniul protejării monumentelor istorice, România.
2 Nenea Bálint [notă ed.].
3 Tradus ca „M-am uitat înapoi de la jumătatea drumului", titlul este o referinţă la un cântec popular maghiar [notă trad.].

■ Professzor Úrral kezdődött az ismeretségünk, Bálint bácsi lett egy idő után.

■ Volt egy beteljesületlen történés fiatalkoromban. Szerettem volna élőben találkozni nagynevű szobrász rokonommal, BORSOS Miklóssal. Dédapám és édestestvére, a szobrász KÖLLŐ Miklós az ő édesapjának anyai ágon nagybátyja volt. A *Visszanéztem félutamból* című életrajzában bőven kitér arra, mit jelentett a családban meg neki a szobrász KÖLLŐ Miklós. Elképzeltem, hogy becsengetek hozzá, Tihanyban (Magyarország), mint KÖLLŐ Miklós, a szobrász azonos nevű rokona. Nem jött össze, '89 előtt nehéz volt kimenni Magyarországra, aztán katona lettem, s mire leszereltem '90 márciusára, addig ő februárban meghalt.

E miatt a történet miatt mindig nagy-nagy tisztelettel néztem azokra, akik ismerték a XX. század nagyjait. A bukaresti éveim alatt ismertem meg SEBESTYÉN

1 Építész, városrendező, műemlékvédelmi szakember, a Kulturális Minisztérium által elismert műemlékvédelmi szakmérnök, Románia.

Due to this missed opportunity, I have always had a deep respect for those who knew the great minds of the 20th century. It was during my years in Bucharest that I met Klári SEBESTYÉN, a pupil of KODÁLY, who, blessed with extraordinary humility and amiability, used to watch over the blunders of our first attempts at playing early music within the Lyceum Consort Early Music Ensemble, on Saturday afternoons, in the apartment of Ági ÖLLERER.

It was not Bálint bácsi that I had met first, but his brother, Gyula H. SZABÓ, the director of Kriterion Publishing House, in connection with a book cover design. This was still back in the mid-nineties. Albert-László BARABÁSI had not yet formulated the "six degrees of separation" or "six-clicks" distance, but I looked up to H. SZABÓ as a man who personally knew architect Károly KÓS. In the terms of BARABÁSI's theory, they were "one click" away from each other.

I heard at the university about these Tuşnad conferences, which were said to deal with historic buildings. I thought to myself: if it's not organised by the Bucharest University of Architecture, "Ion Mincu", then it can't be that good... But the fact that historic building expert Professor Peter DERER, who taught in the urban planning department and to whom I looked up to, was frequenting the conference, made me think twice. Then, when I found out that the person behind its organisation was someone who knew and was close to KÓS, the event's significance instantly grew in my eyes, that is the Tuşnad conferences had piqued my interest. A few years later, as city architect of Gheorgheni, I apprehensively submitted to the conference an abstract mainly about urban strategy, not necessarily related to historic buildings, but rather to safeguarding built heritage. There were two city council resolutions, one listing the built and natural heritage to be protected, and the other trying to give some kind of support to owners in the conservation processes. I didn't think that my care au avut privilegiul de a cunoaşte marile personalităţi ale secolului XX. În anii petrecuţi la Bucureşti, am avut ocazia să o întâlnesc pe tanti Klári SEBESTYÉN, discipolă a lui KODÁLY. Cu o umilinţă extraordinară şi o disponibilitate rară de a ne ajuta, ea ne ghida încercările de a explora muzica veche în cadrul ansamblului Lyceum Consort, în fiecare sâmbătă după-amiază, acasă la Ágnes ÖLLERER.

Prima dată m-am întâlnit nu cu Bálint bácsi, ci cu fratele său, Gyula H. SZABÓ, directorul editurii Kriterion, cu ocazia unei colaborări pentru coperta unei cărţi, undeva la mijlocul anilor ,90. Albert László BARABÁSI încă nu formulase teoria „distanţei de şase clicuri între oricare două persoane", dar îl vedeam pe H. SZABÓ ca pe un om care îl cunoscuse direct pe Károly KÓS. Conform teoriei lui BARABÁSI, el era „la un clic" distanţă de Kós.

Am auzit la universitate despre conferinţele de la Tuşnad, poate legate de monumente istorice. Iniţial, am crezut că dacă nu sunt organizate de Universitatea de Arhitectură din Bucureşti, „Ion Mincu", nu pot fi de calitate... Însă, faptul că profesorul Peter DERER, un respectat specialist în urbanism şi în domeniul restaurării, participa la aceste conferinţe, m-a făcut să-mi reconsider atitudinea. Iar când am aflat că în spatele organizării se afla cineva care l-a cunoscut şi a fost apropiat de KÓS, prestigiul conferinţelor de la Tuşnad a crescut semnificativ în ochii mei, trezindu-mi cu adevărat interesul.

Câţiva ani mai târziu, pe când eram arhitect-şef al oraşului Gheorgheni, am trimis cu timiditate un rezumat pentru conferinţa Tuşnad, deşi conţinutul său era mai mult o strategie urbanistică (vizând în principal conservarea patrimoniului construit) decât un subiect strict legat de monumente istorice. La propunerea mea, Consiliul Local adoptase două hotărâri: una care inventaria patrimoniul construit şi natural ce trebuia protejat, şi alta care încerca să ofere sprijin proprietarilor în procesul de restaurare. Nu Klári nénit, ő KODÁLY-tanítvány volt, rendkívüli alázattal és segítőkészséggel megáldva egyengette a Lyceum Consort régizene-együttesben, szombaton délutánonként az ÖLLERER Ági lakásán a régizenei szárnybontogatásaink melléfogásait.

Nem is Bálint bácsival találkoztam először, hanem a testvérével, H. SZABÓ Gyulával, a Kriterion Könyvkiadó igazgatójával, könyvtervezés kapcsán. Még a kilencvenes évek közepén. Még BARABÁSI Albert László nem fogalmazta meg a „hat kattintás" távolságot, de úgy néztem fel H. SZABÓRA, mint egy emberre, aki közvetlenül ismerte KÓS Károlyt. BARABÁSI elmélete szerint „egy kattintásra" volt tőle.

Az egyetemen hallottam, hogy vannak Tusnád-konferenciák, talán műemlékekkel foglalkoznak. Azt gondoltam, ha nem a bukaresti építészeti egyetem, a Ion Mincu szervezi, nem is lehet jó... De az, hogy az urbanisztikai tanszéken tanító, műemlékes DERER Peter tanár úr (akire felnéztem) lejár Tusnádra, na, az elgondolkodtatott. S mikor megtudtam, hogy valaki olyan áll a szervezés mögött, aki ismerte és közel volt KÓSHOZ, az megnövelte a rendezvény ázsióját, vagyis a Tusnád-konferenciák elérték az ingerküszöbömet. Pár évvel később, Gyergyószentmiklós főépítészeként félve küldtem be egy absztraktot az épp aktuális Tusnád-konferenciára, mert főleg urbanisztikai stratégiát tartalmazott, nem is feltétlenül a műemlékekre vonatkozóan, inkább az épített örökség megóvása céljából. Két tanácshatározat volt, az egyik felsorolta a védendő épített és részben a természeti örökséget, a másik pedig megpróbált valamiféle támogatást nyújtani a tulajdonosoknak a felújítás során. Nem gondoltam, hogy ez érdekfeszítő lehet, de elfogadták, így megtarthattam életem első konferencia-előadását, a szekcióvezető városvédő, RÁDAY Mihály felvezetője után. Summa

paper would be of interest, but it got accepted, so I delivered my first-ever presentation at a conference, after an introduction by the section leader, the urban heritage conservationist Mihály RÁDAY. *Summa summarum*, the result was that the next Tuşnad conference included a study field trip to Gheorgheni, with a half-hour programme. I was in charge of the list of landmarks to visit: I suggested the Benedek Mansion, the Armenian Row,[4] and the Armenian Church – but I had no experience of what could be visited in how much time, or in fact of what should be visited during such a field trip, so the visit surpassed the scheduled timeframe. Everyone was already annoyed when Bálint bácsi, emerging from the Armenian Church's roof structure, ordered everyone up to the roof because there was something there that they hadn't seen before. However, from the sternness of his gaze, I learned once and for all that punctuality and conciseness are just as important as the profession and the landmarks.

The next time we met was in Târgu Secuiesc, at a conference organised by the Guild Museum. I was no longer a city architect but a young designer with little money; I hitchhiked on my way there, and I intended to do the same on my way back, but I took advantage of his having a car, so I asked him and had a good chat on the way back. It was not my intention to work in the field of historic building conservation, but on that trip, he convinced me that I had to, because there are but few people in the field, there is a lot to do, and in Transylvania, in the Hungarian context, historic building conservation is more than a profession, it is also a question of identity... So why was I avoiding this field? During my six-month fellowship in Belgium, I was briefly initiated into the secrets of the craft, both on a theoretical level and on the building site. The lectures of Professor Christian CAPELLE fascinated me, as well as the field visits guided

4 A street with houses built and inhabited by Armenian families [transl. note].

m-am aşteptat să fie de interes, dar rezumatul a fost acceptat, şi astfel am susţinut prima mea prezentare la o conferinţă, după introducerea făcută de Mihály RÁDAY, renumitul apărător al patrimoniului urban din Budapesta. Rezultatul a fost că în programul următoarei conferinţe de la Tuşnad a fost inclusă o vizită la Gheorgheni, cu o sesiune de jumătate de oră. Mi s-a încredinţat responsabilitatea de a propune obiectivele de vizitat: am sugerat conacul Benedek, şirul armenesc[4] şi biserica armenească. Neavând experienţă, nu ştiam cât timp necesită fiecare vizită, astfel că excursia a depăşit cu mult timpul planificat. Toată lumea era deja nervoasă când Bálint bácsi, coborând din şarpanta bisericii armeneşti, i-a invitat pe toţi să urce în pod, pentru că acolo era ceva ce nu mai văzuseră. Din privirea sa severă aruncată către mine, am învăţat pentru totdeauna că nu doar meseria şi obiectivele sunt importante, ci şi punctualitatea şi concentrarea pe esenţial.

Data următoare ne-am întâlnit la Târgu Secuiesc, la o conferinţă organizată de Muzeul Breslelor. Nu mai eram arhitect-şef al oraşului, ci un tânăr proiectant cu resurse limitate. Am mers cu autostopul şi plănuiam să mă întorc la fel, dar am profitat de faptul că el avea maşină şi l-am întrebat dacă mă poate lua cu el, ceea ce mi-a oferit ocazia să discutăm pe drum. Iniţial, nu aveam intenţia de a mă ocupa de protecţia monumentelor sau de restaurare, dar în acea călătorie m-a convins că este necesar să o fac, deoarece puţini se ocupă de acest domeniu, sunt multe de realizat, iar în Transilvania, protecţia monumentelor este mai mult decât o profesie, este o chestiune de identitate...

De ce nu voiam să mă ocup de restaurare? În timpul unei burse de şase luni în Belgia, am ajuns să înţeleg dedesubturile acestei meserii, atât din perspectivă teoretică, cât şi din cea a provocărilor de pe şantier. Prelegerile profesorului Chris-

4 O stradă cu case construite şi locuite de familii armeneşti [notă trad.].

summarum, az lett az eredmény, hogy a következő Tusnád-konferencia programjába bekerült egy félórás gyergyószentmiklósi látogatás. Rám volt bízva a meglátogatandó objektumok listája: a Benedek-kúriát, az örmény sort és az örmény templomot javasoltam – de nem volt gyakorlatom, mi mennyi idő alatt nézhető meg, s hogy egyáltalán mit is néznek egy ilyen kiránduláson, úgyhogy a tervezett időt túlfutotta a látogatás. Már mindenki ideges volt, amikor Bálint bácsi az örmény templom tetőszerkezetéből előkerülve mindenkit felparancsolt a tetőbe, mert ott valami olyan van, amit még nem láttak. De rám nézése, tekintete szigorú voltából örökre megtanultam, hogy nemcsak a szakma, a látnivaló, hanem a pontosság és a lényegre fókuszálás legalább annyira fontos.

Következő alkalommal Kézdivásárhelyen, a Céhmúzeum szervezte konferencián találkoztunk, már nem voltam városi főépítész, vékonypénzű fiatal tervező voltam, stoppal mentem, visszafelé is az volt szándékomban, de kihasználtam a lehetőséget, hogy Ő autóval van, rákérdeztem, s így alkalmam volt a visszaúton egy jót beszélgetni. Nem akartam én műemlékvédelemmel, restaurálással foglalkozni, de azon az úton meggyőzött, hogy muszáj, mert kevesen vannak, kik ezzel foglalkoznak, sok a tennivaló, és Erdélyben magyar vonatkozásban a műemlékvédelem több mint szakma, identitáskérdés is… Hogy miért nem akartam restaurálással foglalkozni? Belgiumi féléves ösztöndíjam alatt beleláttam ennek a mesterségnek a boszorkánykonyhájába, mind elméleti szinten, mind az építőtelepi nyűgjeibe. Lenyűgözőek voltak Christian CAPELLE tanár úr előadásai, szintúgy André ROUELLE tanár úr terepvezetései – de bennem két dolog csapódott le ezekből: egyrészt, hogy annyi mindent kell ehhez tudni, és annyi társtudományt/társszakágat kell ösz-

by Professor André ROUELLE, but I drew two conclusions: firstly, that to get good results one needs to know so much and needs to bring together so many co-professions, something that I will never be able to achieve, and secondly, how much room there is for error and how much can one destroy as a dilettante. However, during our conversation on the way home from Târgu Secuiesc, it became clear to me: as there were no other architects in Gheorgheni at that time, it was my moral duty to be active in the field, alongside architecture and urban planning...

I enrolled in the Postgraduate Course on Historic Building Conservation in Cluj-Napoca. I was vociferous, like any young person who grasped something or other of the profession and felt that they had already something to show for it, I interjected here and there when Bálint bácsi gave his opinion on a matter. It was during this time that I started to learn that a true master can say a lot with a few words, even when speaking softly. I was a witness to his brief but pithy comment on a conservation proposal submitted to the National Commission for Historical Monuments: Gothic roof structures do not need to be reinvented, one simply needs to examine the carpentry work, assess what has been lost, and the rest will come by itself.

The breadth and depth of his understanding of the profession became evident in his assessment of the conservation design for the cross on the Caraiman Peak[5]. The meeting of the National Commission for Historical Monuments also grappled with a question of identity, and there was a lot of political pressure: but if anyone was unbothered by this, it was Bálint bácsi. Looking up from his spectacles, he merely suggested taking into account the resulting increase of the structural cross-section and ice load of the surface area, because if the design was carried out according to the proposed reinforcement,

tian CAPELLE erau fascinante, la fel şi ghidajele practice oferite de profesorul André ROUELLE – însă am rămas cu două concluzii importante: pe de o parte, că este necesar să ai cunoştinţe vaste şi să coordonezi numeroase discipline şi specializări pentru a obţine un rezultat bun, ceea ce mi se părea o sarcină copleşitoare, şi pe de altă parte, că există un risc imens de a greşi şi de a distruge lucruri preţioase... Cu toate acestea, în discuţia de la întoarcerea de la Târgu Secuiesc, am ajuns la o decizie clară: neexistând alt arhitect în Gheorgheni la acea vreme, era datoria mea morală să mă implic şi în acest domeniu, pe lângă arhitectură şi urbanism…

M-am înscris la cursul de specializare în protecţia monumentelor la Cluj. Mă făceam auzit, ca un tânăr care a înţeles ceva din meserie şi simţea că a realizat ceva, intervenind uneori când Bálint bácsi îşi exprima opinia. În acest timp, am învăţat că adevăratul maestru vorbeşte la obiect, încet şi cu puţine cuvinte. Peste un deceniu, am fost martor la un comentariu scurt, dar plin de substanţă, la evaluarea unui proiect depus în faţa Comisiei Naţionale a Monumentelor Istorice: structura gotică a acoperişului nu trebuie reinventată, ci înţeleasă.

Am simţit cât de cuprinzător şi profund îşi înţelegea meseria atunci când a evaluat proiectul de restaurare a crucii de pe Caraiman[5]. Acea şedinţă a Comisiei Naţionale a Monumentelor Istorice (CNMI) a fost şi despre identitate, iar presiunea politică era enorm de mare. Dar dacă pe cineva nu l-a interesat acest ultim aspect, acela a fost Bálint bácsi. Ridicându-şi privirea deasupra ochelarilor, a sugerat doar atât: să se ia în considerare sarcina de gheaţă rezultată din creşterea secţiunii şi a suprafeţei din cauza consolidării, pentru că aceasta va duce la prăbuşirea crucii gigantice, dacă planul se va realiza conform consolidării imaginate. De asemenea, a spus că, în opinia sa, cu secţiunile existente

szefogni a jó eredmény érdekében, hogy arra én sosem leszek képes, másrészt hogy mekkora lehetősége van a tévedésnek, és hályogkovácsként mit tehet tönkre az ember. De a Kézdiről hazafelé tartó beszélgetésen letisztult bennem: nem lévén más építész akkor Gyergyóban, erkölcsi kötelességem nekifogni ennek a szakágnak is az építészet és az urbanisztika mellett…

Beiratkoztam a kolozsvári műemlékes szakmérnökire. Hangoskodtam, mint fiatal, aki valamit megértett a szakmából, s úgy érezte, valamit letett az asztalra, bele-belekotyogtam, mikor Bálint bácsi véleményt mondott valamiről. Közben tanultam meg azt, hogy aki igazán mester, az halkan is tud, keveset szólva, sokat mondani. Szemtanúja voltam egy rövid, de velős kommentárjának az országos műemlékes bizottság elé terjesztett tervbírálaton: a gótikus fedélszerkezetet nem újra kitalálni kell, csak körül kell nézni az ácsmunkán, felfedezni, mi tűnt el belőle, s a többi adja magát.

Hogy milyen átfogó merítéssel és milyen mélységben látta a szakmáját, azt a Caraimanon lévő kereszt[2] restaurálási tervének bírálatakor éreztem. Identitásról is szólt az a műemlékes bizottsági gyűlés, nagy volt a politikai nyomás is: de ha valakit nem érdekelt mindez, az Bálint bácsi volt. Szemüvege fölött feltekintve csak annyit javasolt, a megerősítés miatti szerkezeti keresztmetszetből és felületnövekedésből adódó jégterhet is figyelembe kellene venni, mert az fog a gigantikus fémkereszt összeomlásához vezetni, ha az elképzelt megerősítés szerint kivitelezik a tervet. Meg szerinte a létező keresztmetszetekkel nem fáradt el az anyag, bírni fogja az a kereszt még, de hozzanak laborpróbákat. Ezzel el volt intézve a napirend kényes

5 Heroes' Cross on Caraiman Peak, Prahova County, Romania [ed. note].

5 Monumentul istoric Crucea Eroilor de pe Muntele Caraiman, judeţul Prahova, România [notă ed.].

2 A Hősök keresztje történelmi emlékmű, Caraiman-hegy, Prahova megye, Románia [szerk. megjegyz.].

it would lead to the collapse of the gigantic metal cross. He was also of the opinion that with the existing cross-sections, the material was not fatigued and that the cross would hold up, but that lab tests should be provided. This settled the delicate subject of the agenda, and later the results confirmed his assessment.

It was not only in professional matters that he considered our built heritage important. Leaving aside all his other important duties, he guided my children through the home of KÓS' parents in Breaza Street, Cluj-Napoca, explaining a million details – he probably had more consequential matters to deal with, but at the time this was the most important: to tell the story of this emblematic house to three small children. I can't imagine a better centre for passing on knowledge about Transylvanian historic building conservation, and it's good that thanks to Bálint bácsi, this place is what it is.

In the following, I will try to be brief. When trying to obtain the certification of historic building conservation specialist, both times it was Bálint bácsi who gave me letters of recommendation. The last time I met him was in the engineering and architecture section of the National Commission for Historical Monuments in Bucharest, every month, as a committee member, while he was the chairman. On the way home, I was now driving, often dropping him off at the Bucharest airport. We talked about tasks, about the future. He had a lot of energy. I had the feeling that he would always be with us because we needed him. This is still true but in a different way. Now, the number of clicks from reaching KÓS has grown. But we were one click away from Bálint SZABÓ.

Thank you, Professor!

materialul nu a obosit, crucea va rezista şi să aducă probe de laborator. Cu aceasta, punctul sensibil al ordinii de zi a fost rezolvat, iar ulterior rezultatele i-au dat dreptate.

Nu doar în chestiuni profesionale considera Bálint bácsi important patrimoniul nostru construit. Trecând prin Cluj împreună cu copiii mei, am ajuns la casa părinţilor lui KÓS, de pe strada Breaza. Lăsând deoparte toate treburile importante, a devenit ghid pentru copii, explicând cu grijă istoria casei şi fiecare detaliu. Cu siguranţă ar fi avut lucruri mai urgente de făcut, dar în acel moment, cel mai important pentru el a fost să le spună celor trei copii povestea acelei case emblematice. Nu pot să-mi imaginez un loc mai potrivit pentru a servi drept centru de formare pentru protecţia monumentelor din Transilvania, şi este bine că, datorită lui Bálint bácsi, acel loc este ceea ce este.

În continuare, voi încerca să fiu scurt. Pentru a obţine calificarea de specialist, respectiv expert în protecţia monumentelor, ambele scrisori de recomandare le-am primit de la Bálint bácsi. Ultima oară l-am întâlnit la Bucureşti, tot în cadrul STAI din CNMI. Ne întâlneam lunar – eu ca membru al comisiei, el ca preşedinte. Fiind cu maşina, la întoarcere, de multe ori l-am condus la aeroportul din Bucureşti. Discutam despre sarcini, despre viitor. Avea o energie incredibilă. Am avut mereu sentimentul că va fi mereu cu noi, pentru că avem nevoie de el. Şi chiar aşa este, doar că acum într-un fel puţin diferit: la două clicuri de KÓS.

Cei care ne ocupăm azi de restaurare în Transilvania, cu toţi am fost la un clic de Bálint SZABÓ. Şi acest clic ne leagă.

Vă mulţumesc frumos, Domnule Profesor!

pontja, később az eredmények őt igazolták.

Nemcsak szakmai dolgokban tartotta fontosnak épített örökségünket. Cseperedő gyerekeimet a KÓS szüleinek brétfűi házában, minden fontos dolgát félretéve, végigvezette, magyarázatot fűzött millió részlethez – biztos lett volna fontosabb dolga is, de akkor az volt a legfontosabb: három kisgyereknek elmesélni az emblematikus ház történetét, amelynél jobb helyszínt nem tudok elképzelni az erdélyi műemlékvédelem képzési központjául, és jó, hogy Bálint bácsinak köszönhetően az a hely az, ami.

A továbbiakban megpróbálok rövid lenni. Műemlékes szakértői képesítés megszerzéséhez ajánlóleveleimet mindkét alkalommal Bálint bácsi adta. Utoljára a bukaresti Országos Műemlékvédelmi Bizottság mérnöki és építészeti szekciójában találkoztam vele, havi rendszerességgel. Mint bizottsági tag, Ő pedig a bizottság elnöke. Hazafelé most én voltam autóval, gyakran kihoztam a bukaresti reptérre. Beszélgettünk feladatokról, jövőről. Rengeteg energiája volt. Az volt az érzésem, mindig is itt lesz velünk, mert szükségünk van rá. Így is van, csak most kicsit másképp. Most már egy kattintással távolabb kerültünk KÓSTÓL. De egy kattintásnyira voltunk SZABÓ Bálinttól.

Köszönöm szépen, Professzor Úr! (most már csak űr…)

■ Miloš DRDÁCKÝ[1]

Notă privind diagnosticarea clădirilor istorice

■ **Rezumat:** *Prezenta lucrare oferă câteva exemple de diagnosticare a deteriorărilor unor clădiri zidite. De asemenea, atrage atenţia asupra deficienţelor de evaluare a simptomelor apărute sau a metodelor inadecvate de intervenţie pentru remediere. Lucrarea abordează cauze atipice ale fisurilor de zidărie şi principiile de monitorizare a comportamentului acestora. Metodele vizuale sunt completate ilustrativ cu informaţii despre posibilităţile de măsurare prin termoviziune, prin utilizarea georadarului şi a dispozitivelor radiologice portabile.*

■ **Cuvinte cheie:** fisură de zidărie, diagnosticarea clădirilor, monitorizare, inspecţie vizuală, termografie, georadar, radiologie

Introducere

■ În medicină, diagnosticarea se referă la procesul de identificare a unei boli sau tulburări pe baza simptomelor şi semnelor. Acesta cuprinde şi examinarea sau analizarea cauzei sau naturii unei stări, situaţii sau probleme. Termenul diagnostic provine din cuvântul grec *gnosis*, care înseamnă cunoaştere.

Leonardo DA VINCI văzuse deja asemănarea dintre medicină şi repararea defectelor de construcţie şi a îndemnat arhitecţii să adopte cunoştinţe şi proceduri de vindecare a construcţiilor în scrisoarea *Lettera ai fabbricieri del Duomo di Milano*, trimisă în jurul anului 1487, împreună cu o ofertă de remedii pentru problemele catedralei din Milano, care se afla într-o stare critică (*Codex Atlanticus*).[2] Ceriani SEBREGONDI[3] a publicat un extras din scrisoare, iar la o notă de subsol a precizat că aceasta nu este prima dovadă istorică a utilizării termenului de „arhitect-medic”.[4] Analogia medicală a procesului de remediere a unei distrugeri sau a unui defect

1 Fost director al Institutului pentru Teoria şi Practica Mecanicii al Academiei Ştiinţelor din Cehia, profesor la Universitatea Tehnică Cehă din Praga, preşedinte al Consiliului de cercetare al ministrului ceh al culturii.
2 Codex Atlanticus, “f 730”, https://codex-atlanticus.ambrosiana.it/#/Detail?detail=730 (accesat 18 februarie, 2024).
3 Giulia Ceriani SEBREGONDI este conferenţiar în specialitatea Istoria arhitecturii la Universitatea Campania „Luigi Vanvitelli”, Italia.
4 Ceriani G. SEBREGONDI, “The Design Process and the Building Site: Leonardo da Vinci at Milan Cathedral as a Case Study,” *Architectural Histories*, 10(1) (2022).

Note on Diagnostics of Historical Buildings

■ **Abstract:** *The article gives several examples of the diagnosing of failures of masonry buildings. It draws attention to deficiencies in the evaluation of acquired symptoms or inappropriate methods of remedial interventions. It deals with atypical causes of cracks in masonry and the principles of monitoring their behaviour. The visual methods are illustratively supplemented with information about the possibilities of thermal imaging measurement, the use of ground penetrating radar and portable X-rays.*

■ **Keywords:** masonry crack, building diagnostics, monitoring, visual inspection, thermography, ground penetrating radar, x-ray

Introduction

■ In medicine, diagnosis refers to the process of identifying a disease or disorder based on its symptoms and signs. It also includes examining or analysing the cause or nature of a condition, situation, or problem. The term diagnosis comes from the Greek word *gnosis*, which means knowledge.

Leonardo DA VINCI already saw the similarity between medicine and the repair of construction defects and urged architects to adopt construction-healing knowledge and procedures in the letter *Lettera ai fabbricieri del Duomo di Milano*, submitted around 1487, with an offer to cure the problems of Milan Cathedral, which was in critical condition (*Codex Atlanticus*).[2] Ceriani SEBREGONDI[3] published an excerpt from the letter, and in the footnote, he points out that this is not the first evidence in history of the use of the term “architect-physician”.[4] The medical analogy of the process of repairing damage or malfunction of a building has been known since ancient times, when it was based on the philosophy and interdisciplinary attitude of the Greek physician Galen[5].[6] Leonardo may also have been influenced by a work of Leone Battista ALBERTI first published in Florence in 1485. In the introduction to the tenth book, ALBERTI writes: “if we are to talk about repairing defects in construction works, we must consider what these defects

1 Past director of the Institute of Theoretical and Applied Mechanics of the Czech Academy of Sciences, Professor of the Czech Technical University in Prague, Chair of the Council for Research of the Czech Minister for Culture.
2 Codex Atlanticus, “f 730”, https://codex-atlanticus.ambrosiana.it/#/Detail?detail=730 (accessed February 18, 2024).
3 Giulia Ceriani SEBREGONDI is Associate Professor in History of Architecture at the University of Campania “Luigi Vanvitelli”, Italy.
4 Ceriani G. SEBREGONDI, “The Design Process and the Building Site: Leonardo da Vinci at Milan Cathedral as a Case Study.” *Architectural Histories*, 10(1) (2022).
5 Aelius GALENUS or Claudius GALENUS, son of an architect, 129-216 AD.
6 Matvej Aleksandrovic GUKOVSKIJ, “Leonardo e Galeno” *Raccolta Vinciana* 20 (1964).

are and which of them can be corrected by human hands. Doctors also believe that a large part of the healing process depends on recognizing the disease. Defects in both public and private buildings are caused by defects that are either inherent in the construction or come from elsewhere."[7] These words have lost none of their validity.

A continuation of the medical analogy is the use of the words "building pathology" to refer to the study of the defects and failures of buildings. The author of this article includes in building pathology the study of building and structural diseases or functional and structural changes and defects.[8] It covers defects or failures induced during the building or structural life by environmental forces (like fatigue, damage cumulative processes, corrosion), material degradation (ageing, chemical changes), service conditions (misuse, overloading, ignorance), maintenance errors, negligence, etc. The study of inborn or innate defects including malformations and monstrosities might be called building teratology. Structurally, this approach involves all defects or failures generated during pre-design, design and construction stages of buildings and structures. Even though some such defects are difficult to define and sometimes even difficult to ascertain in structures – the structure is not always visible – they are important. This family of defects, caused mostly due to human errors, ignorance and negligence, and rarely due to lack of knowledge, initiate more than 80% of building or structural failures.

Defects are usually defined as a discrepancy between expected and observed performance. They typically initiate the diagnostic process. In the construction industry, determining the difference between the cause and the effect of a defect or failure has become the main objective of building diagnostics. At present, a diagnosis is often accompanied by a proposal for corrective intervention, but this article only deals with this aspect marginally by pointing out that inappropriate or defective proposals for the treatment of a defect or failure are often offered. Another reason to perform diagnostics is to supplement information about the design and condition of a structure so as to estimate its usability for a different purpose, to ascertain its energy consumption performance, or to determine its service life for the planning of maintenance or major repairs.

Practical Diagnostics

■ The diagnosis of historical constructions is supported by the *Guidelines for the Analysis, Conservation and Structural Restoration of Architectural Heritage* developed by the ICOMOS ISCARSAH scientific committee.[9] In this document, diagnosis is closely linked to the assessment of the safety of historic buildings and uses three groups of analyses: historical, qualitative, and quantitative, including mathematical modelling and testing.

A successful diagnosis begins with a careful anamnesis, i.e., a review of the history of a building, including past traumas, structural or consolidation interventions, building modifications, environmental changes, construction work in the vicinity, and similar potentially damaging circumstances. Such an investigation requires work in archives

7 Leon Battista ALBERTI, *De re aedificatoria libri decem* (Paris: Berthold Rembolt & Ludwig Hornken, 1512).

8 Miloš DRDÁCKÝ, "Comments on evaluation of failures in civil engineering," in *Lessons from Structural Failures 3*, edited by Miloš DRDÁCKÝ (Prague: Proceedings of the Third International Conference, Aristocrat, Telč, 1993), 1-4.

9 ISCARSAH Guidelines, "2023," https://iscarsah.files.wordpress.com/2023/01/part-ii-e28093-guidelines.pdf (accessed February 18, 2024).

la nivelul unei clădiri este cunoscută din vremuri antice, când avea la bază filosofia şi atitudinea interdisciplinară a fizicianului grec Galen[5].[6] Este posibil ca Leonardo să fi fost influenţat şi de o lucrare a lui Leone Battista ALBERTI, publicată pentru prima dată în Florenţa în 1485. În introducerea la cartea a zecea, ALBERTI scrie: „când e vorba de repararea defectelor la lucrări de construcţie, trebuie să analizăm ce sunt defectele respective şi care dintre ele poate fi corectat de mâna omului. Şi medicii cred că o mare parte din procesul de vindecare depinde de recunoaşterea bolii. Defectele la clădirile publice şi private sunt cauzate fie de defecte inerente construcţiei fie de defecte care vin din altă parte."[7] Aceste cuvinte nu şi-au pierdut nimic din valabilitate.

O continuare a analogiei medicale este utilizarea expresiei „patologia clădirii" cu referire la studierea defectelor şi deficienţelor clădirilor. Autorul prezentei lucrări include în patologia clădirilor studierea bolilor clădirilor şi structurilor sau modificările şi defectele funcţionale şi structurale.[8] Aceasta cuprinde defecte sau deficienţe declanşate pe parcursul vieţii clădirii sau structurii de forţe din mediul înconjurător (precum oboseala, procesele distrugătoare cumulate, coroziunea), de degradarea materialelor (îmbătrânire, modificări chimice), de condiţiile de utilizare (utilizare neadecvată, supraîncărcare, ignoranţă), erori de întreţinere, neglijenţă etc. Studiul defectelor înnăscute, care includ malformaţiile şi monstruozităţile, poate fi numit teratologia clădirilor. Din punct de vedere structural, această abordare implică toate defectele sau deficienţele apărute în etapele de preconcepţie, proiectare şi construcţie a clădirilor şi structurilor. Chiar dacă unele astfel de defecte sunt greu de definit, iar uneori chiar greu de determinat în structuri – structura nu este mereu vizibilă – ele sunt importante. Această familie de defecte, cauzate în principal de erori umane, ignoranţă şi neglijenţă, şi mai rar de lipsă de cunoştinţe, sunt la originea a peste 80% din deficienţele clădirilor sau structurilor.

Defectele sunt definite în general ca discrepanţe între performanţa preconizată şi cea constatată. Acestea declanşează în mod normal procesul de diagnosticare. Principalul obiectiv al diagnosticării clădirilor în domeniul construcţiilor este determinarea diferenţei între cauza şi efectul unui defect sau al unei deficienţe. În prezent, un diagnostic este deseori însoţit de o propunere de intervenţie corectivă. Totuşi, prezenta lucrare abordează acest aspect doar marginal, subliniind că deseori se fac propuneri inadecvate sau defectuoase de tratare a defectelor sau deficienţelor. Un alt motiv de efectuare

5 Aelius Galenus sau Claudius Galenus, fiul unui arhitect, 129-216 AD.

6 Matvej Aleksandrovic GUKOVSKIJ, "Leonardo e Galeno," *Raccolta Vinciana* 20 (1964).

7 Leon Battista ALBERTI, *De re aedificatoria libri decem* (Paris: Berthold Rembolt & Ludwig Hornken, 1512).

8 Miloš DRDÁCKÝ, "Comments on evaluation of failures in civil engineering," în *Lessons from Structural Failures 3*, editat de Miloš DRDÁCKÝ (Prague: Proceedings of the Third International Conference, Aristocrat, Telč, 1993), 1-4.

a diagnosticului este de completare a informaţiilor despre proiectul şi starea structurii pentru a-i estima aplicabilitatea pentru un scop diferit, pentru a-i determina eficacitatea energetică sau pentru a-i stabili durata de viaţă în vederea planificării întreţinerii sau reparaţiilor majore.

Diagnosticare practică

■ Diagnosticarea construcţiilor istorice este sprijinită de „Ghidul pentru analiza, conservarea şi restaurarea structurală a patrimoniului arhitectural" elaborat de comitetul ştiinţific ISCARSAH al ICOMOS.[9] În cadrul acestora, diagnosticul este strâns legat de evaluarea siguranţei clădirilor istorice şi se folosesc trei grupuri de analize: istorică, calitativă şi cantitativă, inclusiv modelare şi testare matematică.

Un diagnostic reuşit începe cu o anamneză atentă, respectiv cu trecerea în revistă a istoriei clădirii, inclusiv traume trecute, intervenţii structurale sau de consolidare, modificări ale clădirii, schimbări ale mediului înconjurător, lucrări de construcţie în vecinătate şi alte circumstanţe similare potenţial dăunătoare. O astfel de investigaţie implică muncă în arhivă şi interviuri cu martori, proprietari sau administratori de clădiri. Totuşi, recunoaşterea şi identificarea informaţiilor importante în timpul unei inspecţii ajută în mod foarte semnificativ.

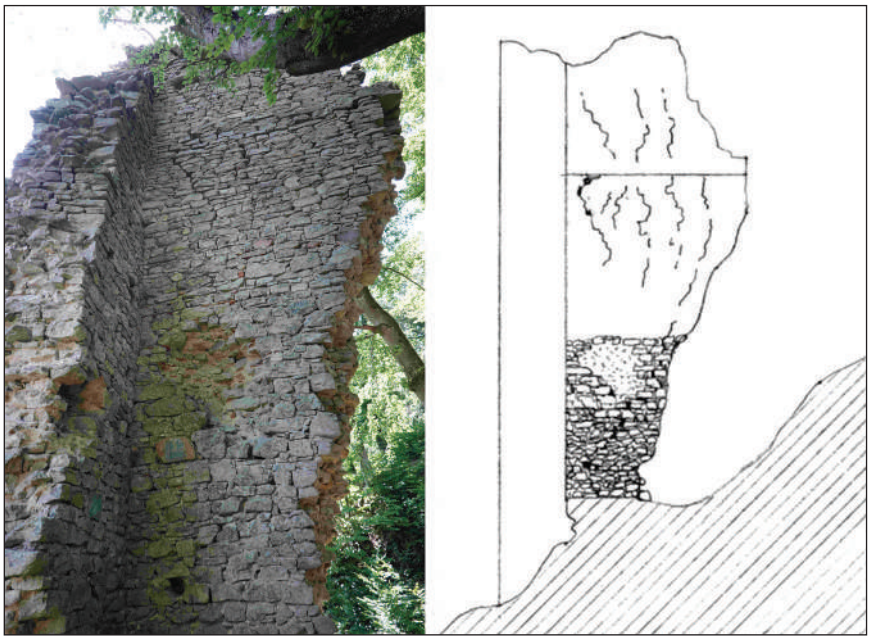
Releveul este o etapă iniţială indispensabilă în cadrul oricărei diagnosticări. Primul releveu permite elaborarea unui plan de explorare mai detaliat care, în cazurile simple, poate cuprinde doar documentare adecvată a constatărilor de suprafaţă, iar în cazuri mai complexe, poate presupune măsurători cu instrumente, monitorizare pe termen lung sau chiar eşantionare pentru teste de laborator. Anumite situaţii şi cerinţe speciale pot uneori necesita teste de sarcină pentru structurile evaluate.[10]

O inspecţie vizuală cu ochiul liber poate revela uşor probleme de integritate structurală mai mari sau mai mici, cum ar fi fisurile în zidărie, deformarea excesivă a structurilor şi terenului din jurul clădirii, lipsa unor elemente structurale, probleme de umiditate, efectele sărurilor solubile în apă şi biodegradarea. Circulând prin clădire, pot fi identificate şi modificări de rigiditate a structurilor orizontale, deoarece corpul uman este foarte sensibil la vibraţii.

Având în vedere că scopul acestui scurt articol nu este de a prezenta exhaustiv metodele de diagnosticare, ne vom opri asupra celei mai comune manifestări a defectelor zidăriei istorice, şi anume fisurile. Trebuie precizat că un defect structural este de obicei rezultatul unei combinaţii de cauze, ale cărei manifestări se acumulează, uneori de-a lungul unei perioade foarte lungi de timp sau

9 ISCARSAH Guidelines, "2023," https://iscarsah.files.wordpress.com/2023/01/part-ii-e28093-guidelines.pdf (accesat 18 februarie, 2024).

10 Miloš DRDÁCKÝ and Shota URUSHADZE, "Load Testing of Cultural Heritage Structures and Sculptures: Unconventional Methods for Assessing Safety," *Heritage* Vol. 6, No. 7 (2023).



■ ***Fig. 1.*** *Torso of a medieval wall with false cracks. © Miloš DRDÁCKÝ*
■ ***Fig. 1.*** *Corp de zid medieval cu crăpături false. © Miloš DRDÁCKÝ*

and interviews with witnesses, owners, or the managers of buildings. However, recognizing and establishing important information during an inspection helps very significantly.

A site survey is an indispensable initial step in any diagnostics. The first survey allows for the creation of a more detailed exploration plan, which in simple cases may only include adequate documentation of surface findings, whereas more complex cases might entail instrumented measurements, long-term monitoring, or even sampling for laboratory tests. Special situations and requirements sometimes require load tests of the structures under evaluation.[10]

A naked-eye visual inspection easily reveals larger or smaller structural integrity issues, such as cracks in masonry, excessive deformation of structures and terrain around the building, missing structural elements, moisture problems, the effects of water-soluble salts, and biodegradation. By moving around the building, changes in the stiffness of horizontal structures can also be identified because the human body is very sensitive to vibrations.

Since the aim of this short article is not a comprehensive overview of diagnostic methods, let us pause to consider the most common manifestation of defects in historic masonry, which are cracks. It should be noted that a structural defect is usually the result of a combination of several causes, whose manifestations accumulate, sometimes over a very long period of time or with a long-time interval between individual damaging events. Estimating or determining the probable cause also requires an experienced assessor, which reduces the possibility of false conclusions.

Fig. 1 shows an example of a false evaluation of open joints that look like cracks. However, they were created by the flushing of mortar from the joints by flowing precipitation during rain and the melting of snow captured on open horizontal surfaces or recesses of the ruins of the medieval castle walls. The designer proposed to stitch the broken parts with horizontal stainless-steel reinforcement inserted

10 Miloš DRDÁCKÝ and Shota URUSHADZE, "Load Testing of Cultural Heritage Structures and Sculptures: Unconventional Methods for Assessing Safety," *Heritage* Vol. 6, No. 7 (2023).

into milled grooves in several layers above each other. Such a design would have been a brutal and completely unnecessary intervention into the authentic surface, and therefore it was rejected and the remains were conserved with the use of masonry repairs – deep jointing, gap filling, partial underpinning, or re-walling using the "scuci-cuci" method.

Stitching cracks is generally a popular method for repairing them. However, many cracks are caused by a natural need for structural release to accommodate volume changes due to thermal expansion or shrinkage. In such a case, stiff stitching is a rather harmful intervention because the structure seeks its release elsewhere and new failures arise. One example might be the strengthening of the Romanesque tower in the World Heritage City of Telč, where bridging a significant crack led to the emergence of a family of new micro-cracks in the façade layer of the external masonry leaf very soon after the intervention. A vertical crack throughout the height of a wall is a common defect observed in towers, which tend to twist due to the uneven heating of differently insulated walls exposed to sunlight; the resulting shear stresses cause the accumulation of significantly localized defects. Fig. 2 shows an older example of the fix of such a crack in a Gothic tower by means of pre-stressed cables. This method led to significant damage to the appearance of the historical structure and is now considered to have been inappropriate. We mention it here mainly because the remediation was justified with reference to a measurement of the movement in the crack which detected that the crack was widening at a dramatic rate of 0.27 mm per month. However, the measurement was only carried out during April in one year, which is a reason for another note.

To determine the cause of crack formation, long-term monitoring of its behaviour is an important indicator. We recommend the use of sensors that convert length information into digital data with the possibility of continuous recording. Geometry measurements must always be accompanied by temperature measurements and, for water-sensitive materials, also by moisture measurements. Cracks separating masonry parts are dependent on volume changes in the materials used and therefore on fluctuations in temperature and humidity inside the structure. Both parameters change during seasonal cycles, and cracks go through opening and closing phases, usually without producing a significant permanent change in crack width after the end of the annual cycle. A permanent increase in the crack width is an essential indicator for making a prognosis of long-term development and the emergence of a

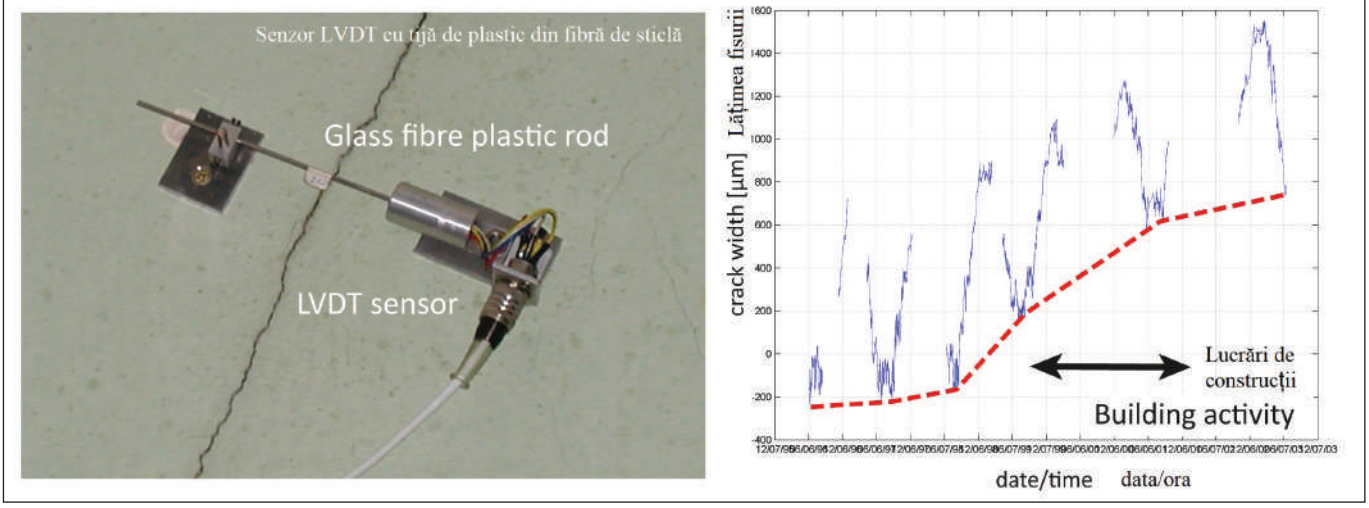


■ ***Fig. 2.*** *A tower damaged by a crack after switching by prestressed tendons and reinforced concrete jacketing. © Jaroslav BUZEK*

■ ***Fig. 2.*** *Turn deteriorat de o fisură după utilizarea de cabluri pretensionate și aplicarea unui înveliș de beton armat. © Jaroslav BUZEK*

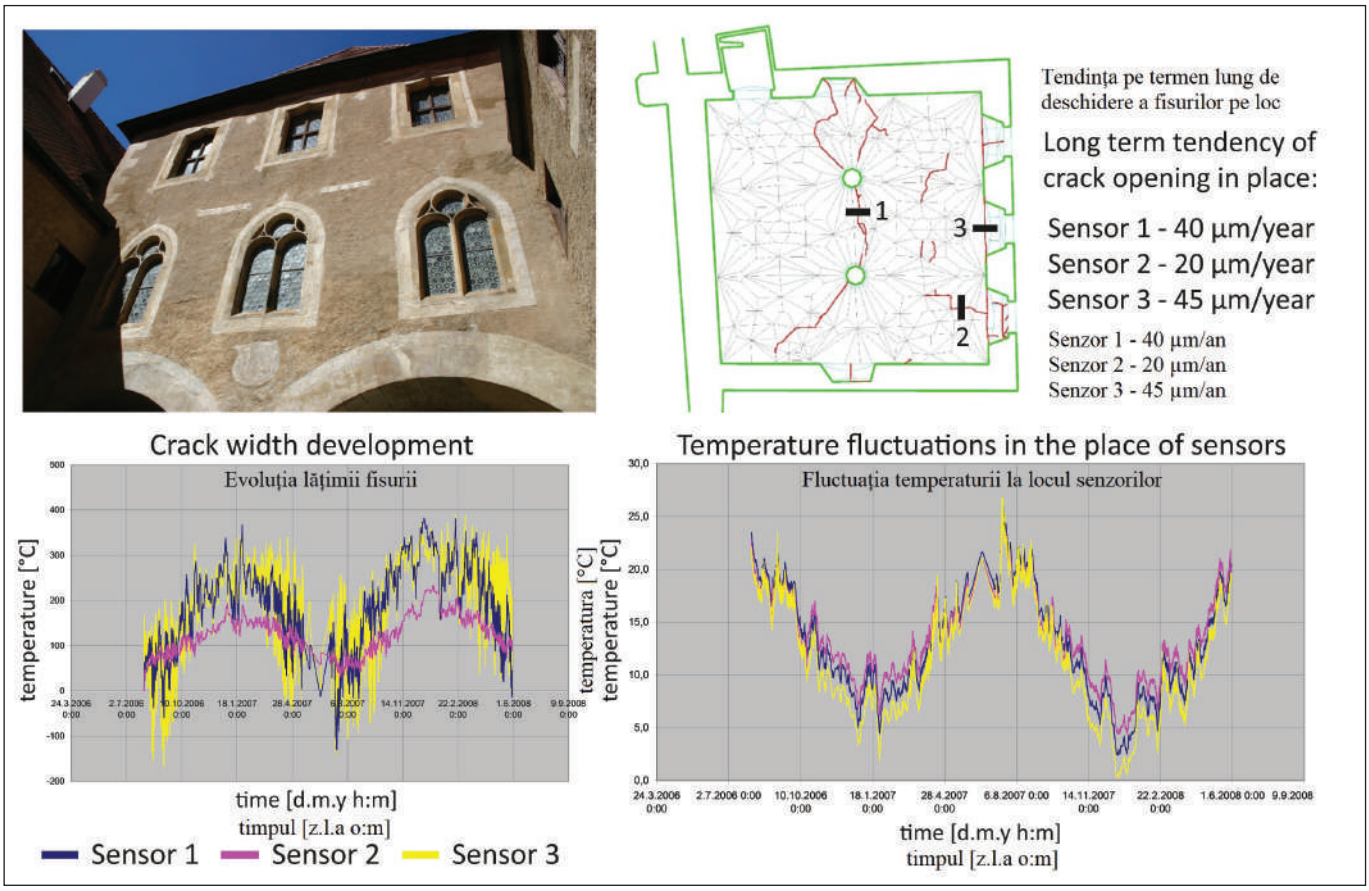
cu intervale lungi de timp între evenimentele dăunătoare. Pentru estimarea sau determinarea cauzei probabile este nevoie şi de un evaluator experimentat, pentru a reduce posibilitatea unor concluzii false.

Fig. 1 ilustrează un exemplu de evaluare falsă a unor rosturi deschise care arată ca nişte fisuri. Totuşi, acestea au apărut în urma spălării mortarului din îmbinări prin fluxul precipitaţiilor în timpul ploilor şi prin topirea zăpezii acumulate pe suprafaţa orizontală deschisă sau în nişele rămăşiţelor de



■ ***Fig. 3.*** *A record of a five-year measurement of the crack width affected by temporary construction activity. © Miloš DRDÁCKÝ & Pavel ZÍMA*

■ ***Fig. 3.*** *Evidența măsurătorilor pe o perioadă de cinci ani asupra lățimii unei fisuri afectate de lucrări temporare de construcții. © Miloš DRDÁCKÝ & Pavel ZÍMA*



■ ***Fig. 4.*** *Spatial distribution of cracks in the cellar vault caused by thermal load near the sunlit wall. © Miloš DRDÁCKÝ & Pavel ZÍMA*

■ ***Fig. 4.*** *Distribuție spațială a fisurilor în bolta subsolului cauzate de încărcare termică în vecinătatea zidului expus luminii solare. © Miloš DRDÁCKÝ & Pavel ZÍMA*

ziduri ale castelului medieval. Proiectantul a propus ţeserea părţilor rupte cu armături orizontale în locaşuri frezate în mai multe straturi unul deasupra celuilalt. O astfel de soluţie ar fi fost o intervenţie brutală şi complet inutilă în suprafaţa autentică. Prin urmare, a fost respinsă, iar ruina a fost conservată utilizând reparaţii de zidărie, respectiv rostuire adâncă, plombaje, subzidire sau rezidire prin metoda „scuci-cuci".

În general, ţeserea fisurilor este o metodă populară de reparare. Totuşi, multe fisuri sunt cauzate de o nevoie naturală de eliberare structurală pentru a răspunde modificărilor de volum cauzate de dilatarea sau retractarea termică. Într-un astfel de caz, ţeserea rigidă este mai degrabă o intervenţie dăunătoare, deoarece structura va căuta să se elibereze în altă parte şi vor apărea deficienţe noi. Un exemplu ar fi consolidarea turnului romanic din oraşul Telč, inclus în patrimoniul mondial. Aici, acoperirea unei fisuri semnificative a dus la apariţia unei serii de microfisuri noi în stratul de zidărie externă al faţadei la foarte scurt timp după intervenţie. O fisură verticală pe înălţimea zidului este un defect frecvent observat la turnuri, care au tendinţa de torsionare din cauza încălzirii inegale a zidurilor cu izolaţii diferite expuse luminii solare; tensiunile de forfecare rezultante duc la acumularea unor defecte localizate semnificative. Fig. 2 ilustrează un exemplu mai vechi de reparare a unei astfel de fisuri într-un turn gotic folosind cabluri pretensionate. Această metodă a dus la daune semnificative pentru aspectul structurii istorice, iar în prezent este

critical condition. It is advisable to carry out measurements over a minimum period of 5 years. Fig. 3 shows an example in which the behaviour of a crack in the masonry of a Renaissance chateau was measured while modifications were underway in its surroundings; a significant temporary change in the tendency of a permanent growth in the crack width occurred during excavation of the sewerage system in the bedrock of the building.

Determining the cause of cracks is also greatly facilitated by showing their spatial relationships throughout the whole structure. Take, for example, the cellar vault damaged by cracks in the room adjacent to the cloister with its southern wall exposed to solar heating. The location of the room in the floor plan indicates that the part of the ceiling near the southern façade is exposed to temperature changes with higher amplitudes compared to parts surrounded by interior spaces with a relatively stable environment. The layout of the crack distribution corresponds to this situation, as does their tendency to permanent deformations, Fig. 4. The prognosis for the development of cracks does not indicate the imminent emergence of a critical situation.

Cracks in masonry are an almost inevitable defect of masonry buildings. It is a common belief that they are caused by some instability in the foundations. In fact, this cause is not the most common. In the case of historic buildings, they can occur when there is a change in the subsoil due to some activity affecting the groundwater level or the type or structure of the foundation soil, e.g. when fine particles are washed out during a flood or when water is massively pumped from the subsoil. Another common cause is excavations in close proximity to the foundations. Similarly, the influence of vibrations from traffic is also usually overestimated, even though the vibrations may significantly contribute to crack propagation. However, the most common cracks are caused by



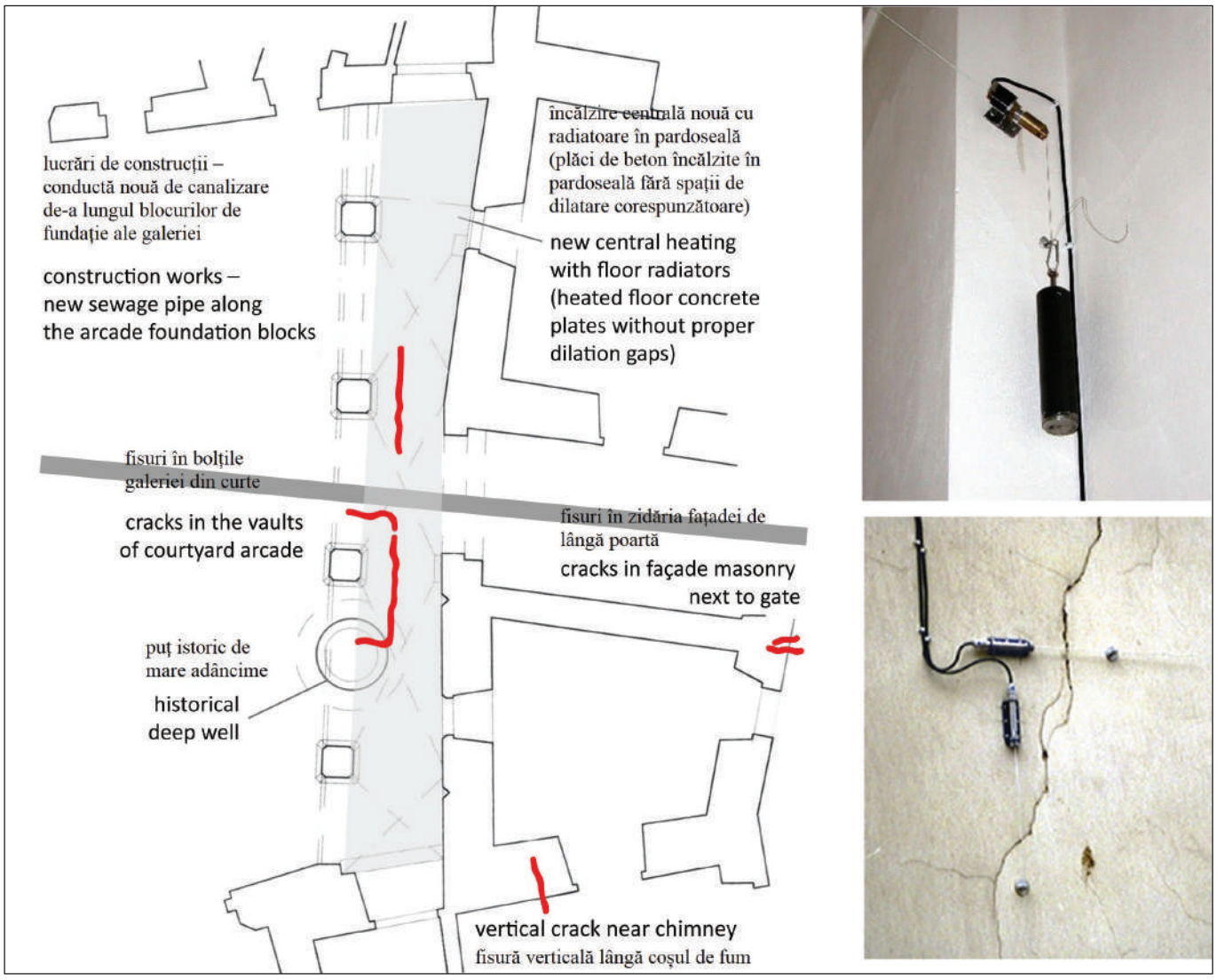
■ ***Fig. 5.*** *Collapse of the medieval tower part of the church by a combination of creep and thermal expansion. © Miloš DRDÁCKÝ*

■ ***Fig. 5.*** *Prăbușirea părții turnului medieval al bisericii printr-o combinație de fluaj și dilatare termică. © Miloš DRDÁCKÝ*

uneven thermal stresses, e.g., vertical cracks in the connection of chimney bodies to the surrounding masonry, or the heating of façade walls connected to less thermally stressed vaults, where there is also a significant difference in the stiffness of the connected elements.

considerată inadecvată. Îl menţionăm aici în principal pentru că remedierea a fost justificată de o măsurătoare a mişcării fisurii care a stabilit că fisura se lăţea într-un ritm dramatic de 0,27 mm pe lună. Totuşi, măsurătoarea a fost efectuată doar în luna aprilie într-un singur an, lucru ce impune o altă observaţie.

Un indicator important în stabilirea cauzei unei fisuri este monitorizarea comportamentului acesteia pe termen lung. Recomandăm utilizarea de senzori care convertesc informaţia legată de lungime în date digitale cu posibilitate de înregistrare continuă. Măsurătorile geometrice trebuie să fie mereu însoţite de măsurători ale temperaturii, iar în cazul materialelor sensibile la apă şi de măsurători ale umidităţii. Fisurile care separă părţi de zidărie depind de modificările în volum ale materialelor folosite şi, prin urmare, de fluctuaţiile de temperatură şi umiditate din interiorul structurii. Ambii parametri se schimbă de-a lungul ciclurilor sezoniere, iar fisurile trec prin faze de deschidere şi închidere, care, în general, nu produc vreo modificare permanentă semnificativă a lăţimii fisurii la finalul ciclului anual. Creşterea



■ ***Fig. 6.*** *An example of a crack system with different origins. © Miloš DRDÁCKÝ & Pavel BENEŠ*

■ ***Fig. 6.*** *Exemplu de sistem de fisuri de origini diferite. © Miloš DRDÁCKÝ & Pavel BENEŠ*

permanentă a lăţimii unei fisuri este un indicator esenţial al prognosticului de evoluţie pe termen lung şi de apariţie a unei situaţii critice. Se recomandă efectuarea de măsurători pe o perioadă de minim 5 ani. Fig. 3 prezintă un exemplu de măsurare a comportamentului unei fisuri în zidăria unui castel renascentist în timp ce se produceau modificări în împrejurimi; s-a produs o schimbare temporară semnificativă a tendinţei de creştere permanente a lăţimii unei fisuri în timpul lucrărilor de excavare pentru sistemul de canalizare în fundaţia clădirii.

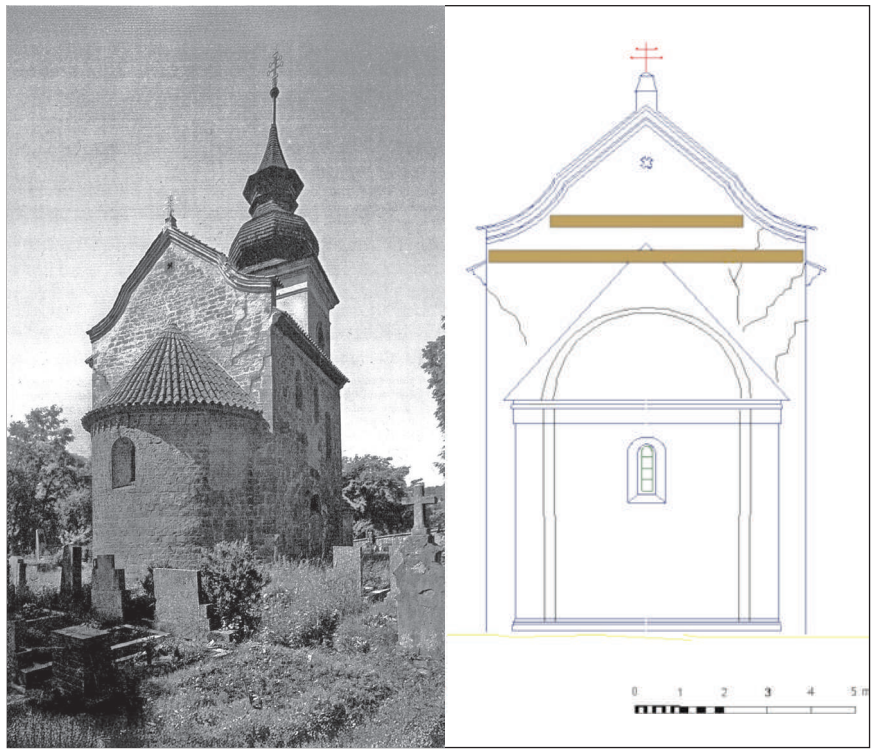
Determinarea cauzei fisurilor este facilitată mult şi de evidenţierea relaţiilor spaţiale dintre fisuri la nivelul întregii structuri. Să luăm, de exemplu, bolta subsolului afectată de fisuri în încăperea lipită de claustru, cu peretele sudic expus la căldura soarelui. Poziţia încăperii în plan arată că partea de plafon din apropierea faţadei sudice este expusă la schimbări de temperatură cu amplitudini mai mari decât părţile înconjurate de spaţii interioare cu un mediu relativ stabil. Configuraţia distribuţiei fisurilor corespunde cu această situaţie, similar cu tendinţa acestora de deformări permanente, Fig. 4. Prognoza evoluţiei fisurilor nu indică apariţia iminentă a unei situaţii critice.

Fisurile în zidărie sunt un defect aproape inevitabil al clădirilor zidite. Se crede că acestea sunt cauzate de o oarecare instabilitate la nivelul fundaţiilor. În cazul clădirilor istorice, acestea pot apărea când se produce o schimbare în subsol din cauza unei activităţi care afectează nivelul apei subterane sau tipul sau structura solului de fundare, de exemplu când particulele fine sunt spălate în timpul unei inundaţii sau când se pompează masiv apă din subsol. O altă cauză comună este efectuarea de excavaţii în proximitatea fundaţiilor. De asemenea, influenţa vibraţiilor cauzate de trafic este de obicei supraestimată, chiar dacă vibraţiile pot contribui semnificativ la propagarea fisurilor. Cu toate acestea, cele mai frecvente fisuri apar din cauza tensiunilor termice inegale, de exemplu, fisurile verticale în zona de racordare a coşurilor de fum cu zidăria din vecinătate sau încălzirea zidurilor de faţadă în raport cu bolţile supuse mai puţin tensiunii termice, atunci când există şi o diferenţă semnificativă de rigiditate la elementele conectate.

Incompatibilităţile de rigiditate în cadrul structurilor zidite sunt şi ele la baza multor fisuri, în special în jurul golurilor şi la nivelul conexiunilor menţionate mai sus între bolţi şi zidurile verticale. Golurile din clădirile istorice sunt deseori conturate cu cadre de piatră, care au o rigiditate diferită faţă de zidăria din jur şi care pot atrage greutăţi verticale mai mari, ceea ce duce ulterior la fisurarea acestora. În cazul structurilor de zidărie din trei straturi cu miez, care are un modul de elasticitate mai mic decât un înveliş de zidărie cu pereţi mai bun, şi care au tendinţă de fluaj, foile subţiri de perete pot fi suprasolicitate şi îşi pot pierde stabilitatea după o încărcare de lungă durată. Aceasta este posibil să fi contribuit la prăbuşirea turnului bisericii din Fig. 5, unde este clar vizibil că foile nu sunt suficient de bine ancorate în miez. Totuşi, o fotografie istorică ilustrează fisura

Stiffness incompatibilities in masonry structures are also responsible for many cracks, especially around openings and in the above-mentioned vault connections to vertical walls. Openings in historic buildings are often lined by stone frames, which have a different rigidity than the surrounding masonry and can attract higher vertical loads, which then lead to their cracking. In the case of three-leaf masonry structures with a core, which has a lower modulus of elasticity than a better walled masonry shell and have a tendency to creep, the slender wall leaves may be overloaded and lose stability after long-term loading. This may have contributed to the collapse of the church tower in Fig. 5, where it is clearly visible that the leaves are not sufficiently anchored into the core. However, a historical photograph shows the significant crack mentioned above in the tower body and the adjacent walls. The warning was ignored, even though some attempts to monitor the crack behaviour by a gypsum plate is apparent.

A surveyor may encounter situations where there are simultaneously a number of cracks of various origins in the masonry building and a number of suspicious influences in the vicinity. One such example is shown in Fig. 6, where there were undoubtedly temperature cracks around the chimneys, cracks caused by the excavation for the sewerage system, and at first glance inexplicable cracks in the vaults of the courtyard arcade, which could have been caused by a significant change in the groundwater level in the given location. This is where the importance of studying archival documents became apparent. It was found that underfloor heating was installed in the corridor above the arcade vault, apparently without a sufficient expansion gap, which caused the walls to deflect and cracks to appear in the vaults. According to the author's experience, faulty installation of underfloor heating is a common cause of otherwise unusual horizontal cracks in the masonry, most often visible in the pillars between the windows at the level of the parapet.



■ ***Fig. 7.*** *A church with cracks in the gable caused by the different behaviour of the wooden beams and masonry. © Miloš DRDÁCKÝ*

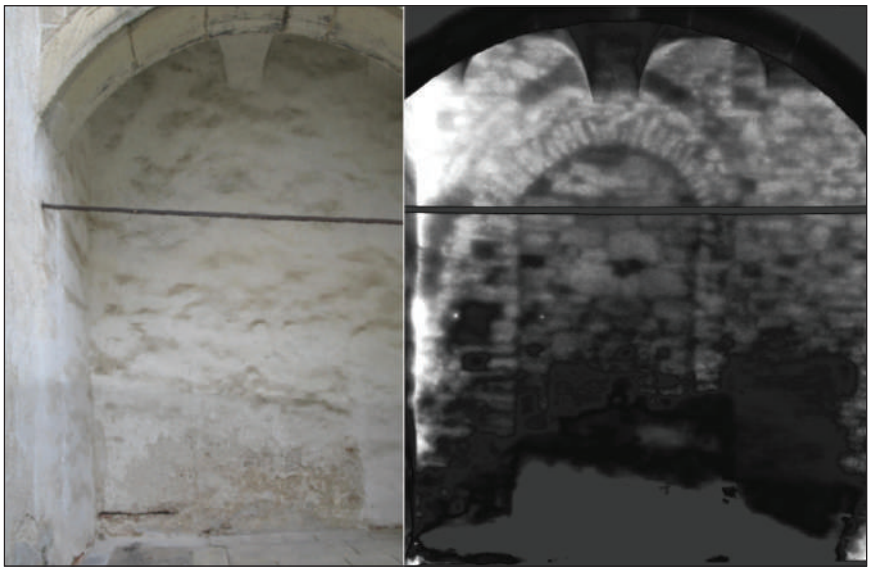
■ ***Fig. 7.*** *Biserică cu crăpături în fronton cauzate de comportamentul diferit al grinzilor de lemn și al zidăriei. © Miloš DRDÁCKÝ*



■ ***Fig. 8.*** *Gothic elements damaged by environmental fatigue. © Miloš DRDÁCKÝ & Jan VOJTĚCHOVSKÝ*
■ ***Fig. 8.*** *Elemente gotice deteriorate de oboseală cauzată de condițiile de mediu. © Miloš DRDÁCKÝ & Jan VOJTĚCHOVSKÝ*

The direction and inclination of cracks are characteristic of certain types of causes. It is widely known that oblique cracks are usually formed in the subsidence of foundations, inclined over the unstable part. However, such cracks can also arise in other ways. Fig. 7 shows an example where the most likely cause of failure is the different behaviour of masonry and timber elements of a composite structure during the seasonal cycle. A massive wooden beam supporting the gable masonry above the triumphal arch of the Romanesque church prevents the gable masonry from shrinking freely in the winter months, as its length hardly changes with the change in temperature. Wooden structures of ceilings and trusses can have a similar effect on simple masonry buildings.

We conclude our notes on cracks with an example of defects that occur in stone elements of a more complex shape, where more massive parts with higher thermal and moisture inertia are combined with smaller details. Typical examples are the tracery of Gothic triforia, but also the ribs of the vaults, Fig. 8. With these elements, environmental fatigue can occur in temperature and humidity-sensitive materials. With repeated short-term changes in temperature and humidity, the smaller parts react faster than the massive parts, and due to the different vol-



■ ***Fig. 9.*** *Thermography makes the masonry hidden under the plaster visible. © Miloš DRDÁCKÝ & Marek EISLER*
■ ***Fig. 9.*** *Termografia evidențiază zidăria ascunsă sub tencuială. © Miloš DRDÁCKÝ & Marek EISLER*

semnificativă menţionată mai sus, prezentă în corpul turnului şi în zidurile limitrofe. Avertizarea a fost ignorată, chiar dacă se vede că au fost câteva tentative de monitorizare a comportamentului fisurilor cu un martor/pată de gips.

Un expert poate întâlni situaţii în care există simultan mai multe fisuri de origini diferite la nivelul clădirii zidite şi mai multe influenţe susceptibile în vecinătate. Un astfel de exemplu este ilustrat în Fig. 6, unde existau fisuri în jurul coşurilor de fum cauzate fără îndoială de temperatură, fisuri cauzate de excavările pentru sistemul de canalizare, precum şi nişte fisuri inexplicabile la prima vedere la nivelul bolţilor galeriei din curte, care ar fi putut să fie cauzate de o schimbare a nivelului apei subterane la locul respectiv. Aici a devenit evidentă importanţa studierii documentelor de arhivă. S-a constatat că fusese instalat sistem de încălzire în pardoseală la nivelul coridorului de deasupra bolţii galeriei, dar aparent fără spaţiu de dilatare suficient, ceea ce a dus la deformarea pereţilor şi la apariţia fisurilor la nivelul bolţilor. Din experienţa autorului, instalarea greşită a încălzirii în pardoseală este o cauză frecventă a fisurilor orizontale în zidării, care altfel sunt neobişnuite, cel mai adesea fiind vizibile la stâlpii dintre ferestre la nivelul parapetului.

Direcţia şi înclinarea fisurilor sunt caracteristice pentru anumite tipuri de cauze. Este bine cunoscut că fisurile oblice se formează de obicei în cazul cedării fundaţiilor, fiind înclinate peste partea instabilă. Totuşi, astfel de fisuri pot apărea şi în alte moduri. Fig. 7 arată un exemplu în care cea mai probabilă cauză a deficienţei este comportamentul diferit al zidăriei şi elementelor de lemn din cadrul unei structuri compozite de-a lungul ciclului sezonier. O grindă masivă de lemn pe care se sprijină zidăria frontonului deasupra arcului triumfal al bisericii romanice împiedică zidăria frontonului să se contracte liber în timpul lunilor de iarnă, deoarece lungimea ei se modifică foarte puţin în funcţie de temperatură. Structurile din lemn ale planşeelor şi fermelor pot avea un efect similar asupra construcţiilor simple din zidărie.

Încheiem observaţiile noastre legate de fisuri cu un exemplu de defect care apare la elementele din piatră cu o formă mai complexă, unde părţi mai masive cu inerţie termică şi de umiditate mai ridicată sunt combinate cu detalii mai mici. Exemple tipice sunt mulurile triforiilor gotice, dar şi nervurile bolţilor, Fig. 8. În cazul acestor elemente, poate apărea oboseala legată de condiţiile de mediu la materialele sensibile la temperatură şi umiditate. În caz de schimbări repetate pe termen scurt ale temperaturii şi umidităţii, părţile mai mici reacţionează mai repede decât părţile masive, iar din cauza modificării diferite în volum, apar tensiuni care determină formarea de fisuri şi propagarea acestora, deseori până la punctul unei deficienţe critice misterioase.

Datele din inspecţia defectelor detectate superficial nu sunt suficiente pentru analiză cantitativă şi modelare matematică, fiind nevoie de utilizarea instrumentelor de măsurat în teren sau teste de laborator pe eşantioane de materiale. Dispozitivele de diagnostic ne-

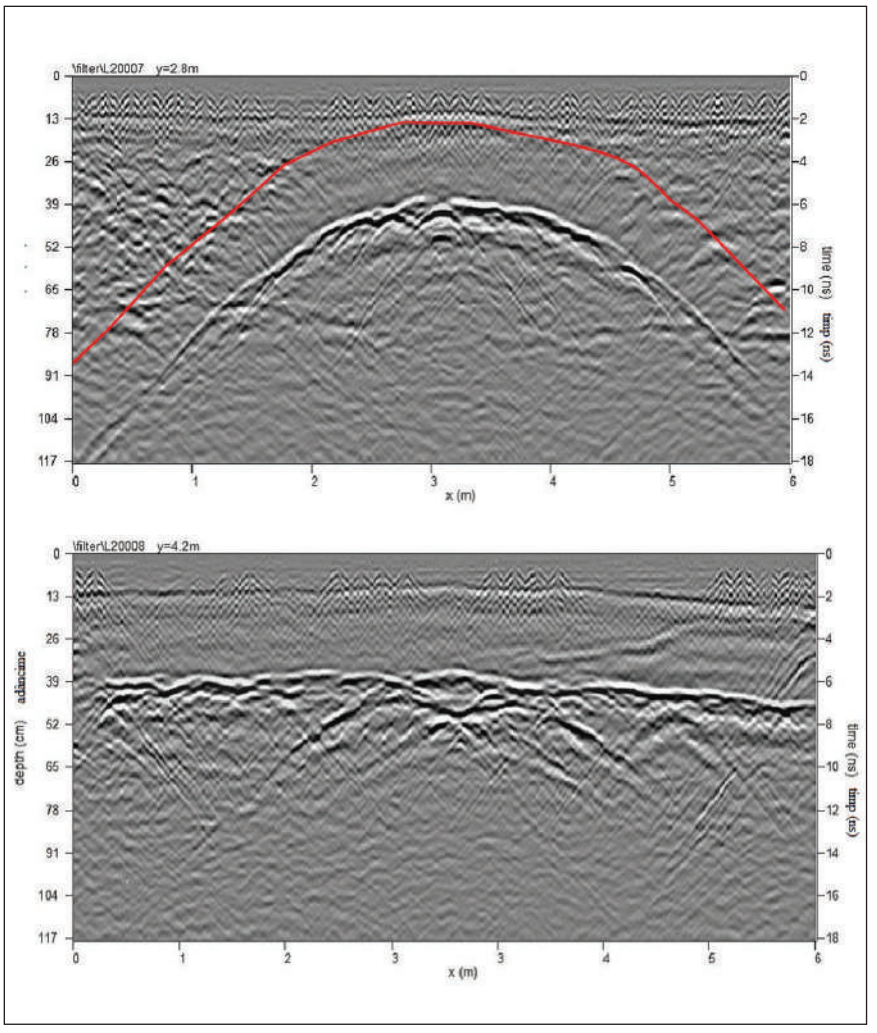
distructive permit vizualizarea caracteristicilor structural ascunse, din care pot fi deduse şi date cantitative în cazuri speciale. Termografia în infraroşu se aplică deseori pentru a identifica defecte de profunzime sau anomalii structurale superficiale. Multe informaţii sunt valoroase, în special din punct de vedere artistic, arhitectural şi istoric. Fig. 9 arată nişa zidită a unei ferestre medievale şi structura zidăriei de piatră descoperite prin termografie într-un castel renascentist. Trebuie precizat că pentru o măsurătoare reuşită este nevoie de un gradient de temperatură în structură. Acesta poate fi obţinut profitând de diferenţa de temperatură din timpul ciclului zilnic de temperatură a aerului, în funcţie de anotimp şi de inerţia termică a structurii. De exemplu, în lunile de vară, este avantajos să se facă măsurători la orele dimineţii, când aerul mai rece răcoreşte suprafaţa structurii încălzite în timpul zilei şi evidenţiază structura profundă cu capacitate de absorbţie şi viteze de propagare a căldurii diferite. Termografia în infraroşu este o metodă uşoară şi rapidă.

O metodă mai eficientă pentru pătrundere la adâncime mai mare este utilizarea radarului. Georadarul se foloseşte frecvent, fiind o metodă geofizică care poate fi folosită pentru o gamă largă de acţiuni de explorare nedestructive, de la cele implicate în descoperirea fundaţiilor clădirilor, prin arheologie, la explorarea amănunţită a defectelor de profunzime ale clădirilor. Principiul de bază al măsurătorii constă în emisia de impulsuri electromagnetice, care trec prin mediul dat. Undele reflectate sunt recepţionate de antenă şi afişate în funcţie de momentul sosirii şi în raport cu poziţia antenei. Semnalul este reflectat sau modificat în funcţie de permitivitatea şi conductivitatea mediului traversat. Dacă se cunoaşte viteza de propagare a undelor într-unul sau mai multe materiale date, se poate determina adâncimea la care se produc modificările sau reflectările. Această metodă este folosită în diagnosticarea clădirilor în special pentru a găsi şi vizualiza cavităţi, pentru a determina poziţia armăturilor sau elementelor de fixare metalice şi pentru a estima componenţa structurii planşeelor. Este de nepreţuit în determinarea formei şi grosimii bolţilor cu o suprafaţă superioară acoperită de un umplutură şi podea.[11] Fig. 10

O altă metodă imagistică nedistructivă care merită menţionată este radiografia cu raze X. Radiaţia electromagnetică cunoscută ca radiografie se creează prin fluxul fotonilor şi se produce când electronii circulând la viteză mare lovesc un obstacol. Când razele X pătrund într-o substanţă, se produc o serie de interacţiuni care le afectează trecerea prin material şi absorb radiaţia. Atenuarea radiografiei depinde de compoziţia fizico-chimică a substanţei, de gravitaţia specifică aproximativă şi de grosimea materialului iradiat. În prezent se folosesc dispozitive radiologice portabile pentru diagnosticarea clădirilor cu posibilitate de pătrundere a materialelor gre-

ume change, stresses occur, which initiate the formation of cracks and their propagation, often to the point of a mysterious critical failure.

For quantitative analysis and mathematical modelling, data from the inspection of superficially detected defects are not sufficient, and we have to use instrumented field measurements or laboratory tests on samples of materials. Non-destructive diagnostic devices provide visualization of hidden structural characteristics, from which quantitative data can also be derived in special cases. Infrared thermography is often applied to find subsurface defects or superficial structural anomalies. A lot of information is valuable, especially from an artistic, architectural and historical point of view. Fig. 9 shows the walled-up niche of a medieval window and the structure of the stone masonry discovered by thermography in a Renaissance chateau. It should be noted that a successful measurement requires a temperature gradient in the structure. This can be achieved by taking advantage of the temperature difference during the daily air temperature cycle, depending on the season and the thermal inertia of the structure. For example, in the summer months, it is advantageous to carry out measurements in the morning hours, when colder air cools the surface of the heated structure during the day and highlights the subsurface structure with different absorption capacity and heat propagation speeds. Infrared thermography is an easy and quick method.



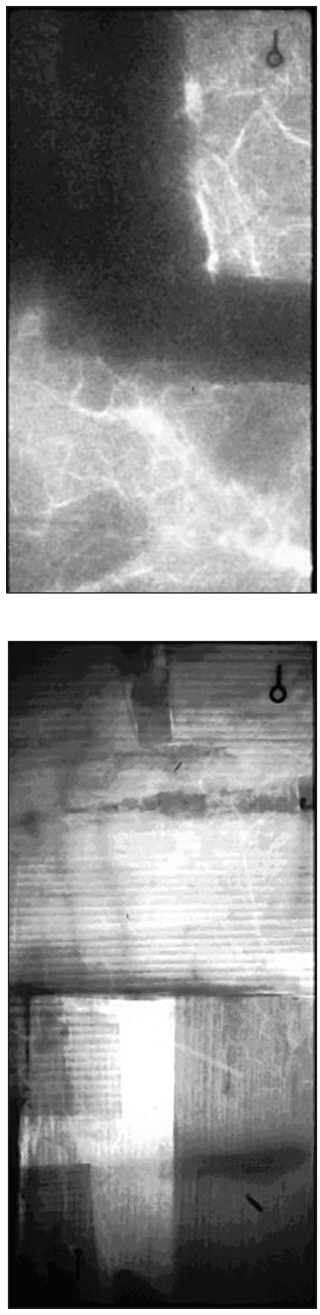
■ ***Fig. 10.*** *Cross-sectional and longitudinal radargrams of a barrel vault with the marked vault masonry thickness. © Jan VÁLEK*

■ ***Fig. 10.*** *Diagrame radar transversale și longitudinale ale unei bolți semicirculare cu grosimea marcată a zidăriei bolții. © Jan VÁLEK*

11 Jan BAYER, Miloš DRDÁCKÝ şi Jan VÁLEK, "Survey and preliminary assessment of a baroque vault for refurbishment and retrofitting planning," *Architecture Papers of the Faculty of Architecture and Design STU*, 29(1) (2024).

A more effective method to penetrate deeper is the use of radar. Ground Penetrating Radar is typically applied and it is a geophysical method that can be used for a wide range of non-destructive exploration tasks from such as those involved in discovering the foundations of buildings, through archaeology, to the detailed exploration of the subsurface defects of buildings. The basic principle of measurement is the pulsed emission of electromagnetic waves, which pass through the given environment. The reflected waves are received by the antenna and displayed according to the time of arrival and in relation to the position of the antenna. Reflection or alteration of the signal occurs when it passes through an environment with different permittivity and conductivity. If the speed of wave propagation in a given material or materials is known, then the depth where the signal changes or reflections occur can be determined. In building diagnostics, the method is mainly used to find and visualize cavities, to determine the position of reinforcement or metal fasteners, and to estimate the composition of ceiling structures. It is invaluable in determining the shape and thickness of vaults with an upper surface covered by an infill and floor. Fig. 10[11]

Another non-destructive imaging method worth mentioning is X-ray radiography. Electromagnetic radiation known as X-rays is created by the flow of photons and is produced when electrons traveling at high speed hit an obstacle. When X-rays penetrate a substance, a number of interactions occur that affect their passage through the material and absorb the radiation. The attenuation of X-rays depends on the physicochemical composition of the substance, on its approximate specific gravity, and on the thickness of the irradiated material. Portable X-ray sources are currently used in building diagnostics with the ability to penetrate heavy building materials only up to small thicknesses of around 150 mm. This significantly limits their applicability in masonry structures, and so the method is more likely to be used in the diagnosis of timber elements, especially when examining the execution of carpentry joints or identifying internal defects. The intensity of the radiation after passing through the body is visualized and recorded in an appropriate way. Traditionally, film exposure or radiation visualization on a fluorescent matte screen is used. A revolutionary technique is provided by a phosphor recording device that allows repeated recording and easy digitization of the image. The plate consists of a very thin layer of phosphor crystals, interconnected and deposited on a flexible plastic substrate. Phosphor crystals absorb and store X-ray energy in the form of a hidden image. The stored energy is then released from the crystals by irradiating them with a red laser. The crystals enter an unstable state and emit blue visible light as they transition to the ground stable state. This light is recorded by the scanner and converted into images that can be further processed using software. To illustrate this, there is a picture of a walled-up wooden window frame in adobe masonry and the connection of the wooden doorframe, Fig. 11.



■ ***Fig. 11.*** *A wooden frame in clay masonry. Connection of the post and the lintel of the wooden door frame (below). © Miloš DRDÁCKÝ archive*

■ ***Fig. 11.*** *Un cadru de lemn în zidărie de lut. Îmbinarea dintre stâlp și buiandrugul cadrului de lemn al ușii (jos). © arhiva lui Miloš DRDÁCKÝ*

Conclusion

■ Evaluation of surface defects in determining their origin requires experience, the imagination of possible scenarios involving all of the mechanisms by which materials and structures might fail depending on the action of both obvious and hidden forces and the environment, and often long-term monitoring of the failure behaviour. The initial steps

le de construcţie doar până la grosimi mici de circa 150 mm. Aceasta limitează semnificativ aplicabilitatea dispozitivelor la structurile zidite, metoda fiind mai degrabă utilizată la diagnosticarea elementelor de lemn, în special pentru examinarea execuţiei îmbinărilor de tâmplărie sau pentru identificarea defectelor interne. Intensitatea radiaţiei după trecerea

11 Jan BAYER, Miloš DRDÁCKÝ and Jan VÁLEK, "Survey and preliminary assessment of a baroque vault for refurbishment and retrofitting planning," *Architecture Papers of the Faculty of Architecture and Design STU*, 29(1) (2024).

prin corp se vizualizează şi înregistrează în mod corespunzător. În mod tradiţional se foloseşte expunerea pe film sau vizualizarea radiaţiei pe un ecran mat fluorescent. O tehnică revoluţionară constă într-un dispozitiv de înregistrare cu fosfor, care permite înregistrarea repetată şi digitalizarea uşoară a imaginii. Placa este formată dintr-un strat foarte subţire din cristale de fosfor interconectate şi depuse pe un substrat flexibil din plastic. Cristalele de fosfor absorb şi stochează energia radiaţiilor sub forma unei imagini ascunse. Energia stocată este ulterior eliberată din cristale prin iradiere cu laser roşu. Cristalele intră într-o stare de instabilitate şi emit o lumină albastră vizibilă atunci când trec la starea stabilă de bază. Această lumină este înregistrată de scaner şi convertită în imagini care pot fi prelucrate în continuare folosind aplicaţii informatice. Fig. 11 prezintă o astfel de imagine a unui cadru de fereastră din lemn zidit în zidărie de chirpici şi racordarea unui cadru de uşă din lemn.

Concluzie

■ Evaluarea defectelor de suprafaţă în vederea determinării originii acestora necesită experienţă, capacitatea de a imagina scenarii posibile care implică toate mecanismele prin care materialele şi structurile ar putea ceda sub acţiunea forţelor evidente şi ascunse şi sub acţiunea factorilor de mediu, precum şi, deseori, o monitorizare pe termen lung a comportamentului deficient. Paşii iniţiali descrişi mai sus trebuie completaţi în faze ulterioare de măsurarea proprietăţilor mecanice relevante şi de verificarea concluziilor trase prin modele numerice.

Mulţumiri

■ Imboldul pentru scrierea acestui articol vine din împlinirea unui jubileu important în viaţa marelui cercetător şi expert în construcţii istorice Profesor Bálint SZABÓ, a cărui muncă a inspirat mult autorul şi rămâne în continuare o sursă de învăţăminte. Sper ca cititorii să folosească această resursă mult timp de acum înainte!

Din păcate, Bálint nu a trăit să vadă publicarea acestui articol, dar opera sa rămâne cu noi şi va continua să fie o sursă de lecţii.

Autorul adresează mulţumiri pentru sprijin Programului RVO 68378297, precum şi lui Jaroslav BUZEK şi Pavel BENEŠ pentru conceptul grafic al imaginilor.

described above must be supplemented in the next phases by measuring the relevant mechanical properties and verifying the conclusions reached on the basis of numerical models.

Acknowledgement

■ The impetus for writing this article was the achievement of an important jubilee in the life of the great researcher and expert on historical constructions, Professor Bálint SZABÓ, whose work brought the author much inspiration and is still a source of great lessons. May readers be able to draw from this source for a long time to come!

Unfortunately, Bálint did not live to see the publication of this article, but his work remains with us and will continue to be a source of much lesson.

The author would like to thank for the support from the RVO 68378297 program and to Jaroslav BUZEK and Pavel BENEŠ for the graphic design of the images.

References

■ ALBERTI, Leon Battista. *De re aedificatoria libri decem*. Paris: Berthold Rembolt & Ludwig Hornken, 1512.

■ BAYER Jan, Miloš DRDÁCKÝ, and Jan VÁLEK. “Survey and preliminary assessment of a baroque vault for refurbishment and retrofitting planning.” *Architecture Papers of the Faculty of Architecture and Design STU*, 29(1) (2024): 2-8.

■ Codex Atlanticus. “f 730.” https://codex-atlanticus.ambrosiana.it/#/Detail?detail=730.

■ DRDÁCKÝ, Miloš. “Comments on evaluation of failures in civil engineering.” In *Lessons from Structural Failures 3*, edited by Miloš DRDÁCKÝ, 1-4. Prague: Proceedings of the Third International Conference, Aristocrat, Telč, 1993.

■ DRDÁCKÝ, Miloš, and Shota URUSHADZE. “Load Testing of Cultural Heritage Structures and Sculptures: Unconventional Methods for Assessing Safety.” *Heritage* Vol. 6, No. 7 (2023): 5538–5558. E-ISSN 2571-9408 https://doi.org/10.3390/heritage6070292.

■ GUKOVSKIJ, Matvej Aleksandrovic. “Leonardo e Galeno.” *Raccolta Vinciana* 20 (1964): 359–67.

■ ISCARSAH Guidelines. “2023.” https://iscarsah.files.wordpress.com/2023/01/part-ii-e28093-guidelines.pdf.

■ SEBREGONDI, Ceriani G. “The Design Process and the Building Site: Leonardo da Vinci at Milan Cathedral as a Case Study.” *Architectural Histories*, 10(1) (2022): 1-27. DOI: https://doi.org/10.16995/ah.8293.

■ Teodor Octavian GHEORGHIU[1]

Reuşite şi eşecuri în restaurarea unor biserici fortificate din Transilvania

Success And Failure in Transylvanian Fortified Church Conservation

■ **Rezumat:** *Articolul încearcă să investigheze modul în care s-au desfăşurat şi se desfăşoară unele acţiuni de restaurare/reabilitare a ansamblurilor bisericilor fortificate din Transilvania, cercetare care să conţină anumite judecăţi de valoare. Subiectul este interesant din punct de vedere istoric (privind evoluţia acestor arhitecturi, extrem de dinamică), dar şi în ceea ce priveşte funcţionalitatea complexă a lor, care, la limită, pot fi considerate „micro-aşezări", capabile să asigure, în perioade dificile, adăpostul şi apărarea unor întregi comunităţi umane. În ceea ce priveşte studiul lor, se poate remarca interesul istoriografic pentru „biserica reduit", numită frecvent „cetate ţărănească", încă din secolul XIX, studiile şi publicaţiile înmulţindu-se în perioada interbelică şi postbelică. Din anii dintre cele două războaie mondiale datează şi primele cercetări arheologice şi primele intervenţii de restaurare modernă, cu rezultate care rezistă până astăzi. Ele s-au înmulţit în anii 1950-77, reuşindu-se realizarea unui număr considerabil de restaurări şi puneri în valoare. După o pauză (relativă) de cca 15 ani, procesul continuă şi astăzi. Aşadar, motivelor istorice şi conceptuale ale acestui studiu, li se adaugă cele care pun în evidenţă dinamica intervenţiilor de restaurare, cele mai multe dintre bisericile fortificate parcurgând etape îndelungate de intervenţie restauratoare, de facturi şi calităţi diferite. Detectarea, prin contactul direct şi repetat al autorului, pe parcursul a cca 50 de ani, cu rezultatele restaurărilor acestor ansambluri (oscilând între reuşite şi eşecuri - parţiale sau totale), poate conduce la alcătuirea unei baze de date necesare calibrării viitoarelor acţiuni similare. Ar fi o primă fază de investigare. Exemplele alese (Ilieni, Alma Vii, Roşia şi Drăuşeni) sunt diverse ca istorie, complexitate şi calitate a restaurării.*

■ **Cuvinte cheie**: biserică fortificată, Transilvania, restaurare, consolidare, calitatea execuţiei, Ilieni, Alma Vii, Roşia (judeţul Sibiu), Drăuşeni

■ **Summary:** *This paper tries to search into how fortified church ensembles in Transylvania have been conserved, and to include the author's personal judgement thereof. The topic is interesting in historical terms, for the extremely dynamic architectural evolution of these churches, as well as in terms of functionality, which is complex for these churches to the point of being considered "micro-settlements", able to provide shelter and defence to whole human communities in hard times. Concerning their study, a historiographic interest in the "reduit church", often called "peasant citadel", can be noticed already in the 19th century, with an increased number of studies and publications in the interwar and post-war periods. The interwar period is also the time when the first archaeological research and the first modern conservation interventions with results persisting today were conducted. Their number increased in the 1950s-77, when many conservation and enhancement works were performed. After a relative break of approximately 15 years, the process is ongoing. Consequently, this study is based on historical and conceptual reasons, as well as on reasons revealing the dynamics of the conservation interventions, as most of the fortified churches have gone through long conservation intervention stages of different types and quality. The author has traced the outputs of the conservation works on these ensembles by direct and repeated contact for approximately 50 years. The findings oscillate between successes and partial or total failures, which could be gathered into a database to be used for the calibration of future similar actions. This could be a first investigation stage. The chosen examples (Ilieni, Alma Vii, Roşia and Drăuşeni) are diverse in terms of history, complexity, and conservation quality.*

■ **Keywords**: fortified church, Transylvania, conservation, consolidation, execution quality, Ilieni, Alma Vii, Roşia (Sibiu County), Drăuşeni

Introducere

■ Biserica fortificată constituie unul dintre cele mai provocatoare subiecte de studiu din istoria arhitecturii medievale europene şi, în speţă, româneşti. Istoria îndelungată (numeroase având începuturi în sec. XIII-XIV şi evoluţii până în sec. XIX), dinamica transformărilor (de la simple biserici parohiale la biserici fortificate înconjurate de incinte devenind, treptat, extrem de ample şi bine dotate defensiv), dinamica mutaţiilor stilistice şi defortificărilor (adoptarea stilurilor „moderne" de sec. XVIII-XIX, prin sacrificarea vechilor biserici şi demantelarea fortificaţiilor exterioare, frecventă în sec. XIX) trebuie să fie

1 Profesor universitar, dr. arh., Facultatea de Arhitectură şi Urbanism a Universităţii Politehnica Timişoara, România.

1 PhD, architect, professor at the Faculty of Architecture and Urban Planning of Timişoara Politechnical University, Romania.

articulate îndelungatelor procese de cercetare şi restaurare în spaţiul românesc începând a se desfăşura într-o manieră modernă în perioada interbelică şi continuând până astăzi.

În ceea ce priveşte istoria edificărilor şi transformărilor, cele mai vechi biserici, cu elemente de apărare modeste, sunt cele din zona Sibiului (Cisnădioara, Roşia, Hamba, Vurpăr etc.) şi din zona secuiască (Cernatul de Sus) datate (unele conform unor săpături arheologice din ultimele decenii) la cumpăna sec. XII–XIII. Acestea aveau deja ziduri de incintă simple sau şi le-au ridicat la scurt timp. În perioada următoare, sunt edificate numeroase biserici romanice sau gotice trinavate care, în sec. XV, încep să fie fortificate, procesul accelerându-se către sfârşitul sec. XV şi începutul sec. XVI, ca urmare a atacurilor otomane. Au rezultat câteva sute de asemenea ansambluri, distribuite în zona Bistriţei, Albei, Sibiului, Sighişoarei, Braşovului, precum şi în Harghita şi Covasna. Intervenţii ulterioare se produc pentru a se perfecţiona apărarea (prin elemente defensive de factură renascentistă) sau în scopul adoptării unor noi stiluri (baroc sau neoclasic în cele mai frecvente cazuri). În sec. XIX se produc o serie de defortificări. În restul spaţiului românesc, biserici fortificate se ridică mult mai târziu (sec. XVII-XVIII) şi reprezintă adaptări ale acestor arhitecturi urbane la necesităţile defensive ale momentului. Cele mai numeroase au fost edificate în Iaşi, Galaţi, Câmpulung, Târgovişte.

Primele cercetări şi intervenţii de protecţie, reabilitare, restaurare au loc în spaţiul transilvan în perioada interbelică (Aţel, Moşna, Agnita, Valea Lungă etc.), iar după război, numărul lor creşte foarte mult, ajungându-se la multe zeci de obiective, unele de mari dimensiuni şi extrem de complexe (Prejmer, Hărman, Sânpetru, Biertan, Valea Viilor-Vorumloc etc.). Avem în vedere desfăşurarea unui proces complet, de la studiile preliminare (topografice, arheologice, arhitecturale şi structurale), proiectarea propriu-zisă (cu toate componentele ei), până la execuţie şi amenajare/punere în valoare. Cele mai multe dintre bisericile fortificate care astăzi funcţionează (mai ales în scop turistic sau cultural, atât timp cât comunităţile respective au emigrat) îşi datorează existenţa acelei perioade. Între ele se numără şi cele 4 exemple alese ca studii de caz: Ilieni, Alma Vii, Roşia-Sibiu şi Drăuşeni. De asemenea, acestea au un parcurs restaurator şi în ultimele decenii, când au avut loc intervenţii de reabilitare a anvelopelor, de consolidare sau de reconstrucţie a unor elemente lăsate în aşteptare de restaurările precedente sau descoperite arheologic. Cele patru studii de caz încearcă să evalueze, implicit, calitatea şi durabilitatea intervenţiilor.

Scurt istoric al evoluţiei bisericilor fortificate din Transilvania şi al cercetării lor

■ Informaţiile privind acest proces (şi, în special, cronologia sa) sunt obţinute documentar, arheologic şi prin studii specifice de arhitectură, structură, parament, artă şi, mai nou, dendrocronologice, fizice, chimice şi altele, adaptate anumitor cazuri specifice. O scurtă trecere în revistă a acestora poate reflecta evoluţia procesului, care, în fond, constituie baza conceptuală şi ştiinţifică a intervenţiilor de restaurare. Primele lucrări moderne publicate, ulterioare „romanticului" secol XIX,[2] [3] având drept subiect acest gen de arhitectură, au pus în circulaţie informaţii limitate la nivelul cunoaşterii din acel moment (anii '20-40 ai sec. XX), dar cu definiri foarte corecte ale contextului teritorial şi urbanistic, precum şi cu relevee mulţumitor de exacte ale situaţiei din acea perioadă.[4]Urmează câteva lucrări din anii '60-70, cu importante contribuţii

2 Între lucrările dedicate atmosferei romantice a Transilvaniei aşezărilor medievale şi cetăţilor: Charles BONER, *Siebenbürgen, Land und Leute* (Leipzig, 1868) şi Albert BIELZ, *Die Burgen und ruinen in Siebenbürgen* (Sibiu 1899).

3 Erich JEKELIUS, *Das Burzenland,* vol. III-1 şi IV-1 (Braşov, 1926 şi 1929).

4 Walter HORVATH, *Siebenbürgisch-sächsische Kirchenburgen* (Sibiu: Ed. Honterus, 1940).

Introduction

■ Fortified churches are one of the most challenging research topics in Middle Ages architecture history in Europe, and more particular in Romania. Their long history (many fortified churches were set up in the 13th-14th centuries and developed until the 19th century), the dynamics of their transformation (from simple parish churches to fortified churches surrounded by enclosures growing bigger and bigger and more and more equipped for defensive purposes over time), the dynamics of the style mutations and defortifications (adopting the "modern" styles in the 18th-19th centuries, when the old churches were sacrificed and the outer fortifications were dismantled, which was frequent in the 19th century) must be articulated with the long research and conservation processes conducted on the Romanian territory, in particular the more modern processes started in the interwar period and conducted until today.

In terms of building and transformation history, the oldest churches with modest defensive elements can be found in the Sibiu area (Cisnădioara, Roşia, Hamba, Vurpăr, etc.) and in the Secklers' region (Cernatul de Sus). They are dated back to the turn of the 12th century (some of them based on archaeological diggings conducted in recent decades). Simple enclosure walls were already present or were built soon afterwards. In the next period, many Romanesque and Gothic three-aisle churches were built, which start to be fortified in the 15th century. The fortification process speeds up in the late 15th-early 16th centuries because of the Ottoman attacks. The outcome consists of hundreds of such ensembles spread in the areas of Bistriţa, Alba, Sibiu, Sighişoara, Braşov, as well as in Harghita and Covasna counties. Subsequent interventions occur to improve the defence (through Rennaissance defensive elements) or to adopt new styles (Baroque or Neoclassical in most cases). A series of defortifications occur in the 19th century. Fortified churches were built in other parts of Romanian territory only much later (17th- 18th centuries). They are adaptations of these urban architectures to the defensive needs of the moment. The largest number were built in Iaşi, Galaţi, Câmpulung, Târgovişte.

The first studies and interventions for conservation purposes in Transylvania occur during the interwar period (Aţel, Moşna, Agnita, Valea Lungă etc.). Their number increases a lot after the war to reach several tens of projects, some of which are large and extremely complex (Prejmer, Hărman, Sânpetru, Biertan, Valea Viilor-Vorumloc, etc.). We are considering full processes, i.e. from preliminary studies (topographic, archaeological, architectural, and structural), actual design (including all its components), to execution and enhancement. Most of the fortified churches operational today (especially for tourism or cultural purposes, as long as the relevant communities have emigrated) owe their existence to that period. We have

de istoria artei şi arhitecturii respective sau dedicate exclusiv bisericilor fortificate[5] [6] şi o serie de istorii ale arhitecturii româneşti (cu numeroase referiri la arhitectura bisericilor fortificate)[7] [8] [9] sau dedicate exclusiv bisericilor fortificate[10] [11] şi o istorie a arhitecturii de apărare medievale.[12] După 1990, lista publicaţiilor de sinteză sau monografice cu acest subiect sau care conţin referiri la el s-a mărit. Între cele care tratează întreg fenomenul, se remarcă cele datorate lui A.A. RUSU şi H. FABINI, primul extrem de selectiv, prudent în ceea ce priveşte cronologiile şi datările, al doilea fiind în egală măsură istoric al fenomenului şi ansamblurilor respective, precum şi proiectant dedicat restaurării lor.[13] [14] [15]

O mare parte din literatura modernă a domeniului recurge la informaţia arheologică pe care o gestionează în relaţie cu cea documentară. Această informaţie, relativ nouă, a contribuit decisiv (acolo unde s-a realizat) la rescrierea a numeroase parcursuri istorice, descoperind elemente arhitecturale sau tehnice necunoscute şi reuşind, frecvent, să ofere evoluţii mult mai sigure ale ansamblurilor. Unele studii de caz inserate în articol vor fi lămuritoare. Acestei literaturi i se adaugă cea dedicată componentelor artistice (detalii de piatră sau ceramică, pictură murală, accesorii ale cultului, mobilier etc.) care, în lipsa altor surse de informare, reuşeşte să contureze unele dintre etapele evoluţiei ansamblului şi, în special, a bisericilor şi capelelor. În fine, pentru elementele de lemn (şarpantă, accesorii ale fortificaţiilor, compartimentări interioare), informaţii cu marjă infimă de eroare se obţin prin investigaţii dendrocronologice, aplicate, cu acelaşi succes, şi altor arhitecturi, cum sunt bisericile de lemn.

Prin acumularea tuturor acestor seturi de informaţii şi prelucrarea lor, s-a putut şi se poate obţine o evoluţie credibilă, cronologic şi faptic, a fenomenului edificării, reedificării şi transformării bisericilor fortificate din Transilvania, ridicate de coloniştii saşi şi secui, iar într-o mai mică măsură, de români şi unguri. Diferenţa dintre aceştia era de statut, obligaţii şi drepturi. Pe scurt, primele biserici sunt ridicate de comunităţile săseşti din ariile Sibiu (Cisnădioara, Roşia, Hamba, Vurpăr, urmate la scurt timp de cele de la Daia, Cisnădie, Noul şi multe altele), din Ţara Bârsei[16] (Toarcla, Rotbav, Sânpetru şi altele) şi din aria secuiască[17] sudică (Cernatul de Sus, apoi Sânzieni etc.). Dacă repere se consideră a fi primele atestări documentare, din prima jumătate a sec. XIV (din listele zeciuielilor papale), numărul bisericilor ridicate până atunci (la cumpăna sec. XIII–XIV) devine mult mai mare, dar ele ar trebui verificate cel puţin arheologic. Dintre acestea, câteva nu se transformă sau nu evoluează (ne referim la edificiul religios şi la ansamblu), ci, cel mult, se adaptează noilor stiluri, dar sunt câteva care au o evoluţie extrem de spectaculoasă, prin fortificarea bisericii şi prin integrarea ei într-un ansamblu defensiv redutabil.

5 Virgil VĂTĂŞIANU, *Istoria artei feudale în Ţările Române,* vol. I (Bucureşti, 1959).
6 George OPRESCU, *Bisericile cetăţi ale saşilor din Ardeal* (Bucureşti: Ed. Academiei RPR, 1957).
7 Grigore IONESCU, *Istoria arhitecturii în România,* vol. I-II (Bucureşti, 1963 şi 1965).
8 Grigore IONESCU, *Arhitectura pe teritoriul României de-a lungul veacurilor* (Bucureşti: Ed. Academiei RSR, 1982).
9 Gheorghe CURINSCHI VORONA, *Istoria arhitecturii în România* (Bucureşti: Ed. Tehnică, 1981).
10 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti din Transilvania," serial al revistei *Komm mit-Almanah Neuer Weg* (1970).
11 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti săseşti din Transilvania," *Transilvania* (1980).
12 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din România* (Bucureşti: Ed. Tehnică, 1985).
13 Adrian Andrei RUSU, *Castelarea carpatică. Fortificaţii şi cetăţi din Transilvania şi teritoriile învecinate (sec. XIII-XIV)* (Cluj-Napoca: Mega, 2005).
14 Hermann FABINI, *Atlas der siebenbürgisch-sächsischen Kirchenburgen und Dorfkirche,* 2 vol. (Heidelberg & Sibiu, 1971 & 1977).
15 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012).
16 În maghiară: Barcaság, în germană: Burzenland.
17 În maghiară: Székelyföld, în germană: Szeklerland.

chosen four of them as our case studies i.e., Ilieni, Alma Vii, Roşia and Drăuşeni. Moreover, these churches have also been subject to conservation developments in the last decades, when interventions were made to conserve the envelopes, to consolidate or reconstruct elements not covered by previous conservation interventions or discovered archaeologically. The four case studies try to assess implicitly the intervention quality and durability.

Short history of the evolution and research on fortified churches in Transylvania

■ The data on this process, and particularly its chronology, have been obtained based on documentation, on archaeological research, as well as on specific architectural, structural, building archaeology, art studies, and, more recently, dendrochronological, physical, chemical, and other studies adapted to certain specific cases. A short overview of all these data may show the process evolution, which is, in fact, the conceptual and scientific basis of the conservation interventions. The first modern publications, after the "Romantic" 19th century,[2] dealing with this type of architecture, released data limited to the knowledge of the time (the 1920s-40s), but included very accurate definitions of the land use and planning context, as well as rather accurate surveys of the situation of the time.[3] [4] The next publications are dated in the 1960s-'70s. They include significant contributions related to the relevant architecture and art history or dedicated exclusively to the fortified churches,[5] [6] as well as a series of Romanian architecture history books (with many references to the architecture of the fortified churches)[7] [8] [9] or dealing exclusively with the fortified churches,[10] [11] and a history book on medieval defensive architecture.[12] After 1990, the list of synthetic or monographic publications on this

2 Some of the papers dealing with the Romantic atmosphere in Transylvanian medieval settlements and citadels: Charles BONER, *Siebenbürgen, Land und Leute* (Leipzig, 1868) and Albert BIELZ, *Die Burgen und ruinen in Siebenbürgen* (Sibiu 1899).
3 Erich JEKELIUS, *Das Burzenland,* vol. III-1 and IV-1 (Braşov, 1926 and 1929).
4 Walter HORVATH, *Siebenbürgisch-sächsische Kirchenburgen* (Sibiu: Ed. Honterus, 1940).
5 Virgil VĂTĂŞIANU, *Istoria artei feudale în Ţările Române,* vol. I (Bucureşti, 1959).
6 George OPRESCU, *Bisericile cetăţi ale saşilor din Ardeal* (Bucureşti: Ed. Academiei RPR, 1957).
7 Grigore IONESCU, *Istoria arhitecturii în România,* vol. I-II (Bucureşti, 1963 and 1965).
8 Grigore IONESCU, *Arhitectura pe teritoriul României de-a lungul veacurilor* (Bucureşti: Ed. Academiei RSR, 1982).
9 Gheorghe CURINSCHI VORONA, *Istoria arhitecturii în România* (Bucureşti: Ed. Tehnică, 1981).
10 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti din Transilvania," serial al revistei *Komm mit-Almanah Neuer Weg* (1970).
11 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti săseşti din Transilvania," *Transilvania* (1980).
12 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985).

topic or referring to this topic has extended. Among the publications dealing with the whole phenomenon, we point out A. A. RUSU's and H. FABINI's books. The former is extremely selective, cautious regarding chronologies and dating, while the latter is equally a historian of the relevant phenomenon and ensembles, and designer of their conservation.[13][14] [15]

Much of the specific modern literature uses archeological information managed in relation with the documentary information. This relatively new type of information had a critical contribution to re-writing many historic processes, as it revealed unknown architectural or technical elements, and managed to provide much safer developments for the ensembles. Some of the case studies in this paper will clarify this point. Beside this literature, there is the literature dealing with the artistic components (details on stone or ceramics, wall painting, worship accessories, furniture, etc.). In the absence of other information sources, this literature manages to trace some of the stages in the ensemble development, particularly for churches and chapels. Eventually, concerning wooden elements (roof structure, fortification accessories, interior partitions), information with very low error margin can be obtained through dendrochronological investigations, which are also used successfully for other types of architecture, such as wooden churches.

All these pieces of information put together and processed could and can reveal a reliable development, in terms of chronology and facts, of the phenomenon consisting of building, re-building, and transforming the Transylvanian fortified churches, which were built by Saxon and Szekler colonists, and less by Romanians and Hungarians. The differences between these populations were related to status, obligations, and rights. In brief, the first churches were built by the Saxon communities in the areas of Sibiu (Cisnădioara, Roşia, Hamba, Vurpăr, shortly followed by the churches in Daia, Cisnădie, Noul and many others), Ţara Bârsei[16] (Toarcla, Rotbav, Sânpetru and others), and southern Székely Land[17] (Cernatul de Sus, then Sânzieni, etc.). Should we consider the first written records as references (papal tithe records in the first half of the 14th century), the number of churches built by then (at the turn of the 14th century) becomes much bigger, but these records should be checked at least archaeologically. Some of these churches do not change or develop

13 Adrian Andrei RUSU, *Castelarea carpatică. Fortificaţii şi cetăţi din Transilvania şi teritoriile învecinate (sec. XIII-XIV)* (Cluj-Napoca: Mega, 2005).

14 Hermann FABINI, *Atlas der siebenbürgisch-sächsischen Kirchenburgen und Dorfkirche*, 2 vol. (Heidelberg & Sibiu, 1971 & 1977).

15 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012).

16 In Hungarian: Barcaság, in German: Burzenland.

17 In Romanian: Ţinutul Secuiesc, in Hungarian: Székelyföld, in German: Szeklerland.

Exemple concludente şi spectaculoase (dintre cele amintite mai sus) sunt Cisnădie şi Sânpetru.[18]

Până în sec. XIV fortificarea bisericilor era asociată ridicării de mici cetăţi de refugiu exterioare localităţilor, ambele fiind necesare protejării comunităţilor rurale în caz de atac din partea feudalilor (laici sau religioşi) sau din partea vecinilor. Secolul XIV se sfârşeşte printr-un eveniment care va determina declanşarea celui mai amplu proces de fortificare a bisericilor din Transilvania: atacul otoman din 1395, vizată fiind Ţara Bârsei. Acesta este urmat de atacurile din 1420-21, 1432, 1438 (unul dintre cele mai distrugătoare), 1473, 1479 şi, cel mai amplu şi cu consecinţe dramatice, din 1493. Până în acel ultim moment, fortificarea bisericilor se constată a fi fost sporadică, neplanificată la nivel regional. După 1493 nu numai că se fortifică în ritm accelerat vechile biserici şi se înconjoară cu incinte din ce în ce mai ample şi perfecţionate militar, ci se şi generează un model „integrat" de biserică fortificată, care va fi aplicat la începutul sec. XVI (începând cu anul 1524) în mai multe zone din Transilvania: Dupuş, Cloaşterf, Boz, Saschiz şi în secuime, la Dârjiu.[19] Acesta s-a născut ca urmare a experienţelor acumulate între timp, astfel încât s-a dovedit a fi o perfectă sinteză între funcţiunile de cult şi apărare, rapid edificabil, simplu, eficient, durabil.

În secolele următoare, bisericile fortificate din aria cea mai periclitată (sudul Transilvaniei) sunt dotate cu elemente de apărare de inspiraţie renascentistă adaptate artileriei (bastioane „pană", turnuri de artilerie, turnuri de plan pentagonal, rondele, turnuri cu sistem de acoperire „în pupitru", ziduri joase şi puternice etc.), datorită cărora rezistă (chiar dacă doar temporar) unor atacuri ample şi desfăşurate chiar cu armament modern. Treptat, puternicele incinte urbane din apropiere preiau această defensivă, dar profitând de disiparea eforturilor de atac datorate cetăţilor ţărăneşti din jur. În acest context, după ce, în perioadele de acalmie, unele elemente componente ale cetăţilor, mai ales din zona estică a Transilvaniei, se barocizează (frontoanele bisericilor, turnurile şi alte anexe ale incintelor) şi după ce un mare număr de cetăţi bisericeşti suferă atacuri extrem de dure în perioada tulbure a începutului de secol XVIII, în secolul următor începe procesul de defortificare, de demantelare a incintelor şi a elementelor de suprastructură defensivă ale bisericilor. Este un fenomen întâlnit mai ales în sud-estul teritoriului şi în zona Bistriţei.[20]

Privire generală asupra procesului de consolidare şi restaurare a bisericilor fortificate din Transilvania

■ După ce, în sec. XIX, încep să fie organizate instituţiile protecţiei monumentelor şi puse în aplicare unele procedee de reabilitare de inspiraţie occidentală, primele cercetări şi intervenţii de protecţie, reabilitare, restaurare modernă a acestui tip de ansamblu defensiv au loc în spaţiul transilvan în perioada interbelică (Aţel, Moşna, Agnita şi Valea Lungă). Majoritatea sunt realizate ca anexe ale unor intervenţii de modernizare a contextului lor, situaţie care a condus şi la dispariţia unor elemente, un exemplu fiind Aţel, care îşi pierde o parte a fortificaţiei.

18 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 49-50, 85-86.

19 Despre relaţia dintre aceste atacuri şi ridicarea de ansambluri bisericeşti fortificate, inclusiv despre naşterea acestui model, la Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 107, 153, 173-191; o analiză morfologică a unor ansambluri, prin care se relevă diversitatea rezolvărilor: Teodor O. GHEORGHIU, „Despre o permanenţă a valorilor în arhitectură - probleme ale formei şi compoziţiei ansamblurilor defensive ţărăneşti din Transilvania," *Arhitectura* 2 (1984): 52-55.

20 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 231-234, 287.

După Al Doilea Război Mondial, sistemul de protecţie a monumentelor este refăcut treptat în intervalul 1952-1959, fiind evident inspirat de cel din perioada interbelică, contribuţii importante având personalităţile care l-au condus, între care: arhitecţii Nicolae BĂDESCU, Pompiliu MACOVEI, Virgil BILCIURESCU, Grigore IONESCU şi Ştefan BALŞ, precum şi inginerul Victor MUNTEANU. În contextul desfăşurării programului naţional de protecţie şi reabilitare a patrimoniului construit în intervalul 1955-1977, multe zeci de biserici fortificate din întreaga arie transilvană sunt cercetate, consolidate şi restaurate. O listă, evident incompletă: Mediaş, Aiud, Prejmer, Hărman, Cisnădie, Cisnădioara, Cristian-Sibiu, Şura Mică, Şura Mare, Dealu Frumos, Merghindeal, Aţel, Biertan, Boian, Cricău, Valea Viilor, Dupuş, Copşa Mare, Dârlos, Curciu, Băgaciu, Alţâna, Rodbav, Viscri, Drăuşeni etc. Unele restaurări au continuat sau au fost iniţiate şi după 1977: Mediaş, Şura Mică, Şura Mare, Guşteriţa, Turnişor, Cisnădie, Valea Viilor, Ighişu Nou, Biertan, Copşa Mare, acestea din urmă fiind datorate în mare măsură arhitectului Hermann Fabini.[21] [22] În 1977, Direcţia Monumentelor Istorice (DMI) este desfiinţată şi începe programul de „sistematizare" a teritoriului şi aşezărilor, cu efecte negative asupra integrităţii patrimoniului construit.

La scurt timp după 1989, în mod paradoxal, procesul a fost reluat cu dificultate şi cu consecinţe grave mai ales pentru monumentele abandonate şi ruinate în intervalul 1977-1989. Cronologia acestei reconstrucţii instituţionale şi legislative, precum şi modul în care s-a realizat sunt bine cunoscute, astfel încât mă rezum la a enumera şantierele de restaurare (sau re-restaurare) a bisericilor fortificate din Transilvania, stabilind o oarecare ordine valorică, pornind de la cele care sunt de bună sau foarte bună calitate: Bălcaciu, Ighişu Nou, Moşna, Alma Vii, Criţ, Cincşor, Dealu Frumos, Merghindeal, Curciu, Băgaciu, Măgheruş, Hosman, Axente Sever, Codlea, Ghimbav, Herina).[23] [24] Există, apoi, programe de intervenţie minimală asupra unor biserici fortificate, asigurând stabilitatea construcţiilor şi oprind degradările în faze necritice. Un exemplu: programul „Tezaure fortificate redescoperite", din 2009, având în vizor 18 obiective, între care Archita, Cloaşterf, Criţ, Mălâncrav, Meşendorf, Valchid.[25] În fine, se pot aminti lucrările corecte de întreţinere, reparaţie sumară şi amenajare a unor muzee în cadrul programelor de restaurare recentă (Guşteriţa, Turnişor, Cisnădie, Cisnădioara, Cincşor, Prejmer), dovedindu-se, implicit, valoarea intervenţiilor din anii 1960-70. În zona estică, în judeţele Covasna şi Harghita, în ultima perioadă s-au derulat şi sunt în curs mai multe şantiere de restaurare, între care am avut acces la următoarele: Nicoleşti, Misentea, Sânmartin, Sânsimion, Sândominic, Racu, Lemnia, Estelnic, Sânzieni, Ilieni, Sf. Gheorghe, Arcuş, Ghidfalău, Aita Mare, Porumbenii Mari, Mugeni, Feliceni, Cernat, Albiş, Dalnic, Reci, Chilieni, Ozun, Bicfalău, Chichiş şi, nu în ultimul rând, Dârjiu. O evaluare calitativă globală este dificilă, dat fiind diversitatea tipologiilor şi a intervenţiilor. Reţin atenţia înnoirile generale ale finisajelor (biserica - fără excepţie şi incinta - frecvent), dar şi restaurările păstrând patina vremii de la unele ziduri de incintă: Sânmartin, Sântimbru, Misentea, Racu, Cârţa şi altele. De asemenea, se remarcă tratarea foarte corectă a detaliilor de piatră exterioare sau amplele suprafeţe de pictură murală descoperite şi restaurate într-o primă

21 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 109-243.

22 Mai recent în: Teodor O. GHEORGHIU, „Restaurări comparate: Cetăţile Şoimoş şi Câlnic, versus Severin şi Lăzarea," *Patrimonium Banaticum,* IX (2019), 179-180, 186.

23 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 109-243..

24 Teodor O. GHEORGHIU, „Restaurări comparate: Cetăţile Şoimoş şi Câlnic, versus Severin şi Lăzarea," *Patrimonium Banaticum,* IX (2019), 193.

25 Georgiana TIRT, „De la Archita la Valchid. Intervenţii structurale în cadrul programului «Tezaure fortificate redescoperite»," în *Fortificaţii din nou în folosinţă* (Cluj-Napoca: Utilitas, 2011): 37-56.

(namely the religious building and the ensemble), but rather adapt, at the most, to the new styles. However, other churches experience an extremely spectacular development, consisting of church fortification and integration in a powerful defensive ensemble. Cisnădie and Sânpetru are two conclusive and spectacular examples among the churches mentioned above.[18]

Until the 14th century, church fortification consisted of building small retreat citadels outside the settlements. These two conditions were necessary to protect rural communities in case of attack from landowners (lay or religious) or from neighbours. The 14th century ends with an event that triggers the largest church fortification process in Transylvania i.e., the 1395 Ottoman attack against Ţara Bârsei region. The next attacks occur in 1420-21, 1432, 1438 (one of the most destructive attacks), 1473, 1479, and 1493 (the biggest attack with the most dramatic consequences). Until this last attack, church fortification was found to be sporadic, unplanned at regional level. After 1493, old churches get fortified at an accelerated pace and get surrounded by enclosures that are always bigger and improved in military terms. Moreover, an "integrated" pattern of fortified church is developed, which will be used in several areas in Transylvania in the early 16th century (since 1524): Dupuş, Cloaşterf, Boz, Saschiz, and, in the Szeklers's Land, Dârjiu[19]. This pattern emerged from the experiences cumulated over time, and proved to be a perfect synthesis between religious and defensive functions, a simple, efficient, durable ensemble that could be built rapidly.

In the following centuries, the fortified churches in the most jeopardized area (south of Transylvania) were equipped with Rennaissance-inspired defensive elements adapted for artillery (wedge-shaped bastions, artillery towers, pentagonal plan towers, roundels, towers with half-pitched covering system, low and powerful walls, etc.). Consequently, they can face (even if only temporarily) large attacks even when conducted with modern arms. Progressively, the strong urban enclosures nearby take over this defence taking advantage of the attack effort dissipation due to the surrounding peasant citadels. In this context, certain elements of the citadels go Baroque (church gables, towers, and other enclosure outbuildings) especially in Eastern Transylvania, during peaceful periods, and many church citadels suffer extremely hard attacks during the troubled period at

18 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 49-50, 85-86.

19 About the relation between these attacks and the construction of fortified church ensembles, including the emergence of this pattern in: Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 107, 153, 173-191; morphological analysis of certain ensembles revealing the variety of solutions: Teodor O. GHEORGHIU, „Despre o permanenţă a valorilor în arhitectură - probleme ale formei şi compoziţiei ansamblurilor defensive ţărăneşti din Transilvania," *Arhitectura* 2 (1984): 52-55.

the beginning of the 18th century. Further on, in the next century, the defortification process starts by dismantling enclosures and the defensive superstructure elements of the churches. This phenomenon is mainly found in south-eastern Transylvania and in the Bistriţa area.[20]

Overview of the Transylvanian fortified church consolidation and conservation process

■ The first institutions for historic building protection are set up in the 19th century when some Western conservation procedures also start to be implemented, but the first research and modern interventions for the protection and conservation of this type of defensive ensemble in Transylvania were conducted in the interwar period (Aţel, Moşna, Agnita and Valea Lungă). Most interventions occur as additions to context refurbishment interventions, which led to the loss of certain elements, such as Aţel, where part of the fortification is lost.

After World War II, the historic building protection system was reshaped progressively between 1952 and 1959. Reshaping was obviously inspired by the interwar system, with significant contributions from the personalities having conducted this process, such as architects Nicolae BĂDESCU, Pompiliu MACOVEI, Virgil BILCIURESCU, Grigore IONESCU and Ştefan BALŞ, as well as engineer Victor MUNTEANU. Under the national programme for built heritage protection and conservation conducted between 1955 and 1977, many tens of fortified churches all through Transylvania were surveyed, consolidated, and conserved. A non-exhaustive list contains: Mediaş, Aiud, Prejmer, Hărman, Cisnădie, Cisnădioara, Cristian-Sibiu, Şura Mică, Şura Mare, Dealu Frumos, Merghindeal, Aţel, Biertan, Boian, Cricău, Valea Viilor, Dupuş, Copşa Mare, Dârlos, Curciu, Băgaciu, Alţâna, Rodbav, Viscri, Drăuşeni, etc. Some conservation interventions were pursued or started after 1977, such as Mediaş, Şura Mică, Şura Mare, Guşteriţa, Turnişor, Cisnădie, Valea Viilor, Ighişu Nou, Biertan, Copşa Mare. The last ones largely owe their conservation to architect Hermann Fabini.[21] [22] In 1977, the Historic Monument Directorate (DMI) is dismantled, and the land and settlement "systematization" programme is launched, with negative impact on built heritage integrity.

Shortly after 1989, the process was paradoxically resumed with difficulty and with serious consequences, especially for the historic buildings that were abandoned





■ ***Fig. 1.a, b*** *Ilieni, secvenţe cu biserica fortificată aflată într-o stare bună, din toate punctele de vedere, 1974. © Teodor Octavian GHEORGHIU*

■ ***Fig. 1.a, b*** *Ilieni, views of the fortified church in good condition, from all viewpoints, 1974. © Teodor Octavian GHEORGHIU*

fază înainte de 1990 şi definitivate în ultimii ani în cadrul restaurării întregului ansamblu, de la Ghelinţa, Dârjiu şi Mugeni.[26]

Între exemplele de restaurări derulate defectuos sau nefinalizate, precum şi de abandon sau suferind grave degradări structurale care au provocat prăbuşiri ale unor componente ale ansamblurilor, se pot aminti Roşia, Vurpăr (ambele în zona Hârtibaciului), Drăuşeni, Iacobeni, Roadeş, Rotbav, Dobârca şi altele.

Studii de caz

■ Exemplele alese, fără să fie dintre cele mai spectaculoase sau cunoscute, acoperă, mulţumitor, diversele tipologii de organizare a acestor ansambluri fortificate şi diversele perioade şi tipuri de intervenţie restauratoare. Toate sunt începute şi parţial sau total stabilizate şi reabilitate în anii '60-'70 şi toate parcurg sau au parcurs etape recente de restaurare. Vizitele repetate din ultimii 40-45 de ani ale autorului la toate bisericile fortificate tratate aici (de fapt la toate din Transilvania), însoţite de fotografierea şi studiul lor, au evidenţiat calităţile diferite ale proceselor, de la reuşite depline la abandonuri sau eşe-

20 Teodor O. GHEORGHIU, *Architectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 231-234, 287.

21 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 109-243.

22 More recently in the context of assessment of the whole process: Teodor O. GHEORGHIU, „Restaurări comparate: Cetăţile Şoimoş şi Câlnic, versus Severin şi Lăzarea," *Patrimonium Banaticum*, IX (2019), 179-180, 186.

26 Teodor O. GHEORGHIU, „Restaurări comparate: Cetăţile Şoimoş şi Câlnic, versus Severin şi Lăzarea," *Patrimonium Banaticum*, IX (2019), 194.





■ ***Fig. 2.a, b*** *Ilieni, fotografii din iulie, care surprind efectele seismului din martie: fisurarea turnului de poartă, a bisericii și a turnului clopotniță, prăbușiri ale zidului de incintă etc., 1977. © Teodor Octavian GHEORGHIU*

■ ***Fig. 2.a, b*** *Ilieni, July photos showing the effects of the March earthquake: cracks in the gate tower, church, bell tower, crashes in the enclosure wall, etc., 1977. © Teodor Octavian GHEORGHIU*

curi, să sperăm, temporare. Considerăm că acest tip de evaluare (să-i spunem prima treaptă) a rezultatelor restaurării/reabilitării poate produce judecăţi de valoare mult mai concludente decât cunoaşterea intimă a temei, proiectelor, avizărilor. Din proprie experienţă, proiecte din ultimii 30 de ani, impecabile conceptual şi trecute prin toate filtrele avizărilor, au produs rezultate cel puţin discutabile, lesne detectabile la o simplă parcurgere a ansamblurilor, dar foarte greu de reconstituit ca proces. În perioada anterioară anului 1977, programul derulat prin DMI fiind de tip „integrat", este mult mai uşor de evaluat actorii şi rezultatul muncii lor, iar diferenţele dintre aceste două tipuri de procese vor apărea cu claritate în studiile de caz.

Ilieni,[27] județul Covasna – biserica fortificată

■ Documentar, aşezarea apare în 1332, în lista zeciuielilor papale, sub numele „Villa Helye" şi abia în 1561 cu numele de „Illyefalva". Primul document certifică existenţa unei biserici (romanică la ora aceea), care va fi transformată

27 În maghiară: Illyefalva, în germană: Ilgendorf.

and ruined between 1977 and 1989. The chronology of this institutional and legislative reconstruction, as well as how it was conducted are well known. We shall just list the Transylvanian fortified church conservation or re-conservation sites, and shall establish a value-related order, starting with high or very high-quality interventions: Bălcaciu, Ighişu Nou, Moşna, Alma Vii, Criţ, Cincşor, Dealu Frumos, Merghindeal, Curciu, Băgaciu, Măgheruş, Hosman, Axente Sever, Codlea, Ghimbav, Herina).[23] [24] Moreover, there are minimum intervention programmes for fortified churches consisting of ensuring building stability and stopping decay in non-critical stages. One such example is the 2009 "Rediscovered Fortified Treasures" Programme targeting 18 buildings, among which Archita, Cloaşterf, Criţ, Mălâncrav, Meşendorf, Valchid.[25] Eventually, we can mention correct maintenance, small repairs, and refurbishing works in museums under recent conservation programmes (Guşteriţa, Turnişor, Cisnădie, Cisnădioara, Cincşor, Prejmer), where the value of the 1960s-70s has been implicitely proven. Several conservation sites have been conducted in Covasna and Harghita counties in eastern Transylvania in recent years. We had access to Nicoleşti, Misentea, Sânmartin, Sânsimion, Sândominic, Racu, Lemnia, Estelnic, Sânzieni, Ilieni, Sf. Gheorghe, Arcuş, Ghidfalău, Aita Mare, Porumbenii Mari, Mugeni, Feliceni, Cernat, Albiş, Dalnic, Reci, Chilieni, Ozun, Bicfalău, Chichiş, and, last but not least, Dârjiu. An overall qualitative assessment is hard to make because of the wide variety of typologies and interventions. Our attention is drawn by the general renewal of finishes (the church – no exception, and the enclosure – frequently). However, there are interventions that maintain the weathered aspect of certain enclosure walls, such as in Sânmartin, Sântimbru, Misentea, Racu, Cârţa, and others. One can also remark on the very proper treatment of the exterior mansonry details and ample frescoed surfaces discovered and restored initially in 1990 and finalized in the last few years alongside the entire ensemble at Ghelinţa, Dârjiu, and Mugeni.[26]

There are cases of faulty or unfinished interventions, abandonment or serious structural deterioration resulting in the collapse of ensemble parts, such as in Roşia, Vurpăr (both in Hârtibaci area), Drăuşeni, Iacobeni, Roadeş, Rotbav, Dobârca and others.

23 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 109-243.

24 Teodor O. GHEORGHIU, „Restaurări comparate: Cetăţile Şoimoş şi Câlnic, versus Severin şi Lăzarea," *Patrimonium Banaticum*, IX (2019), 193.

25 Georgiana TIRT, „De la Archita la Valchid. Intervenţii structurale în cadrul programului «Tezaure fortificate redescoperite»," în *Fortificaţii din nou în folosinţă* (Cluj-Napoca: Utilitas, 2011): 37-56.

26 Teodor O. GHEORGHIU, „Restaurări comparate: Cetăţile Şoimoş şi Câlnic, versus Severin şi Lăzarea," *Patrimonium Banaticum*, IX (2019), 194.







■ ***Fig. 3.a, b, c*** *Ilieni, cetatea restaurată în întregime şi foarte corect amenajată pentru diverse activităţi, 2020. © Teodor Octavian GHEORGHIU*

■ ***Fig. 3.a, b, c*** *Ilieni, the citadel fully conserved, very properly refurbished for various activities, 2020. © Teodor Octavian GHEORGHIU*

(reconstruită?) în stil gotic prin 1443. Fortificarea are loc începând cu sec. XV şi continuă până la începutul sec. XVII, când se edifică incinta a doua, dotată cu turnuri pentru artilerie. În afara sporului demografic şi măririi forţei economice din sec. XVI şi XVII (devine târg începând cu prima jumătate a sec. XVI), necesitatea fortificării a rezultat dintr-o succesiune de atacuri şi asedii, soldate cu numeroase victime şi pierderi materiale, precum cele din 1618, 1658, 1661. În faza finală, biserica era înconjurată cu două incinte fortificate. Cea interioară avea un plan relativ circular, iar cea exterioară, de plan pentagonal, era alcătuită dintr-un zid din piatră cu guri de tragere pentru armament individual şi artilerie uşoară şi cu cinci turnuri de artilerie de plan pentagonal şi pătrat, amplasate în colţurile incintei. În sec. XVIII şi XIX se succed o serie de distrugeri care afectează toate componentele cetăţii. În timpul revoltei curuţilor, de la începutul sec. XVIII, este asediată şi devine pentru un timp ocupată şi utilizată de armata habsburgică, iar în 1738, 1802, 1940 şi 1977 are de suferit distrugeri ca urmare a puternicelor cutremure din zona Vrancea. Urmările ultimelor evenimente, care produc prăbuşiri sau avarii deosebit de grave ale unor componente (biserica, unele turnuri sau fragmente din zidurile înconjurătoare), sunt consistente: după cutremurul din 1738, vechea biserică este demolată şi construită noua biserică (1782, respectiv 1786), iar, în 1803, respectiv 1816-1819, biserica este reparată şi turnul reconstruit. Se produc reparaţii şi consolidări în 1962 şi 1966, la care se adaugă operaţiunile din 1978 de consolidare generală a tuturor componentelor, de după cutremurul din 1977.[28] [29] [30] [31] [32]

Case studies

■ The exemples we have chosen are not the most spectacular or famous, but they cover well the various organisation typologies for these fortified ensembles, the various periods, and conservation intervention types. All the cases refer to projects that started and fortified churches partially or totally stabilized and conserved in the 1960s-70s, undergoing recent conservation stages. The author's repeated site visits in the last 40-45 years at all the fortified churches under discussion here (actually at all the fortified churches in Transylvania), accompanied by photos and studies, have revealed the qualities of the different processes, from full successes to hopefully temporary abandonment or failures. We think this type of assessment (let us call it "first step" assessment) of consolidation results can help to provide judgements that are much more conclusive than the intimate knowledge of the topic, projects, and permits. Our own experience has shown that projects in the last 30

28 Pentru informaţiile istorice şi evenimentele recente: Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 128, 129, 232 (prima incintă e datată în cca. 1450).

29 Gheorghe SEBESTYÉN, *Renaşterea* (Bucureşti: Ed. Tehnică, 1987), 16, 54, 99-100.

30 Kinga TÜDŐS S., *Erdélyi védőrendszerek a XV-XVIII. Században* (Budapest, 1995), 29-30, 119-127.

31 János GYÖNGYÖSSY, Terézia KERNY şi József SARUDI SEBESTYÉN, *Székelyföldi vártemplomok* (Budapest, 1995), 135-143.

32 Wikipedia, „Illyefalvi református templom," https://hu.wikipedia.org/wiki/Illyefalvi_reform%C3%A1tus_templom (accesat ianuarie, 2024).





■ ***Fig. 4.a, b*** *Alma Vii, ansamblul și detalii ale clădirilor care reflectă consecințele seismului din acel an: fisurări ale zidului de incintă și turnurilor și degradări grave la biserică, 1977. © Teodor Octavian GHEORGHIU*

■ ***Fig. 4.a, b*** *Alma Vii, ensemble and building details showing the consequences of the earthquake that year: crackings in the enclosure wall and towers, and serious damage to the church, 1977. © Teodor Octavian GHEORGHIU*

În ultima perioadă, de după 1989, au fost realizate importante lucrări de consolidare şi restaurare a întregului ansamblu, pentru o optimă valorificare turistică. Fragmentul din incinta interioară, cu turnul-clopotniţă, a fost restaurat sub formă de ruină, restul fiind reabilitat şi amenajat în scopul vizitării.[33] Ceea ce ridică semne de întrebare este complexul hotelier edificat în ultimii ani la poalele cetăţii (cu care aceasta interferează în mod nefericit, în ciuda diferenţelor de nivel), pe care, în 2020, l-am găsit abandonat.

Alma Vii,[34] județul Sibiu – biserica fortificată

■ Satul, sub denumirea de „Alma”, aparţinea în 1289 de Capitlul din Mediaş, iar în 1356, de Scaunul Mediaş, fiind o comună liberă. Începutul ansamblului datează din sec. XIV, când pe o înălţime din estul satului este ridicată o

33 Biserici, „Biserica Reformată Ilieni,” https://www.biserici.org/index.php?menu=BI&code=783 (accesat ianuarie, 2024).

34 În maghiară: Szászalmád, în germană: Almen.

years with perfect concepts and having passed all permit filters have produced at least questionable results, easy to see by simply visiting the ensembles, but very hard to remake as a process. Before 1977, as the DMI programme was “integrated”, it is much easier to assess the stakeholders and the result of their work. The differences between these two types of processes will become obvious in the case studies.

Ilieni[27], Covasna County – the fortified church

■ The settlement is first mentioned in the papal tithe records in 1332, as “Villa Helye”, and only in 1561 as “Illyefalva”. The first document certifies the existence of a church (Romanesque at that time), which will be transformed (rebuilt?) to Gothic style in 1443. Fortification starts in the 15th century and continues until the beginning of the 17th century, when the second enclosure is built and equipped with artillery towers. Fortification was needed because of demographic growth and increased economic power in the 16th and 17th centuries (the settlement becomes a fair as from the first half of the 16th century), as well as because of a series of attacks and sieges that resulted in many casualties and large material loss, such as in 1618, 1658, 1661. In the final stage, the church was surrounded by two fortified enclosures. The inner enclosure had a relatively circular plan. The outer enclosure with a pentagonal plan was made up of a stone wall with embrasures for individual arms and light artillery, and of five artillery towers with pentagonal and square plans, placed in the enclosure corners. A series of destructions on all the components of the citadel occur in the 18th and 19th centuries. During the Kuruc rising at the beginning of the 18th century, the citadel is under siege, occupied, and used by the Habsburg army for a while. In 1738, 1802, 1940 and 1977 it suffers destructions because of the powerful earthquakes in the Vrancea area. These last events cause collapse or very serious damage to certain components (the church, certain towers, or fragments from the surrounding walls). The consequences are substantial: after the 1738 earthquake, the old church is demolished (1782) and a new church is built (1786). Furthermore, the church is repaired in 1803, and the tower is rebuilt in 1816-1819. Other repairs and consolidations are conducted in 1962 and 1966, as well as in 1978, when overall consolidation of all the components is performed after the 1977 earthquake.[28] [29] [30] [31] [32]

27 In Hungarian: Illyefalva, in German: Ilgendorf.

28 For historic data and recent events: Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 128, 129, 232 (the first enclosure is dated around 1450).

29 Gheorghe SEBESTYÉN, *Renaşterea* (Bucureşti: Ed. Tehnică, 1987), 16, 54, 99-100.

30 Kinga TÜDŐS S., *Erdélyi védőrendszerek a XV-XVIII. Században* (Budapest, 1995), 29-30, 119-127.

31 János GYÖNGYÖSSY, Terézia KERNY and József SARUDI SEBESTYÉN, *Székelyföldi vártemplomok* (Budapest, 1995), 135-143.

32 Wikipedia, „Illyefalvi református templom,” https://hu.wikipedia.org/wiki/Illyefalvi_reform%C3%A1tus_templom (accesat ianuarie, 2024).









■ ***Fig. 5.a, b, c, d*** *Alma Vii, fotografii de ansamblu și a unor elemente de arhitectură, de după recentele consolidări, restaurări și amenajări; biserica este în aceeași stare ca în 1977, 2019. © Teodor Octavian GHEORGHIU*

■ ***Fig. 5.a, b, c, d*** *Alma Vii, photos of the ensemble and architecture elements after the recent consolidations, conservation works and refurbishment; the church is in the same state as in 1977, 2019. © Teodor Octavian GHEORGHIU*

In the last period, after 1989, the whole ensemble was subject to large consolidation and conservation works for tourism purposes. The fragment of the inner enclosure with the bell tower was conserved as ruin, while all the rest was refurbished for visiting.[33] One element raising questions is the hotel complex built in recent years at the foot of the citadel. The interference between the two is rather unfortunate despite the level difference. Moreover, we found the hotel abandoned in 2020.

Alma Vii[34], Sibiu County - the fortified church

■ In 1289, the village, under the name of "Alma", belonged to the Mediaş Chapter.

33 Biserici, „Biserica Reformată Ilieni," https://www.biserici.org/index.php?menu=BI&code=783 (accesat ianuarie, 2024).

34 In Hungarian: Szászalmád, in German: Almen.

biserică-sală gotică, fără turn. Către sfârşitul sec. XV sau începutul sec. XVI, biserica se fortifică (corul este supraetajat, etajul respectiv fiind sprijinit pe contur pe console, printr-un procedeu de realizare a machicoulis-urilor, des întâlnit în zona Mediaşului) şi se înconjoară cu o incintă poligonală adaptată sitului.[35] [36] [37] [38]

Reparaţii şi perfecţionări ale sistemelor defensive ale incintei sunt realizate în prima parte a sec. XVII. Între ele se remarcă turnul de poartă, din sud-est, extrem de puternic, cu patru niveluri de apărare, dotate cu guri de tragere pentru artilerie şi o galerie la partea superioară scoasă în console pe o structură de lemn. Deosebit de particulară (singulară în Transilvania) este forma

35 Pentru prima variantă:Walter HORVATH, *Siebenbürgisch-sächsische Kirchenburgen* (Sibiu: Ed. Honterus, 1940), 29-31.

36 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 176, 189.

37 Pentru a doua: Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 147.

38 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti săseşti din Transilvania," *Transilvania* (1980), 65 datează ridicarea incintei la sf. sec. XV şi fortificarea corului la înc. sec. XVI, anul 1513, inscripţionat pe arcul de est al bisericii, însemnând finalizarea lucrărilor.

turnului de sud, cu funcţie dublă (defensivă şi locuire) cu patru protuberanţe în colţurile zonei mediane, dotate cu numeroase guri de tragere.

O serie de intervenţii relativ minore din sec. XVIII-XIX au produs mici modificări ale arhitecturii interioare a bisericii. Timpul lung scurs după ieşirea din funcţie a fortificaţiei a produs, în special incintei, degradări grave, care au fost rezolvate prin lucrările de reabilitare/restaurare din 1966.[39]

O finanţare din fonduri ale unui grant oferit de Islanda, Liechtenstein şi Norvegia a permis „Trustului Mihai Eminescu" derularea proiectului şi execuţiei de restaurare a incintei şi amenajării unui muzeu. Şantierul s-a derulat în intervalul 2015-2016 şi a presupus consolidarea şi restaurarea turnurilor, a casei pazniculuі, a zidului de incintă cu drum de strajă pe cca. ½ din contur, scări şi pasarele de acces etc. O expoziţie a şantierului este amplasată în clădirea de acces în incintă, ansamblul beneficiind de pază şi custodie.[40] Biserica n-a fost cuprinsă în acest program, având în continuare nevoie imperioasă de consolidare şi reabilitare.

Roşia,[41] judeţul Sibiu – biserica fortificată

■ Biserica de început de secol XIII, care a devenit centrul acestei fortificaţii, face parte din categoria „bazilicilor scurte" din zona Hârtibaciului.[42] Dat fiind forma circulară a incintei şi faptul că în sec. XIV-XV familia de greavi din Roşia (apărând în documente prima oară în 1377-1379) avea o poziţie importantă în Transilvania (erau juzi regali şi aveau posesiuni pe pământ nobiliar), ridicarea modestului zid de incintă poate fi contemporană sau realizată imediat după edificarea bisericii, sau poate fi din perioada de existenţă a greavilor de Roşia, aceştia înconjurând turnul lor locuinţă (bănuit a fi actualul turn-clopotniţă) cu un zid de incintă. Există şi varianta ca incinta să fie pusă în legătură cu documentul din 1509, când „Provincia Sibiului" acordă ajutor bănesc pentru construcţii la biserică şi pentru praf de puşcă şi plumb, necesare apărării. Turnul nu este articulat zidului de apărare şi are accesul la al doilea nivel, elemente care sugerează funcţia iniţială. După incendiul din 1631, când a ars partea lui superioară, şi-a pierdut imaginea severă de donjon. Este interesant că satul era protejat prin porţi prevăzute cu herse care se închideau la căderea nopţii. În sec. XVIII-XIX au loc câteva intervenţii constructive şi de mobilare la biserică, care nu modifică imaginea generală a ansamblului, iar până de curând, acesta s-a menţinut într-o stare relativ bună, presupunând derularea unor acţiuni de întreţinere şi reabilitare.[43] [44] [45]

In 1356, it belonged to the Mediaş Seat, as free municipality. The ensemble started to exist in the 14th century, when a Gothic hall church, without a tower was built on an elevation in the eastern part of the village. At the end of the 15th century or the beginning of the 16th century, the church is fortified. An extra storey is built over the chancel, which is supported on brackets all around, using a machicolation building technique often used in the Mediaş area. Moreover, the church is surrounded by a polygonal enclosure adapted to the site.[35] [36] [37] [38]

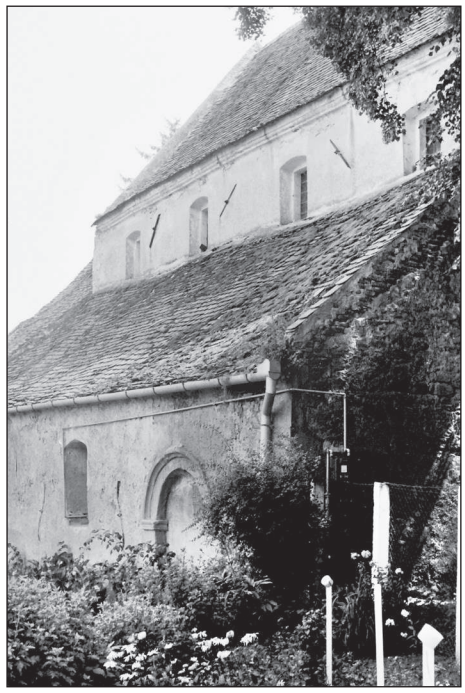
The enclosure defensive systems are subject to repairs and improvements in the first part of the 17th century. We point out the south-eastern gate tower, extremely strong, with four defensive levels equipped with loopholes for artillery, and a cantilevered gallery on a wooden structure in the upper side. The shape of the south tower is very rare (unique in Transylvania). It has a double function (defence and housing), and includes four protuberances in the corners

35 For the first version: Walter HORVATH, *Siebenbűrgisch-sächsische Kirchenburgen* (Sibiu: Ed. Honterus, 1940), 29-31.

36 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 176, 189.

37 For the second: Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 147.

38 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti săseşti din Transilvania," *Transilvania* (1980), 65 dates the building of the enclosure to the end of the 15th century and the fortification of the chancel to the beginning of the 16th century, in 1513, engraved on the eastern vault of the church as year when the works were ended.



■ ***Fig. 6.*** *Roşia, imagine care surprinde starea relativ bună a bisericii, care este, în orice caz, funcţională, 1977. © Teodor Octavian GHEORGHIU*

■ ***Fig. 6.*** *Roşia, image showing the relatively good condition of the church, which is in any way operational, 1977. © Teodor Octavian GHEORGHIU*

39 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti din Transilvania," serial al revistei *Komm mit-Almanah Neuer Weg* (1970), pl. 65; în „Cronică-Principalele lucrări de restaurare a monumentelor istorice din Republica Socialistă România", *BMI,* XXXIX, 1970, 73-78, „intervenţiile urgente" sunt datate 1960-1961; e posibil ca ele să fi fost continuate sau urmate de cele din 1966.

40 Pentru detalii: Caroline FERNOLEND, „Zentrum zur Interpretation der traditionellen Kultur" in Almen – Sanierung und Umnutzung der befestigten Anlage/ Centrul de interpretare a culturii tradiţionale Alma Vii – reabilitarea şi refuncţionalizarea incintei fortificate," *Kulturerbe Siebenbűrgische Kirchenburgen-Landschaft/Bisericile fortificate în peisajul cultural din Transilvania,* Simpozion internaţional, mai 2018, Berlin, 271-283, passim, conform https://www.restauratoren.de/wp-content/uploads/2019/07/Publikation_Symposium_Berlin_2018_IV_07-16-2019_96DPI.pdf, (accesat în 31 mai 2020).

41 În maghiară: Veresmart, în germană: Rothberg.

42 O primă sinteză asupra acestei arhitecturi particulare: Alexandru AVRAM, „Câteva consideraţii asupra bazilicilor scurte din bazinul Hârtibaciului şi zona Sibiului," *Revista Monumentelor şi Muzeelor,* II (1981): 64-71.

43 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti din Transilvania," serial al revistei *Komm mit-Almanah Neuer Weg* (1970), pl. 5.

44 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 49, 77, 79, 186.

45 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 175-176.





■ ***Fig. 7.a, b*** *Roşia, efectele reabilitărilor neconforme (în primul rând, a învelitorii şi paramentului) care cer remedieri viitoare obligatorii, 2015. © Teodor Octavian GHEORGHIU*

■ ***Fig. 7.a, b*** *Roşia, effects of the inappropriate conservation work (first of all the covering and the wall facing) requiring mandatory future correction, 2015. © Teodor Octavian GHEORGHIU*

of the median area equipped with many loopholes.

A series of relatively minor interventions in the 18th-19th centuries led to small changes in the architecture inside the church. The long lapse of time passed since decommissioning of the fortification triggered serious decay, especially on the enclosure. The 1966 conservation works dealt with these degradations.[39]

Thanks to a grant from Iceland, Liechtenstein, and Norway "Mihai Eminescu Trust" foundation managed to implement a project for the conservation of the enclosure and the setting up of a museum. The site was conducted between 2015 and 2016. It consisted in consolidating and conserving the towers, the gatekeeper's lodge, approximately half of the enclosure wall with battlement walk, stairs and access walkways, etc. An exhibition of the works is shown in the enclosure access building, as the ensemble benefits from security and custody services.[40] The church was not included in this programme, so it urgently needs consolidation and conservation interventions.

39 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti din Transilvania," serial al revistei *Komm mit-Almanah Neuer Weg* (1970), 65; in „Cronică-Principalele lucrări de restaurare a monumentelor istorice din Republica Socialistă România", *BMI*, XXXIX, 1970, 73-78, the "emergency interventions" were dated to 1960-1961; they might have been pursued or followed by other interventions in 1966.

40 For details: Caroline FERNOLEND, „Zentrum zur Interpretation der traditionellen Kultur" in Almen – Sanierung und Umnutzung der befestigten Anlage/ Centrul de interpretare a culturii tradiţionale Alma Vii – reabilitarea şi refuncţionalizarea incintei fortificate," *Kulturerbe Siebenbürgische Kirchenburgen-Landschaft/Bisericile fortificate în peisajul cultural din Transilvania*, Simpozion internaţional, mai 2018, Berlin, 271-283, passim, conform https://www.restauratoren.de/wp-content/uploads/2019/07/Publikation_Symposium_Berlin_2018_IV_07-16-2019_96DPI.pdf, (accesat în 31 mai 2020).

La începutul anilor 2010, s-au realizat o serie de intervenţii de refacere a tencuielilor exterioare şi de schimbare a învelitorii la biserică, derulate fără cercetările preliminare necesare şi ignorându-se cele mai elementare reguli ale domeniului, cu materiale şi tehnici de proastă calitate. Toate acestea erau vizibile la ultimele vizite la faţa locului, din 2015 şi 2016, şi semnalate ca atare în mai multe publicaţii online.[46]

Drăuşeni,[47] judeţul Braşov – biserica fortificată

■ Este unul dintre cazurile cele mai dramatice din istoria restaurărilor româneşti. Începută în anii '70, abandonată în 1977, reluată în 1993, abandonată din nou şi reîncepută în 2006-2008 printr-o licitaţie „cu cel mai mic preţ" (tipică pentru această perioadă), restaurarea cetăţii, după cca. 50 de ani, nu este încheiată (în 2020), unele elemente distrugându-se progresiv, iar altele ridicând serioase semne de întrebare.

Satul, amplasat în nordul actualului judeţ Braşov, face parte (împreună cu Caţa, Mercheaşa şi Homorod) din linia de graniţă medievală a zonei săseşti. Drăuşeni apare documentar pentru prima oară în actul din 1224 prin care regele Andrei al II-lea acorda privilegii comunităţilor săseşti, inclusiv celor din scaunul Rupea din care satul făcea parte. În continuare se cunosc destul de multe date despre evoluţia ansamblului. Pe scurt, combinând informaţia documentară cu cea arhitecturală, s-a considerat că anterior edificării bazilicii romanice, a fost ridicată o mică biserică-sală sacrificată de şantierul care a urmat, al bazilicii. Prin 1500 (reper fiind anul 1494, când se acordă subvenţii pentru continuarea şantierului) se fortifică turnul de vest şi altarul (cămăşuit parţial pentru a primi galeria defensivă corespunzătoare podului) şi se suprimă cele două colaterale. Prima incintă se presupune că a fost edificată tot atunci. În prima jumătate

46 Maria CRÎNGACI ŢIPLIC şi Ioan-Cosmin IGNAT, „Relaţia arheologului / istoricului român cu mediul online. Studiul de caz: Biserici medievale – biserici fortificate din Transilvania," *Transilvania* 10 (2016), 26 şi nota 9 unde se precizează şi că: „Intervenţiile de reparaţie ilegale asupra bisericii romanice din Roşia au făcut obiectul unui dosar penal în 2015".

47 În maghiară: Homoróddaróc, în germană: Draas.





■ ***Fig. 8.a, b*** *Drăuşeni, efectele seismului din 6 martie şi primul şantier de consolidare şi reconstrucţie, 1977. © Teodor Octavian GHEORGHIU*
■ ***Fig. 8.a, b*** *Drăuşeni, effects of the earthquake on 6 March and the first consolidation and reconstruction site, 1977. © Teodor Octavian GHEORGHIU*

a sec. XVII este ridicată incinta a doua.[48] [49] [50] [51] Se va vedea că o serie din aceste date vor fi corectate sau modificate radical prin cercetările arheologice din 1973-77 şi, mai mult, din 1993-1996.

Cercetările arheologice şi de arhitectură premergătoare proiectului şi şantierului de restaurare din anii '70 precizează o serie de elemente ale evoluţiei bisericii şi cetăţii: mica biserică este datată în sec. XII (ante 1141) şi era amplasată în zona colateralului nordic al bisericii romanice datate în jumătatea a doua a sec. XIII, şantierul reconstrucţiei durând cca. 40-60 de ani, în care se trece de la romanicul târziu la goticul timpuriu. Urmele de ziduri din incintă au fost interpretate ca fiind ale unei incinte de formă ovală contemporane cu bazilica romanică (sf. sec. XII - înc. sec. XIV). Lucrările din 1496 sunt consemnate în registrul de cheltuieli al Sibiului, însemnând adaptarea bisericii la defensivă şi, probabil, ridicarea primei incinte. La biserică se înalţă turnul de vest şi se dotează cu o galerie sprijinită pe console de lemn, soluţie adoptată şi pentru altarul consolidat (cămăşuit spre est) în prealabil. De asemenea, s-a constatat că cele două colaterale s-au demolat mult mai târziu (jum. a doua a sec. XVI), între timp (sfârşitul sec. XV) edificându-se prima incintă, cu 6 turnuri, dintre care cel puţin două vor fi reedificate ulterior, pentru a fi adaptate artileriei.[52] Pare că aceste ultime date se referă la turnurile de plan pentagonal cu guri de tragere pentru arme de foc din sud-sud-est, care sunt edificate în 1651-52. Cu ceva timp înainte, în 1611-1612, se consideră că ar fi fost ridicată a doua incintă, cu un turn-bastion construit în 1622. Lucrări ulterioare: în 1782 (la arcul de triumf, care era fisurat), în 1804, 1841 (când incinta a doua este demolată integral), 1860 etc.[53] Se va vedea că aceste date n-au rezistat total concluziilor cercetării din 1993-96.

Începerea primului şantier de restaurare este precedată de demontarea în 1972 a tuturor elementelor de lemn din interiorul bisericii şi de cercetarea

Roşia[41], Sibiu County - the fortified church

■ The church dated to the beginning of the 13th century that has become the centre of this fortification is one of the "short basilicas" in the Hârtibaci area.[42] Considering the circular shape of the enclosure and the fact that the count family in Roşia (first recorded in 1377-1379) had a significant role in Transylvania in the 14th-15th centuries (they were royal judges and owned properties on noble land), it is likely that the modest enclosure wall was built at the same time or immediately after the construction of the church, or that it dates back to the time when counts were established in Roşia, and surrounded their housing tower (probably the current belltower) with an enclosure wall. Another possibility is to relate the enclosure to the 1509 record, when the "Sibiu Province" granted money for church related constructions, and for gunpowder and lead necessary for defence. The tower is not connected to the defense wall, and the access to it is at the second storey, which suggest its initial function. After the 1631 fire, when its upper side burnt, the tower lost its harsh dungeon appearance. It's interesting that the village was protected by gates with portcullis that would be closed at nightfall. A few constructive and furnishing interventions in the church occur in the 18th-19th centuries, but they do not change the overall appearance of the ensemble. The ensemble was maintained in relatively good state until recently, thanks to maintenance and conservation actions.[43] [44] [45]

48 Walter HORVATH, *Siebenbürgisch-sächsische Kirchenburgen* (Sibiu: Ed. Honterus, 1940), 42-44.
49 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti din Transilvania," serial al revistei *Komm mit-Almanah Neuer Weg* (1970), pl. 35.
50 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 129, 180-182, 287.
51 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 220-221.
52 Mariana DUMITRACHE, „Cetatea sătească din Drăuşeni, jud. Braşov, ansamblu de arhitectură medievală, cercetări arheologice 1973-1977," *Cercetări arheologice*, III (1979), 155-197 *apud* Sanda IGNAT, „Studiu preliminar în vederea restaurării bisericii din Drăuşeni, judeţul Braşov," *Arhitectura* 6 (1977): 77-80.
53 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti din Transilvania," serial al revistei *Komm mit-Almanah Neuer Weg* (1970), pl. 35.

41 In Hungarian: Veresmart, in German: Rothberg.
42 A first synthesis of this specific architecture: Alexandru AVRAM, „Câteva consideraţii asupra bazilicilor scurte din bazinul Hârtibaciului şi zona Sibiului," *Revista Monumentelor şi Muzeelor*, II (1981): 64-71.
43 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti din Transilvania," series of the journal *Komm mit-Almanah Neuer Weg* (1970), pl. 5.
44 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 49, 77, 79, 186.
45 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 175-176.

At the beginning of the 2010s, a series of interventions were conducted to remake the outer plastering and to change the church covering. No necessary preliminary research was conducted, the basic rules in the field were overlooked, and low-quality materials and techniques were used. All this was visible when we paid our last visits on-site in 2015 and 2016 and made known as such in several online publications.[46]

Drăuşeni[47], Braşov County - the fortified church

■ This is one of the most dramatic cases in the Romanian conservation history. Started in the '70s, abandoned in 1977, resumed in 1993, abandoned again and re-resumed in 2006-2008 through a "smallest price" tendering procedure (typical for that period), the conservation of the citadel was not finished approximately 50 years later (in 2020), with certain elements under progressive decay, and other elements raising serious questions. The village, sited to the north of current Braşov County, is part (together with Caţa, Mercheaşa and Homorod) of the medieval frontier line of the Saxon area. Drăuşeni is first recorded in 1224, when King Andrew II granted privileges to the Saxon communities, including the ones in the Rupea seat to which the village belonged. There is a lot of in-

46 Maria CRÎNGACI ŢIPLIC and Ioan-Cosmin IGNAT, „Relaţia arheologului / istoricului român cu mediul online. Studiul de caz: Biserici medievale – biserici fortificate din Transilvania," *Transilvania* 10 (2016), 26 and note 9, stating that: "The illegal interventions for repairs on the Romanesque church in Roşia were the subject of criminal proceedings in 2015".

47 In Hungarian: Homoródaróc, in German: Draas.

arheologică din 1973-77.[54] Desfiinţarea DMI din 1977 stopează şantierul început cu puţin timp înainte şi obligă la mutarea în 1986 a pieselor demontate la bisericile din Şura Mare şi Rupea, biserica din Drăuşeni rămânând mult timp în stare critică.[55] În vara lui 1977, după cutremur, am surprins şantierul de reconstrucţie şi reparare a unui fragment din zidul de nord. După câţiva ani, prin 1980, se păstrau urmele şantierului (sprijiniri ale zidului de incintă, demolarea parţială a unei construcţii exterioare din preajma cetăţii), iar starea unora dintre componente (turnuri, curtine etc.) anunţa ruinarea lor.

Neşansele ansamblului continuă şi după 1989, cu toate că începuturile programului de protecţie, cercetare şi restaurare erau promiţătoare. În cadrul unui proiect organizat în intervalul 15 iulie-1 septembrie 1993 de Asociaţia „Jeunesse et Patrimoine International" sub egida UNESCO (bazele sale în România au fost puse de Radu POPA încă din 1988!), au fost executate săpături arheologice care le-au continuat pe cele din anii '70. Cele din 1993 n-au adăugat multă informaţie celor din anii '70, decât în privinţa tehnicilor constructive detectate la biserică şi a succesiunii, datării şi atribuirii necropolelor.[56]

Săpăturile arheologice din anii următori (1994-1996) acoperă practic întreaga incintă şi descoperă elemente inedite şi spectaculoase. Între rezultate, este demontarea ideii (din cercetarea din anii '70) că în sec. XIII - înc. sec. XIV ar fi fost ridicată o incintă ovală în jurul bazilicii romanice. Se descoperă, însă, o primă incintă („incinta 1"), ridicată la sfârţitul sec. XV, cu fortificarea estului şi vestului bisericii. Incinta avea un plan rectangular (zidurile fiind în prelungirea colateralelor care se menţinuseră) şi era dotată cu patru turnuri de colţ, câte două la vest şi respectiv la est. Această incintă ar fi fost demolată odată cu ridicarea incintei actuale („incinta 2"), datată cel mai devreme la sf. sec. XVI sau înc. sec. XVII (ante 1650, când e adosat turnul de S-V). Este perioada (până la jumătatea sec. XVII) în care se demolează şi colateralele.[57] Au-

54 Date generale recente, nu foarte exacte, în: Repertoriul Arheologic Naţional. „Drăuşeni," http://ran.cimec.ro/sel.asp?descript=drauseni-cata-brasov-situl-medieval-al-cetatii-sateasti-si-al-bisericii-evanghelice-fortificate-de-la-drauseni-cod-sit-ran-40795.08 (accesat ianuarie, 2024); la vizita pe care am făcut-o prin 1980, mobilerul era deja demontat.

55 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 221.

56 Daniela MARCU, „Şantierul arheologic de la Drăuşeni," *Buletinul Comisiei Monumentelor Istorice* 1-4 (1994), 19-24.

57 Daniela MARCU, „Biserica fortificată de la Drăuşeni, jud. Braşov," în *Arhitectura religioasă medievală din Transilvania*, II, coord. Adrian Andrei RUSU şi Péter Levente SZŐCS (Satu Mare: Ed. Muzeului Sătmărean, 2002), 41-65.





■ ***Fig. 9.a, b*** *Drăuşeni, noi lucrări de consolidare, 1980. © Teodor Octavian GHEORGHIU*
■ ***Fig. 9.a, b*** *Drăuşeni, new consolidation works, 1980. © Teodor Octavian GHEORGHIU*





■ ***Fig. 10.a, b*** *Drăuşeni, rezultatele şantierului din anii 2009-2011: zone restaurate mulţumitor, şantier abandonat, ruinări ale unor componente ale ansamblului, degradări ale interiorului bisericii. © Teodor Octavian GHEORGHIU*

■ ***Fig. 10.a, b*** *Drăuşeni, output of the 2009-2011 works: areas conserved satisfactorily, abandoned site, ruination of certain ensemble components, deterioration of the church interior. © Teodor Octavian GHEORGHIU*

toarea săpăturilor, Daniela MARCU, recunoaşte că „incinta 1" este un unicat în Transilvania. De fapt, reconstituirea etapelor ridicării ansamblului pune o serie de întrebări la care se poate răspunde doar prin simple presupuneri. În plus, este de discutat şi modul în care s-a gândit şi executat restaurarea bisericii, dar nu înainte de a derula mai departe procesul reabilitării întregului ansamblu.

Şantierul deschis în anii '90 a produs mai multe distrugeri decât realizări; consolidarea bisericii s-a realizat cu mult ciment, iar subzidirea din 1996, imprudentă, a turnului de nord al incintei s-a finalizat cu prăbuşirea lui, urmată de o reconstrucţie relativ arbitrară, se pare. Singura reuşită a fost restaurarea parţială a picturii murale din biserică. După o pauză de câţiva ani, în 2006 Ministerul Culturii lansează licitaţia pentru un nou proiect de restaurare, cu finanţare europeană, licitaţie câştigată (după cum am menţionat anterior, prin cel mai mic preţ) de o firmă din Bacău. Situaţia extrem de criticată de specialişti produce o restaurare parţială a bisericii (căreia, în afara consolidă-

formation available about the evolution of the ensemble. In brief, the documentary information combined with the architectural information reveals the presence of a small hall-church before the construction of the Romanesque basilica, which was demolished during the basilica construction works. Around 1500 (1494 is the milestone year, when subsidies are granted for pursuing the works), fortification works are conducted on the western tower and the sanctuary (partially coated to receive the defensive gallery pertaining to the attic), and the two aisles are removed. The first enclosure is supposed to have been built at the same time. The second enclosure was built in the first half of the 17th century.[48] [49] [50] [51] Some of these data will be corrected or changed radically based on the archaeological research conducted in 1973-77, and even more as from 1993-1996.

The archaeological and architectural research conducted before the conservation project and works in the '70s point out a series of elements in the evolution of the church and citadel. The small church is dated in the 12th century (before 1141) and is positioned in the area of the northern aisle of the Romanesque church dated in the second half of the 13th century. The reconstruction works lasted around 40-60 years, when late Romanesque turns into early Gothic. The wall traces in the enclosure were interpreted as parts of an oval enclosure contemporary with the Romanesque basilica (end of the 12th century – beginning of the 14th century). The 1496 works were recorded in Sibiu dispense records as church adaptation for defence and probably the building of the first enclosure. The church's western tower is built and equipped with a gallery supported on wooden brackets. This solution was also used previously for the consolidated sanctuary (coated to the east). Moreover, the two aisles were found to have been demolished much later (the second half of the 16th century). Meanwhile (end of the 15th century) the first enclosure was built, with six towers, at least two of which will be rebuilt later to be adapted for artillery.[52] It seems that these last data refer to the south-south-eastern towers in pentagonal plan built in 1651-52. Sometime before, in 1611-1612, the second enclosure is believed to have

48 Walter HORVATH, *Siebenbürgisch-sächsische Kirchenburgen* (Sibiu: Ed. Honterus, 1940), 42-44.

49 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti din Transilvania," series of the journal *Komm mit-Almanah Neuer Weg* (1970), pl. 35.

50 Teodor O. GHEORGHIU, *Arhitectura medievală de apărare din* România (Bucureşti: Ed. Tehnică, 1985), 129, 180-182, 287.

51 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 220-221.

52 Mariana DUMITRACHE, „Cetatea sătească din Drăuşeni, jud. Braşov, ansamblu de arhitectură medievală, cercetări arheologice 1973-1977," *Cercetări arheologice,* III (1979), 155-197 *apud* Sanda IGNAT, „Studiu preliminar în vederea restaurării bisericii din Drăuşeni, judeţul Braşov," *Arhitectura* 6 (1977): 77-80.

been built. Its bastion tower might have been built in 1622. Further works were conducted in 1782 (on the triumphal arch, which was cracked), in 1804, 1841 (when the whole second enclosure is demolished), 1860, etc.[53] The conclusions of the 1993-96 research will not validate these data, as we will see later.

Before the first conservation works, all the wooden elements inside the church were dismantled in 1972, and archaeological research was conducted in 1973-77.[54] As DMI was dismantled in 1977, the works started a little time before were stopped, the dismantled elements had to be moved in 1986 to the churches in Şura Mare and Rupea, and the Drăuşeni church was in critical state for a long time.[55] In the summer of 1977, after the earthquake, we witnessed the reconstruction and repair works on a fragment of the northern wall. A few years later, around 1980, the works traces were still visible (enclosure wall supports, partial demolition of an outer building around the citadel), and the condition of certain components (towers, curtain walls, etc.) announced their ruination.

Bad luck over the ensemble persists after 1989, despite the promising beginnings of the protection, research, and conservation programme. Under a project run between 15 July and 1 September 1993 by the "Jeunesse et Patrimoine International" Association under the auspices of UNESCO (its bases in Romania were established by Radu POPA already in 1988!), archaeological diggings were conducted as a continuation of the diggings performed in the '70s. These new diggings did not add much information to the old ones other than data related to the church building techniques, and necropolis succession, dating and assignment.[56]

The archaeological diggings in the next years (1994-1996) practically cover the whole enclosure and reveal original and spectacular elements. One of the results is dismantling the idea (resulted from the '70s research) that an oval-shaped enclosure would have been built around the romanesque basilica in the 13th century – beginning of the 14th century. On the other hand, a first enclosure ("enclosure 1"), built at the end of the 15th century, fortifying the church to the east and west, is discovered. The enclosure had a rectangular plan (with the walls in prolongation of the aisles, which were maintained) and



■ ***Fig. 10. c, d*** *Drăuşeni, rezultatele şantierului din anii 2009-2011: zone restaurate mulţumitor, şantier abandonat, ruinări ale unor componente ale ansamblului, degradări ale interiorului bisericii. © Teodor Octavian GHEORGHIU*

■ ***Fig. 10. c, d*** *Drăuşeni, output of the 2009-2011 works: areas conserved satisfactorily, abandoned site, ruination of certain ensemble components, deterioration of the church interior. © Teodor Octavian GHEORGHIU*

rii şi a reconstituirii galeriilor de apărare ale turnului de vest şi corului, i se adaugă un turn lipit - la sud - de turnul de vest al bisericii), a celor două turnuri de nord ale cetăţii şi a curtinei dintre ele, precum şi repararea învelitorii turnului de poartă.[58] [59] [60] [61]

În fine, trebuie revenit la turnul adosat turnului de vest al bisericii, turn care, până la ultima restaurare, exista sub forma unui volum simplu, acoperit în trei ape, un rest al colateralului sudic, care conţinea şi scara de acces la nivelurile intermediare ale turnului principal. Prin ultima restaurare, el a fost modificat, adăugându-i-se o galerie de lemn la ultimul nivel, soluţie adoptată nu se ştie pe baza cărei informaţii. De pildă, el nu respectă reconstituirea fazelor ansamblului, propusă de Daniela MARCU, unde există două turnuri ale „incintei 1" la N-V şi S-V, ieşite în afară faţă de turnul bisericii şi lipite de acesta.[62] Reconstituirea executată în ultimul timp creează confuzie, dar trebuie menţionat faptul că ea corespunde cu propunerea din proiectul de restaurare din 1992-1995,[63] realizat de un colectiv din biroul de proiectare al DMI-ului din acel moment.

Părea că defecţiunile se opresc aici, dar, ca întotdeauna, se poate mai rău, în 2020 ansamblul arătând ca în urma unui atac nimicitor. În iulie 2020, noua lucrare (care, conform panoului de afişaj al şantierului, trebuia să dureze cca. 2 ani – iulie 2009 – iunie 2011) era abandonată şi lăsa în urmă incinta restaurată parţial (cu zidul şi unele dintre turnuri părând a fi fost finalizate, dar cu altele în stare de ruină avansată). Biserica, a cărei restaurare era suspendată,

53 Iuliana FABRIŢIUS DANCU, „Cetăţi ţărăneşti din Transilvania," serial al revistei *Komm mit-Almanah Neuer Weg* (1970), pl. 35.

54 Recent general data, not very accurate, in: Repertoriul Arheologic Naţional. „Drăuşeni," http://ran.cimec.ro/sel.asp?descript=drauseni-cata-brasov-situl-medieval-al-cetatii-sateasti-si-al-bisericii-evanghelice-fortificate-de-la-drauseni-cod-sit-ran-40795.08 (accessed January, 2024); during our site visit around 1980, the furniture was already dismantled.

55 Hermann FABINI, *Universul cetăţilor bisericeşti din Transilvania* (Sibiu: Ed. MonuMenta, 2012), 221.

56 Daniela MARCU, „Şantierul arheologic de la Drăuşeni," *Buletinul Comisiei Monumentelor Istorice* 1-4 (1994), 19-24.

58 Medievistica, „Drăuşeni," http://www.cetati.medievistica.ro/cetati/Transilvania/D/Drauseni/album1/index.html (accesat noiembrie, 2019).

59 Wikipedia, „Biserica fortificată din Drăuşeni," https://ro.wikipedia.org/wiki/Biserica_fortificat%C4%83_din_Dr%C4%83u%C8%99eni (accesat ianuarie, 2024).

60 Art Historia, „Biserica săsească din Drăuşeni," http://art-historia.blogspot.com/2008/05/biserica-sseasc-din-drueni.html (accesat ianuarie, 2024).

61 Bună Ziua Braşov, „Biserica fortificată de la Drăuşeni, un alt monument sortit pierii," http://www.bzb.ro/stire/biserica-fortificata-de-la-drauseni-un-alt-monument-sortit-pierii-a96209 (accesat ianuarie, 2024).

62 Daniela MARCU, „Biserica fortificată de la Drăuşeni, jud. Braşov," în *Arhitectura religioasă medievală din Transilvania*, II, coord. Adrian Andrei RUSU şi Péter Levente SZŐCS (Satu Mare: Ed. Muzeului Sătmărean, 2002), 68, pl. 2.

63 Gheorghe CURINSCHI VORONA, *Arhitectură, urbanism, restaurare*, (Bucureşti: Ed. Tehnică, Bucureşti, 1995/9), 308-309, unde apar şi piese ale proiectului respectiv.



■ ***Fig. 10. e*** *Drăuşeni, rezultatele şantierului din anii 2009-2011: zone restaurate mulţumitor, şantier abandonat, ruinări ale unor componente ale ansamblului, degradări ale interiorului bisericii. © Teodor Octavian GHEORGHIU*

■ ***Fig. 10. e*** *Drăuşeni, output of the 2009-2011 works: areas conserved satisfactorily, abandoned site, ruination of certain ensemble components, deterioration of the church interior. © Teodor Octavian GHEORGHIU*

avea fragmente din mobilierul interior aruncate pe jos şi lipsite de orice protecţie şi, foarte grav, cu pictura murală restaurată în anii '90 stropită cu mortar sau cu apa de ploaie care se scurgea prin ferestrele sparte. Incinta era aproape impenetrabilă, cu numeroase rămăşiţe ale schelelor şi altor fragmente constructive în jur. Părea că prin incintă şi biserică trecuse o hoardă care dorise să distrugă cât mai mult, dar pe-acolo trecuse doar o foarte cunoscută firmă de restaurare din sudul Transilvaniei, care, din motive obscure, abandonase lucrarea.

Concluzii sumare

■ Ultimele două studii de caz pun în evidenţă defecţiuni de la toate nivelurile sistemului, care, la o privire superficială, pare a fi foarte bine conceput şi că ar răspunde oricăror provocări. Se dovedeşte, astfel, că analiza şi comentarea lor sunt necesare pentru a detecta posibile vicii de organizare, de finanţare, tehnice, de cercetare preliminară, de proiectare şi execuţie, precum şi de evaluare corectă a oportunităţilor şi procedurilor. De pildă, între altele, se relevă un fapt care poate pune pe gânduri: asigurarea tuturor „competenţelor" cerute de o licitaţie (or marea majoritate a proiectelor şi execuţiilor de restaurare se licitează) nu asigură în mod obligatoriu rezultate de calitate, iar ultimul exemplu prezentat aici demonstrează corectitudinea acestei observaţii. Ultimele două exemple se adaugă altor zeci de monumente care suferă din cauza unor defecţiuni de pe parcursul procesului de consolidare şi restaurare, precum şi din cauza abandonului, care conduce la o ruinare progresivă. Este greu ca aceste situaţii să fie imputabile unor anumite persoane, foruri, organizaţii sau firme, măcar pentru faptul că derularea componentelor procesului a devenit din ce în ce mai complicată, dificil de detectat în toată complexitatea ei şi, frecvent, având rezultate contradictorii. În cazul bisericilor fortificate săseşti, este evident că problema gravă este dispariţia comunităţilor care le-au ridicat, le utilizau şi le întreţineau.

Sintetic vorbind, nereuşitele sunt o consecinţă atât a modului ambiguu, nesustenabil de acţiune şi a competenţelor limitate ale unora dintre structurile protecţiei monumentelor (incapabile de a avea şi perfecţiona propriile

was equipped with four corner towers, two to the west and two to the east. This enclosure would have been demolished when the current enclosure was built ("enclosure 2"), dated at the end of the 16th century – the beginning of the 17th century at the earliest (before 1650, when the SW tower was added). This is the period (until mid-17th century) when the aisles are also demolished.[57] The diggings' author, Daniela MARCU, admits that "enclosure 1" is unique in Transylvania. In fact, remaking the stages of the ensemble building raises a series of questions the answers to which can only be simple suppositions. Moreover, the church conservation concept and execution are also subject to debate, but not before pursuing the whole ensemble conservation process.

The works launched in the '90s have brought about more damage than accomplishments. A lot of cement was used to consolidate the church. The careless substructure built in 1996 under the enclosure northern tower has led to its collapse, and then seemingly to a relatively arbitrary reconstruction. The only success was the partial conservation of the church wall painting. After several years of break, the Ministry of Culture launched a tender for a new conservation project in 2006, with European funds. The contract was awarded (based on the smallest price, as mentioned earlier) to a company from Bacău. The situation is largely criticised by specialists. The project will consist of partial conservation of the church (consolidation, restoration of the defence galleries in the western tower and the chancel, as well as addition of a tower adjacent to the church western tower to the south), of the two northern towers of the citadel and of the curtain wall between them, and of repairs of the gate tower covering.[58] [59] [60] [61]

Eventually, we must come back to the tower added to the church's western tower. Until the last conservation works, that tower existed as a simple volume with a three-ridged covering, a remainder from the southern aisle, which used to shelter the access stairs to the intermediary levels of the main tower. The last works changed this tower by adding a wooden gallery at

57 Daniela MARCU, „Biserica fortificată de la Drăuşeni, jud. Braşov," in *Arhitectura religioasă medievală din Transilvania*, II, coord. Adrian Andrei RUSU and Péter Levente SZŐCS (Satu Mare: Ed. Muzeului Sătmărean, 2002), 41-65.

58 Medievistica, „Drăuşeni," http://www.cetati.medievistica.ro/cetati/Transilvania/D/Drauseni/album1/index.html (accessed November, 2019).

59 Wikipedia, „Biserica fortificată din Drăuşeni," https://ro.wikipedia.org/wiki/Biserica_fortificat%C4%83_din_Dr%C4%83u%C8%99eni (Accessed January, 2024).

60 Art Historia, „Biserica săsească din Drăuşeni," http://art-historia.blogspot.com/2008/05/biserica-sseasc-din-drueni.html (accessed January, 2024).

61 Bună Ziua Braşov, „Biserica fortificată de la Drăuşeni, un alt monument sortit pierii," http://www.bzb.ro/stire/biserica-fortificata-de-la-drauseni-un-alt-monument-sortit-pierii-a96209 (Accessed January, 2024).

the last level. Nobody knows on what information this solution is based. For instance, this tower does not comply with Daniela MARCU's suggestion to remake the ensemble stages, where there are two towers of "enclosure 1" i.e., the NW and the SW towers, projecting outward from the church tower and adjacent to it.[62] The recent remake creates confusion. Therefore, mention should be made that it corresponds to the proposal in the 1992-1995 conservation project[63] developed by a team in the DMI design department.

It seemed that these were all the shortcomings, but, as always, it can be worse. In 2020, the ensemble looks like after a devastating attack. In July 2020, the new works (that were supposed to last for approximately two years according to the site notice board i.e., from July 2009 to June 2011) were abandoned. They left behind a partially conserved enclosure. The wall and certain towers seemed to be finished, but other elements were in an advanced state of ruin. The church conservation was suspended. Parts of the interior furniture were thrown on the ground, without any protection whatsoever. Even worse, the wall painting conserved in the '90s was splashed with mortar or with rainwater leaking through the broken windows. The enclosure was also impossible to enter, with many scaffolding debris and other fragments of building materials around. It was as if the enclosure and the church had been crossed by a hoard who wanted to destroy as much as possible, but we know that the only passer-by was a very well-known conservation company from southern Transylvania who had abandoned the site for obscure reasons.

Brief conclusions

■ The last two case studies reveal failures at all system levels, although, at a superficial glance, the system seems to be very well designed and to meet all challenges. An analysis and comments on them prove thus to be necessary to detect possible flaws in organisation, financing, technical aspects, preliminary research, design, and execution, as well as in the correct assessment of opportunities and procedures. For instance, one fact, among others, invites to reflection: providing all the "competencies" requested in a tender (as most conservation designs and works are put out to tender) does not necessarily lead to quality. The last example shown here proves this observation is true. Besides the last two examples, there are other tens of historic buildings suffering from faults during the consolidation and politici în acest sens), cât şi a modului de aplicare a legislaţiei şi principiilor de restaurare. Ca urmare, trebuie reiterată ideea că întreg lanţul de instanţe dedicat protecţiei monumentelor a fost şi este şubrezit, iar la capătul lui, echipa de cercetare, proiectare şi execuţie a fost pusă frecvent în situaţii dificile, greu de gestionat. Adică, fie a fost depăşită de situaţie (timp insuficient, temă imprecisă şi nesusţinută – inclusiv financiar – de studiile pregătitoare necesare), adoptând soluţii neadaptate realităţilor respective, fie a fost obligată să ţină cont de numeroasele ingerinţe şi presiuni care vin dinspre administraţiile locale sau centrale, proprietari, finanţatori, constructori şi furnizori de materiale de construcţie, fie a fost pusă într-o situaţie în care cele două circumstanţe agravante au lucrat împreună.

În fine, să sperăm că cele două documente puse relativ recent în circulaţie de Ministerul Culturii pentru consultări (*Strategia naţională privind protejarea monumentelor istorice"* şi *„Codul patrimoniului cultural*) vor fi finalizate şi aplicate. Ele conţin tabloul nereuşitelor (schiţat mai sus), care este extrem de divers, dens, dificil de gestionat sau remediat fără a aplica soluţii radicale sau măcar curajoase. Ambele documente conţin statistici sau simple observaţii privind disfuncţiile din domeniu, care pot fi lesne coroborate cu cele care rezultă din studiul publicat aici sau din altele similare.

Bibliografie:

- Art Historia. „Biserica săsească din Drăuşeni." http://art-historia.blogspot.com/2008/05/biserica-sseasc-din-drueni.html
- AVRAM, Alexandru. „Câteva consideraţii asupra bazilicilor scurte din bazinul Hârtibaciului şi zona Sibiului." *Revista Monumentelor şi Muzeelor*, II (1981): 64-71.
- BIELZ, Albert. *Die Burgen und ruinen in Siebenbűrgen*. Sibiu 1899.
- Biserici. „Biserica Reformată Ilieni." https://www.biserici.org/index.php?menu=BI&code=783
- BONER, Charles. *Siebenbűrgen, Land und Leute*. Leipzig, 1868.
- Bună Ziua Braşov. „Biserica fortificată de la Drăuşeni, un alt monument sortit pierii." http://www.bzb.ro/stire/biserica-fortificata-de-la-drauseni-un-alt-monument-sortit-pierii-a96209
- CRÎNGACI ŢIPLIC, Maria şi Ioan-Cosmin IGNAT. „Relaţia arheologului / istoricului român cu mediul online. Studiul de caz: Biserici medievale – biserici fortificate din Transilvania." *Transilvania* 10 (2016).
- CURINSCHI VORONA, Gheorghe. *Arhitectură, urbanism, restaurare*. Bucureşti: Ed. Tehnică, Bucureşti, 1995/9.
- CURINSCHI VORONA, Gheorghe. *Istoria arhitecturii în România*. Bucureşti: Ed. Tehnică, 1981.
- FABINI, Hermann. *Atlas der siebenbűrgisch-sächsischen Kirchenburgen und Dorfkirche,* 2 vol.. Heidelberg & Sibiu, 1971 & 1977.
- FABINI, Hermann. *Universul cetăţilor bisericeşti din Transilvania*. Sibiu: Ed. MonuMenta, 2012.
- FABRIŢIUS DANCU, Iuliana. „Cetăţi ţărăneşti din Transilvania," serial al revistei *Komm mit- Almanah Neuer Weg* (1970).
- FABRIŢIUS DANCU, Iuliana. „Cetăţi ţărăneşti săseşti din Transilvania," *Transilvania* (1980).
- FERNOLEND, Caroline. „Zentrum zur Interpretation der traditionellen Kultur" in Almen – Sanierung und Umnutzung der befestigten Anlage/ Centrul de interpretare a culturii tradiţionale Alma Vii – reabilitarea şi refuncţionalizarea incintei fortificate," *Kulturerbe Siebenbűrgische Kirchenburgen-Landschaft/Bisericile fortificate în peisajul cultural din Transilvania,* Simpozion internaţional, mai 2018, Berlin, confrom https://www.restauratoren.de/wp-content/uploads/2019/07/Publikation_Symposium_Berlin_2018_IV_07-16-2019_96DPI.pdf.

62 Daniela MARCU, „Biserica fortificată de la Drăuşeni, jud. Braşov," in *Arhitectura religioasă medievală din Transilvania,* II, coord. Adrian Andrei RUSU and Péter Levente SZŐCS (Satu Mare: Ed. Muzeului Sătmărean, 2002), 68, pl. 2.

63 Gheorghe CURINSCHI VORONA, *Arhitectură, urbanism, restaurare,* (Bucureşti: Ed. Tehnică, Bucureşti, 1995/9), 308-309, including elements of the design in question.

- GHEORGHIU, Teodor O.. „Despre o permanenţă a valorilor în arhitectură - probleme ale formei şi compoziţiei ansamblurilor defensive ţărăneşti din Transilvania.” *Arhitectura* 2 (1984): 52-55.
- GHEORGHIU, Teodor O.. „Restaurări comparate: Cetăţile Şoimoş şi Câlnic, versus Severin şi Lăzarea.” *Patrimonium Banaticum,* IX (2019).
- GHEORGHIU, Teodor O.. *Arhitectura medievală de apărare din* România. Bucureşti: Ed. Tehnică, 1985.
- GYÖNGYÖSSY János, Terézia KERNY şi József SARUDI SEBESTYÉN. *Székelyföldi vártemplomok*. Budapest, 1995.
- HORVATH, Walter. *Siebenbűrgisch-sächsische Kirchenburgen*. Sibiu: Ed. Honterus, 1940.
- IGNAT, Sanda. „Studiu preliminar în vederea restaurării bisericii din Drăuşeni, judeţul Braşov.” *Arhitectura* 6 (1977): 77-80.
- IONESCU, Grigore. *Arhitectura pe teritoriul României de-a lungul veacurilor*. Bucureşti: Ed. Academiei RSR, 1982.
- IONESCU, Grigore. *Istoria arhitecturii în România,* vol. I-II. Bucureşti, 1963 şi 1965.
- JEKELIUS, Erich. *Das Burzenland,* vol. III-1 şi IV-1. Braşov, 1926 şi 1929.
- MARCU, Daniela. „Biserica fortificată de la Drăuşeni, jud. Braşov.” În *Arhitectura religioasă medievală din Transilvania,* II, coord. Adrian Andrei RUSU şi Péter Levente SZŐCS, 41-65. Satu Mare: Ed. Muzeului Sătmărean, 2002.
- MARCU, Daniela. „Şantierul arheologic de la Drăuşeni.” *Buletinul Comisiei Monumentelor Istorice* 1-4 (1994): 19-24.
- Medievistica. „Drăuşeni.” http://www.cetati.medievistica.ro/cetati/Transilvania/D/Drauseni/album1/index.html
- OPRESCU, George. *Bisericile cetăţi ale saşilor din Ardeal.* Bucureşti: Ed. Academiei RPR, 1957.
- Repertoriul Arheologic Naţional. „Drăuşeni.” http://ran.cimec.ro/sel.asp?descript=drauseni-cata-brasov-situl-medieval-al-cetatii-sateasti-si-al-bisericii-evanghelice-fortificate-de-la-drauseni-cod-sit-ran-40795.08
- RUSU, Adrian Andrei. *Castelarea carpatică. Fortificaţii şi cetăţi din Transilvania şi teritoriile învecinate (sec. XIII-XIV)*. Cluj-Napoca: Mega, 2005.
- SEBESTYÉN, Gheorghe. *Renaşterea*. Bucureşti: Ed. Tehnică, 1987.
- SIGERUS, Emil. *Sieberbűrgish-sächsische Kirchenburgen.* Sibiu, 1923.
- TIRT, Georgiana. „De la Archita la Valchid. Intervenţii structurale în cadrul programului «Tezaure fortificate redescoperite».” În *Fortificaţii din nou în folosinţă*, 37-56. Cluj-Napoca: Utilitas, 2011.
- TÜDŐS S., Kinga. *Erdélyi védőrendszerek a XV-XVIII. században*. Budapest, 1995.
- VĂTĂŞIANU, Virgil. *Istoria artei feudale în Ţările Române,* vol. I. Bucureşti, 1959.
- Wikipedia. „Biserica fortificată din Drăuşeni.” https://ro.wikipedia.org/wiki/Biserica_fortificat%C4%83_din_Dr%C4%83u%C8%99eni
- Wikipedia. „Illyefalvi református templom.” https://hu.wikipedia.org/wiki/Illyefalvi_reform%C3%A1tus_templom

conservation process, and from abandonment, which leads to progressive ruination. It is hard to find who is responsible for these situations among people, fora, organisations, or companies at least because the development of the different parts of the process has become more and more complicated, hard to grasp in all its complexity, and often with contradictory results. The obvious serious issue with the Saxon fortified churches is the extinction of the communities that had built, used, and maintained them.

In a nutshell, the failures are due to ambiguous, unsustainable methods and limited competences of certain historic building protection structures (unable to develop and improve their relevant policies), as well as to unproper implementation of conservation laws and principles. Therefore, we should reiterate the idea that the whole chain of entities dealing with historic building conservation has been weakened. At the end of this chain, the research, design, and execution team has often been confronted with difficult situations hard to manage. More precisely, the team was either overwhelmed (insufficient time, inaccurate assignment, absence of funds and/or of necessary background studies), and forced to use inappropriate solutions, or forced to support numerous interferences and pressure from the local or national administrations, owners, sponsors, contractors and building material suppliers, or had to face both aggravating circumstances at the same time.

Eventually, let us hope that the two documents the Ministry of Culture has recently submitted for consultation (“National Strategy for Historic Building Protection” and “Cultural Heritage Code”) will be completed and implemented. They contain the failure table (summarized above), which is extremely diverse, dense, and hard to manage or fix without applying radical or at least courageous solutions. Both documents contain statistics or simple observations concerning the deficiencies in the field, which can be easily corroborated with the information in this paper or in other similar studies.

■ MÁTÉ Zsolt[1]

A településhálózat fejlődésének történelmi folyamatai Magyarország és a történelmi Erdély területén

Historical Development of the Settlement Network in Hungary and Historical Transylvania

■ **Abstract:** *The study follows the development of the settlement network in Hungary and historical Transylvania from prehistoric times to the modern era. Roman urbanisation had a significant impact on the later formation of the settlement network, shaped by the mediaeval counties, the administrative system created by King St. Stephen, and the subsequent royal and ecclesiastical centres. Although the Mongol invasion and the Ottoman occupation caused considerable destruction, some settlements were revived in later periods. In modern times, particularly in the late 19th and early 20th centuries, railways and economic development contributed significantly to the revival of the urban network.*

■ **Keywords:** settlement network, urban network, road network, urbanisation, Hungary, Transylvania

■ **Kivonat:** *Jelen tanulmány Magyarország és a történelmi Erdély településhálózatának fejlődését követi az őskortól a modern korig. A római kori urbanizáció jelentős hatással volt a későbbi városhálózat kialakulására, melyet a középkori vármegyék, a Szent István által létrehozott közigazgatási rendszer, valamint a későbbi királyi és egyházi központok formáltak. A tatárjárás és a török hódoltság komoly pusztítást okozott, de a települések egy része a későbbi időszakokban újraéledt. A modern korban, különösen a 19. század végén és a 20. század elején a vasút és a gazdasági fejlődés jelentősen hozzájárult a városhálózat újjáépüléséhez.*

■ **Kulcsszavak:** településhálózat, városhálózat, úthálózat, urbanizáció, Magyarország, Erdély

■ The scholarly literature constantly recalls the rich settlement network that once existed in the region. However, little is known about the fate of the settlements destroyed in prehistoric times or during the Migration Period. The fact that the Carpathian Basin has been inhabited for thousands of years is solely based on the traces of settlements uncovered by archaeology, nevertheless, we do not have a clear picture about the density of these settlements.

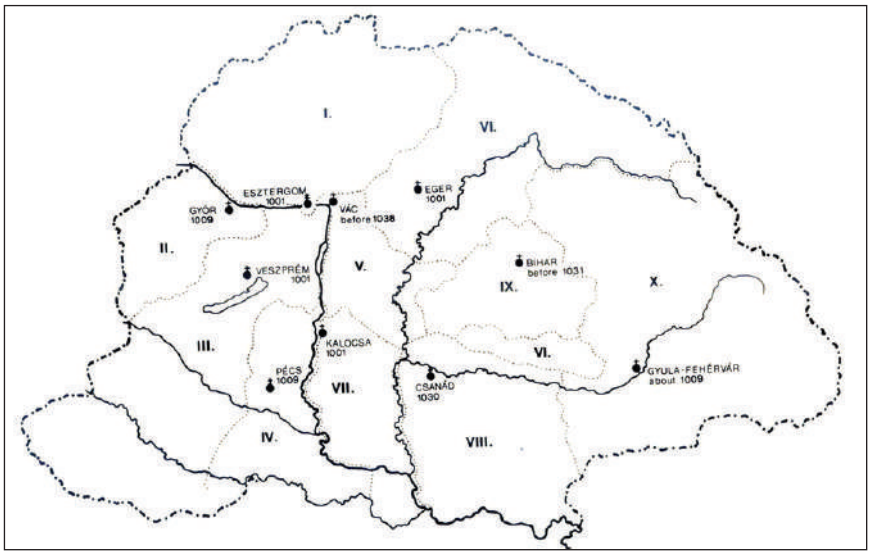
On the territory of Hungary, the earliest urbanisation process already showing characteristics of a settlement network took place in Transdanubia, when it was part of the Roman Empire. The main elements of this early settlement network were determined by natural landscape features, which favoured, even two thousand years ago, the development of larger settlements and increased population concentration. The hydrography and road network that defined the settlement centres, together with the subsequent development of an initial infrastructure, further strengthened the position of these towns. Although we cannot trace

1 Freelance architect, PhD CSc., Hungary.

■ A szakirodalom minduntalan megemlékezik a vidék hajdanvolt gazdag településhálózatáról. Az őskorban vagy a népvándorlás korában elpusztult települések sorsát nemigen ismerjük. Csak a régészet által felszínre hozott telepek nyomaiból tudjuk, hogy a Kárpát-medence évezredeken át lakott hely volt, de a településsűrűségről nincs képünk.

A magyarországi területen a Római Birodalomhoz tartozó dunántúli részen zajlott le a legkorábbi urbanizációs folyamat, amely már településhálózati jellegzetességeket mutatott. A korai településhálózat legfőbb elemeit olyan táji-természeti adottságok határozták meg, amelyek már kétezer évvel ezelőtt is kedvezően hatottak a nagyobb települések, a fokozott lakossági koncentráció kialakulására. A településközpontokat meghatározó vízrajz és úthálózat a későbbiekben kialakult kezdeti infrastruktúra létrejöttével tovább erősítette ezeknek a városoknak a helyzetét. Bár közvetlen települési folyamatosság a római kortól máig egyetlen városunkban sem mutatható ki, HAJNÓCZI Gyula hívta fel a figyelmet arra, hogy a legtöbb jelentős dunántúli város, vármegyeszékhely komoly ókori előzményekkel rendelkezik. Sok római település – annak ellenére, hogy a városi élet évszázadokra megszakadt – egykori jelentőségét mind a mai napig megtartotta, mert elsősorban a földrajzi tényezők tették alkalmassá a nagyobb térségben betöltött, időről időre változó igényű szerepkörének ellátására. Az egykori *Ad Flexum* mellett Moson (Mosonmagyaróvár) települése a 11. században már a hasonló nevű vármegye központja. A folyótorkolatok környezetében elhelyezkedő Győr *(Arrabona)* a 11. század elejétől ispánsági és püspökségi központ. Komárom (Komárno) települése – Komárom vármegye központja – ugyancsak folyótorkolatnál jött létre, a Duna bal, ma

1 Szabadúszó építészmérnök, dr. CSc., Magyarország.



■ ***1. ábra.*** *11. századi püspöki székhelyek. © GYÖRFFY György kutatása, közkincs*
■ ***Fig. 1.*** *11th-century episcopal sees in the Hungarian Kingdom. © Research by György GYÖRFFY, public domain*

Szlovákiához tartozó partján. A Garam folyó torkolatával szemben fekvő Esztergom *(Solva)* 972–1242 között fejedelmi, majd királyi székhely, 1001-től pedig érsekségi központ is. A római korból erődrendszere révén ismert Visegrád (római neve nem maradt fenn) települése egy időszakban Visegrád vármegye központja volt, majd 1323–1408 között királyi székhely is. A Budapest főváros történeti magját képező Óbuda és Pest települése a jobb parti *Aquincum* és a bal parti *Contra Aquincum* erődjének romjain és azok környezetében kelt életre. Budapesttől délre, a Duna alsó szakaszán, a jobb és bal parton ugyancsak korán kialakultak azok az átkelőhelyi települések, Dunaföldvár *(Annamatia)*, Solt, Dunaszekcső *(Lugio)*, amelyek már az ókorban is a folyó két partján fekvő területek közötti folyami összeköttetést biztosították.

Vagyis a fentebb vázolt adottságoknak köszönhetően a mai településhálózat főbb elemei már az ókorban definiálódtak, s az urbanizációs folyamatosság „sötét középkori" megszakadása ellenére a 10. századtól újjáéledő városhálózat csomópontjaiként újra benépesültek. Szent István a közigazgatási és hatalmi szervezet alapjait az országban – rokoni kapcsolatai révén – a bajor–frank rendszer alapján fektette le. A koronázását követő néhány éven belül létrehozta a várispánságokat. A magyar közigazgatás és területfejlesztés történetében ez óriási és döntő lépés volt. A korábbi, térségileg már felbomlott törzsi szervezés helyébe, amely szétszóródva töltötte be az ország lakott területeit, Szent István területi alapú hatalmi és igazgatási rendszert alapított. A 42–45 királyi vármegye egy részének várispáni székhelyeit a korábbi szláv központokban jelölte ki (Csongrád, Nógrád, Visegrád, Veszprém, Kraszna, Zemplén stb.). Ezt követően megszervezte az egyházi közigazgatást, és kijelölte az első nyolc püspökség központjait. A székvárosok körül alakultak ki az ország egyházmegyéi (Csanád, Eger, Esztergom, Győr, Gyulafehérvár, Kalocsa, Pécs, Veszprém, majd pár évtized múlva Bihar, Nyitra és Vác). A hálózatot Szent László egészítette ki a zágrábi püspökség megalakításával (LUDWIG 2005, 8).

A Kárpát-medencében az államalapítás után a városhálózat első központjai a királyi ispáni székhelyek – a királyi hatalom jelenlétének és katonai egységeinek befogadását szolgáló erődített helyek – voltak. Ennek megfelelően kisebb dombokra települtek (Abaújvár, Zemplén, Sopron, Borsod, Zalavár stb.). Az aranybulla (1222) után a hadpolitikai helyzet és az igazgatási rendszer megváltozott. A haderőt a nemesi felkelés *(insurrectio)* biztosította, a közvetlen irányítást a nemesi önkormányzat vál-

in any of our cities direct continuity of the settlement from the Roman period to the present day, Gyula HAJNÓCZI pointed out that most of the major Transdanubian cities and county centres have a historical past going back as early as antiquity. Many Roman settlements, despite the centuries-long interruption of urban life, have retained their former importance to the present day, due especially to geographical factors that made them suitable for the periodically changing role they needed to play within the larger area. The settlement of Moson (Mosonmagyaróvár), near the former *Ad Flexum*, was the centre of the homonymous county already in the 11th century. The town of Győr (*Arrabona*), situated in the vicinity of river confluences, has been a county and episcopal centre since the early 11th century. Komárom (Komárno), a settlement on the left bank of the Danube River, now part of Slovakia, was also founded at the mouth of a river and was the centre of Komárom County. Esztergom (*Solva*), situated opposite the mouth of the Hron River, was a princely and later royal seat between 972 and 1242, and from 1001 it was also the centre of the archdiocese. Visegrád (no information about its Roman name), known from the Roman period for its fortification system, was the centre of Visegrád County for a time, and then a royal seat between 1323 and 1408. The settlements of Óbuda and Pest, constituting the historical core of the capital Budapest, developed on and around the ruins of the fortifications of *Aquincum* on the right bank and *Contra Aquincum* on the left bank of the Danube. To the south of Budapest, on the lower course of the Danube, on the right and left banks, the crossing-point settlements of Dunaföldvár (*Annamatia*), Solt, and Dunaszekcső (*Lugio*) were also established at an early date. These already provided crossing between the two banks of the river in ancient times.

In other words, the main elements of the present-day settlement network were already defined in antiquity, and despite the interruption of urbanisation and settlement continuity during the "Dark Ages", they were repopulated as nodes of the urban network that revived from the 10th century onwards. King St. Stephen laid the foundations of the country's establishment based on of the Bavarian-Franconian system, through his kinship. Within a few years of his coronation, he established the royal counties. This was a huge and important step in the history of Hungarian administration and territorial development. In place of the earlier tribal organisation, which had already been dismantled regionally and had filled the inhabited areas of the country in a scattered manner, King St. Stephen established a territorially organised system of establishment. He designated the seats of some of his 42-45 royal counties in former Slavic centres (Csongrád, Nógrád, Visegrád, Veszprém, Crasna – Romania, Zemplén, etc.). He then organised the ecclesiastical administration and designated the centres of the first eight

dioceses. The dioceses of the country were formed around the episcopal sees (Cenad – Romania, Eger, Esztergom, Győr, Alba Iulia – Romania, Kalocsa, Pécs, Veszprém, and a few decades later Biharia – Romania, Nitra – Slovakia, and Vác). The network was completed by King St. Ladislaus with the creation of the Diocese of Zagreb – Croatia (LUDWIG 2005, 8).

In the Carpathian Basin, after the foundation of the Hungarian state, the first centres of the urban network were the royal county seats – fortified places to house the presence of royal power and military units. Accordingly, they were settled on small hills (Abaújvár, Zemplén, Sopron, Borsod, Zalavár, etc.). After the Golden Bull (1222), the military-political situation and the establishment changed. Military power was provided by the insurrection of the nobility (*insurrectio*), and direct control was replaced by the self-government of the nobility. The royal mercenary army, much smaller than earlier, no longer needed the royal castles, and the noble self-government no longer needed the urbanised centres. In the meantime, the main trade routes – Kyiv to Byzantium – had also changed, and the Poland–Vienna routes became more important. Along these lines, the main urban nodes came to be defined by trade and market activity. Many of the former royal county centres withered away (Baranyavár, Zalavár, Nógrád, Crasna – Romania, etc.). The centres of ecclesiastical administration, dioceses and monasteries were also important. Where these coincided with the county seats, the settlements were able to retain their importance (Bratislava – Slovakia, Sopron, Satu Mare – Romania, Vasvár, etc.) (SZENDE 2013). By the time of the Anjou dynasty, the alliance of urbanising towns and kings had been formed, and the later county centres were fixed. Of course, many towns, the development of which was based on earlier geopolitical and regional antecedents, such as the Roman ones, survived these changes, while others were left behind. In the urbanised county centres (e.g. Sopron) that remained under royal jurisdiction, as well as in the new royal foundations (e.g. Buda), where the fortified area was large enough, regular plots of land were marked out along the fortification walls, on royal initiative. Thus, the streets that emerged, e.g. Szent György Street and Templom Street in Sopron, follow the arching path of the town's fortification wall (SZENDE 2013 138, footnote 63, cf. VÉGH 2009).

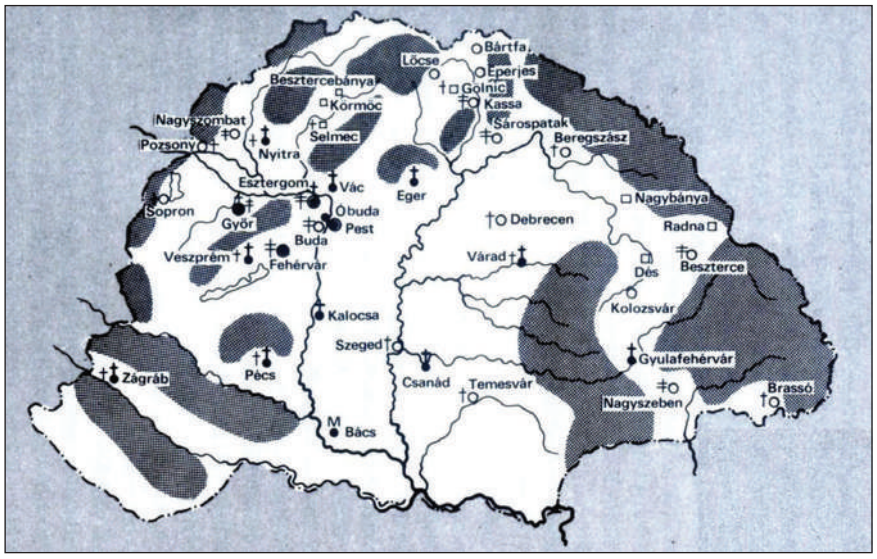
Regarding the period of the Árpád dynasty, historical geography has preserved the names of many more settlements than what exist today. These settlements should not, however, be identified with the complex settlements of present times. During the Hungarian early Middle Ages, these were often small villages in their incipient stages and groups of houses of large families or people settled on outlying lands. There is no doubt, however, that written sources reflect a much denser settlement network than that of today. For example, in

totta fel. A korábbinál jóval kisebb királyi zsoldos katonaságnak nem volt már szüksége az ispánsági várakra, a nemesi önkormányzat pedig nem igényelte a városias központokat. Időközben a fő kereskedelmi irányok – Kijev–Bizánc – is megváltoztak, és a Lengyelország–Bécs útvonalak váltak fontosabbá. Ennek mentén a kereskedelem és a piacszerep jelölte ki a főbb városhálózati csomópontokat. Sok korábbi ispánsági központ elsorvadt (Baranyavár, Zalavár, Nógrád, Kraszna stb.). Fontosak voltak az egyházi igazgatás központjai, a püspökségek és monostorok is. Ahol az ispánsági székhelyek ezekkel egybeestek, a település megőrizhette kiemelkedő szerepét (Pozsony, Sopron, Szatmár, Vasvár stb.) (SZENDE 2013). Az Anjouk korára alakult ki a polgárosodó városok és a királyok szövetsége, és rögzültek a később is fennálló vármegyeközpontok. Természetesen több város, amelynek kialakulása korábbi – pl. római – előzményein, geopolitikai térségalkalmasságon alapult, ezeket a szerepköri változásokat túlélte, mások ennek híján jelentéktelenné váltak. A királyi érdekkörben megtartott ispánsági városokban (pl. Sopron) és az új királyi alapításokban (pl. Buda), ahol az erődítés területe elég nagy volt, királyi kezdeményezésre az erődfalak mentén szabályos telkeket osztottak. Így a kialakult utcavonalak, pl. Sopronban a Szent György utca és a Templom utca, jól követik a városfal vonalának hajlatát (SZENDE 2013, 138, 63. jegyzet, vö. VÉGH 2009).

Az Árpád-korral foglalkozó történeti földrajz a mainál jóval több település nevét őrizte meg. Ezeket a településeket azonban nem szabad a mai, komplex szerepkörű településekkel azonosítani. A korai magyar középkorban sokszor inkább falucsírákkal, nagycsaládi lakóházcsoporttal vagy külterületi földekre kitelepült házcsoportokkal számolhatunk. Kétségtelen azonban, hogy az írott források a mainál sokkal sűrűbb településhálózatot tükröznek. Például a Hortobágy ma ritkán települt tájegységén egyes irodalmi források több száz elpusztult falut emlegetnek. Ezen a tájon egykor valóban több település volt, de ezek a számok túlzóak. Ha az elpusztult települések sorába az őskori telepeket is beszámítjuk – illetve azokat, amelyeknek maradványai felszínre kerültek –, a hortobágyi nagytáj területén összesen mintegy 45–50 elpusztult település nyomát tudjuk kimutatni.

Az oklevelekben országszerte fennmaradt helynevek közül a -laka, -ülése, -háza, -földe elnevezések jórészt apró birtokokat, udvarházakat, majorságokat jelölhettek. Hasonlóan kisebb kihelyezett lakóterület a -szállás, -szállása. A -telek többnyire elpusztult falut jelöl, de lehet szállás, tanya, csárda neve is.

A középkori Magyarország településhálózata számára az első nagyobb megrázkódtatást a tatárjárás jelentette. A tatárjárás során jelentős számú kisebb település pusztult el örökre. A települések számbeli csökkenésének azonban nem csupán a szörnyű pusztítás az egyedüli oka. A tatárjárás után természetes fejlődési folyamatként jöttek létre a megszilárdult birtok- és jogrendnek, a nagyobb termelési szervezettségnek jobban megfelelő nagyobb létszámú települések. Az eddigre már archaikusnak tekinthető nagycsaládi telepek és falucsírák pedig nem települtek újra. A polgárosodás megmutatkozó kezdetei, a piacra szerveződő termelési és piacközpontok mezővárosok hálózatát hozták létre. 1348–1360 között óriási pusztítást végeztek a pestisjárványok, ami jelentős lakosságvesztéssel és egyes települések teljes elnéptelenedésével járt. Az Anjou királyok az oligarchákkal vívott küzdelmeikben szívesen és sikeresen támaszkodtak a városokra, és a segítségért cserébe szabad királyi városi joggal *(libera regia civitas)* mentesítették a település polgárait minden hűbéri függéstől. Az Anjou-kor végére kb. 320 város volt Magyarországon, míg az ország összlakossága 4 millió körül tartott. A 16. században Szeged volt az ország legnagyobb városa: míg Budán csak kb. 500 porta volt, Szegeden 1500. (Persze ha Buda esetében beszámítjuk Lógod, Szt. Péter-város, Óbuda, Pest és a többi Buda környéki település lakosságát, más lesz az arány.) A török megszállás a nyugat-európai fejlődéssel lépést tartó középkori Magyar



■ ***2. ábra.*** *A magyar városhálózat a 14. század első felében. © GRANASZTÓI György kutatása, közkincs*
■ ***Fig. 2.*** *Town network in the Hungarian Kingdom, in first half of the 14th century. © Research by György GRANASZTÓI, public domain*

JELMAGYARÁZAT
LEGEND

korai város (12. sz.)
early town (12th c.)

püspöki székhely
episcopal see

bányaváros
miner town

fontosabb új település (13–14. sz.)
major new settlement (13th-14th c.)

továbbfejlődött korai város
further developed early town

domonkos vagy ferences rendház
Dominican or Franciscan monastery

mindkét rendház
both monasteries

gyéren lakott, hegyes, erdős vidék
sparsely populated, mountainous, wooded region

Királyság bukásával együtt az ország településhálózatának nagy részét érintő sokkhatást is okozott. Különös kegyetlenséggel dúlták fel a falvakat az 1590-es években a török megszállók tatár csapatai. Elnéptelenedés, az erdőkbe, mocsarakba való menekülés, a nomád életforma bizonyos vonásainak – például a pusztai állattartásnak – újraéledése, a végvári katonaélet, a biztonságosabb országrészek felé vándorlás jelentősen megváltoztatta az ekkor még meglévő kiegyensúlyozottságot.

A hódoltsági helyzet azonban sajátosan nem csak településpusztulással járt. A lakosság adóképességének megőrzése bizonyos nyugalmat, közigazgatási rendezettséget igényelt. E vonatkozásban közös volt a királyi Magyarország és Partium, valamint a török Porta érdeke. A viszonylagos rendezettség nyugalmát a kettős adóztatású városok, mint például Debrecen, különösen élvezték. A védelem nélküli falvak sokat szenvedő lakossága szívesen költözött az oltalmat adó városokba. Így alakultak ki az Alföld megyényi határú hatalmas cívis-paraszt városai: Nagykőrös, Kecskemét. Debrecen például a középkortól kezdve több mint 20 falu, más források szerint 45 község lakosságát és határát olvasztotta magába.

the now rarely settled landscape of the Hortobágy Region, some literary sources mention hundreds of destroyed villages. Once there were indeed more settlements in this landscape, but these numbers are exaggerated. If we compile a list of destroyed settlements in the Hortobágy Region and we include prehistoric settlements, as well as those whose remains have been excavated, we can find traces of some 45–50 destroyed settlements.

Regarding the former settlements from throughout the country that are known only based on their names attested in documents, the elements -laka, -ülése, -háza, -földe[2] of the names point towards small estates, manor houses, and farms. A similarly small residential area is designated by -szállás, -szállása[3]. The term -telek[4] usually denotes a destroyed village, but it might also be the name of a loft, a homestead, or an inn.

The first major shock to the settlement network of mediaeval Hungary was the Mongol invasion, which wiped out a significant number of small settlements. However, this terrible destruction was not the only reason for the decrease of the number of the settlements. Following the Mongol invasion, settlements with a larger population, which were more in line with the already established land tenure and legal system, as well as with a more organised production system, emerged as a result of a natural development process. The large family settlements and small villages in their incipient stages, which by then represented a more archaic system, were not resettled. The beginnings of urbanisation, i.e. the market centres organised for production and trade gave rise to a network of market towns. Between 1348 and 1360, the plague wreaked havoc, causing major population losses and the complete depopulation of some settlements. In their struggles with the oligarchs, the Anjou kings came to rely willingly and successfully on the towns, and in return for their help, they granted the citizens the status of free royal towns (*libera regia civitas*), freeing them from any fief dependence. By the end of the Angevin period, there were about 320 towns in Hungary; the country by then had 4 million inhabitants. In the 16th century, Szeged was the largest town in the country, as while Buda had only about 500 households, Szeged had 1500. (Of course, if in the case of Buda, we include the population of Lógod, Szt. Péter-város, Óbuda, Pest, and other settlements around Buda, the ratio is different.) The Ottoman conquest, together with the fall of the mediaeval Hungarian Kingdom, which had been keeping pace with the development of Western Europe, also caused a shock to much of the country's settlement network. In the 1590s, the Tatar troops of the Ottoman invaders ravaged the villages with particular cruelty. Depopulation, the retreat into forests and marshes, the revival of certain aspects of

2 Meaning lodge of, seat of, house of, and land of [transl. note].
3 Meaning toft and toft of [transl. note].
4 Meaning plot or land [transl. note].

nomadic life, such as animal husbandry in the steppe, military life in the castles and fortifications around the borders of the conquered region, and the migration to safer parts of the country, all significantly altered the balance that had existed by that time.

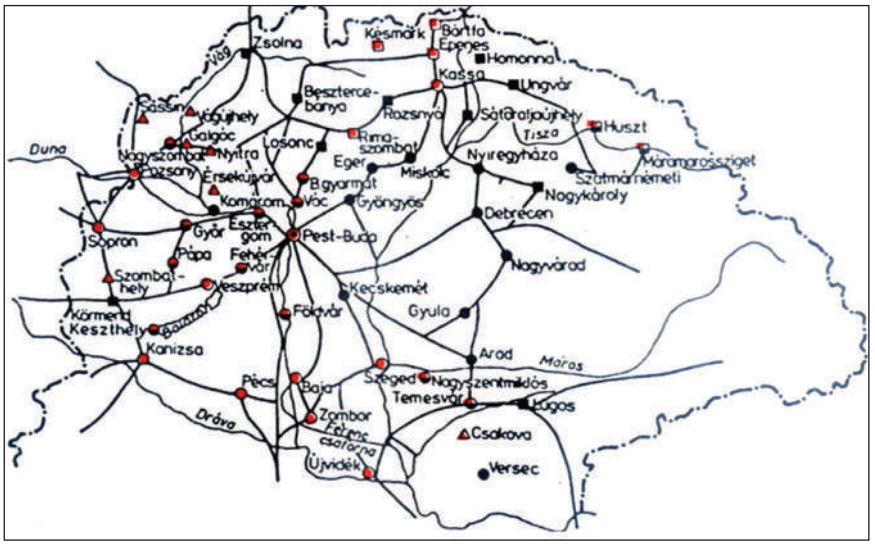
However, the Ottoman conquest was not only associated with the destruction of settlements. Maintaining the tax capacity of the population required a certain degree of peace and administrative order. In this respect, the interests of the Hungarian Kingdom, the Partium, as well as those of the Sublime Porte, were common. The tranquillity of this relative orderliness was particularly enjoyed by dual-taxed towns such as Debrecen. The hard-pressed inhabitants of unprotected villages were eager to move to the sheltered towns. This is how the large burgher-peasant towns of Nagykőrös and Kecskemét were established in the Great Hungarian Plain, encompassing vast agricultural and other lands pertaining to the settlements. From the Middle Ages onwards, Debrecen, for example, incorporated the population and lands of more than 20 villages, or 45 villages according to other sources.

However, due to some stereotypes perpetuated in secondary school education, it becomes necessary to reassess the general picture regarding the Ottoman conquest. The Turkish occupation was a fundamental insult to the Hungarian national consciousness, and it has implanted dominant patterns in the public consciousness that have unilaterally influenced the historical consciousness for hundreds of years. In the previous paragraph, we have already pointed out that general destruction and chaos were not in the interest of the Ottoman Empire.

Apart from the military events of the conquest and taxation, the country's structure changed only a little. "The Christian settlement network of many thousands of villages and towns of considerable size was preserved." (SUDÁR 2020, 121) The nobility remained tax-free in the conquered territories and could use serf services, while the villages were taxed by the Ottomans as well. It was an extreme case, but it occurred that the Turkish owners of occupied Pannonhalma were helped with the harvest by serfs brought from Upper Hungary. However, over time a good part of the nobility gave up their estates in the conquered region.

"The conquerors settled in somewhat more than 150 settlements. In the entire period, with some uncertainty, we can count 175 Muslim settlements[5], but never so many at one time." (SUDÁR 2020, 121) In general, although sometimes with limited power, even in the larger military centres there was a municipal magistrate, a judge's office, and some ecclesiastical administration, mostly staffed by monks. Genuine Muslim urban development (mosques, madrasas, baths, dervish monasteries) developed only where a significant civilian Muslim population had settled alongside the

5 Where there was a Muslim civilian settlement [author's note].



■ ***3. ábra.*** *Központi szerepkört betöltő városok a 19. század elején Magyarországon (Erdély nélkül). © BÁCSKAI Vera kutatása, közkincs*

■ ***Fig. 3.*** *Towns playing a central role in the Hungarian Kingdom, in the early 19th century (without Transylvania) © Research by Vera BÁCSKAI, public domain*

JELMAGYARÁZAT
LEGEND

országhatár
country border

elsőrendű út
first-rank roads

főváros
capital

gyűjtő- és elosztóközpontok
collection and distribution centres

másodrendű kereskedelmi központok
second-rank trading centres

közvetítőközpontok
intermediary centres

elsőrendű regionális központok
first-rank regional centres

hanyatló külkereskedelmi központok
declining foreign trade centres

másodrendű regionális központok
second-rank regional centres

A középiskolai sztereotípiák miatt át kell azonban értékelnünk a hódoltság általános képét. A magyar nemzettudatot alapvetően sértette a török megszállás, és ez a történelemtudatot több száz éve egyoldalúan befolyásoló, uralkodó sémákat ültetett a köztudatba. Az előző bekezdésben már utaltunk arra, hogy a török birodalomnak nem állt érdekében az általános pusztítás és zűrzavar.

A hódítás katonai eseményeitől és az adóztatástól eltekintve az ország berendezkedése alig változott. „A keresztény településhálózat sok ezer faluval és komoly méretű városokkal megmaradt." (SUDÁR 2020, 121) A nemesség a hódoltsági területen is adómentes maradt, a jobbágyi szolgáltatásokat igénybe vehette, miközben a török is adóztatta a falvakat. Extrém eset, de előfordult, hogy a megszállt Pannonhalma török birtokosait felvidéki jobbágymunkával segítették a betakarításban. A nemesség jó része azonban idővel felhagyott hódoltsági birtokaival.

„A hódítók 150-nél nem sokkal több helyen telepedtek meg. A teljes időszakban, némi bizonytalansággal 175 muszlimok lakta települést[2] számolhatunk meg, egyszerre azonban ennyi sohasem állt fenn." (SUDÁR

2 Ahol ti. muszlim polgári letelepedés is volt [szerző megj.].

2020, 121) Általában – még a nagyobb katonai központokban is – olykor korlátozott hatáskörrel, de – működött a városi magisztrátus, bírói hivatal és némi, leginkább szerzetesi állományú egyházi igazgatás is. Igazi muszlim városalakítás csak ott alakult ki (dzsámik, medreszék, fürdők, derviskolostorok), ahol a török igazgatási központ mellett jelentős polgári muszlim lakosság is letelepedett. Hat ilyen város volt: Buda-Pest, Temesvár, Fehérvár, Eger, Várad, Pécs. Másutt egy-két jelentősebb vagy egyszerűbb imahely épült (SUDÁR 2020, 121). „Zeg-zugos törökös városrészek" azonban sehol nem alakultak ki. Az erre utaló – több szakmunkában is fellelhető – „mendemondák" a mahalle elnevezésű török adóösszeírási körzetek félreértelmezéséből alakultak ki. Erdély török vazallus állam volt, (pl. BETHLEN Gábort is a törökök ültették a fejedelmi trónra!), ott semmi sem változott.

Persze a biztonságosabb területek felé vándorlás folyamatos volt. Számos település teljesen elnéptelenedett. A háborús pusztítások is csökkentették a népességszámot, de a viszonylagos „polgári" élet – és emellett a magyar állami, földesúri és egyházi fennhatóság joggyakorlata is – fennmaradt. A regényekből jól ismert kép – az állandó harc, vérengzés, üldözés, pusztítás – nem reális.

A középkori Magyarország kiegyensúlyozott településhálózata azonban soha többé nem állt vissza, habár az elpusztult falvak, városok egy része a visszafoglalás után újratelepült. A hódoltság után az elnéptelenedett déli vidéken nagy számban jöttek létre új települések a határőrvidékek megszervezésével és az elnéptelenedett alföldi területek udvarhű kezekbe juttatásával. Az újratelepült falvak olykor megtartották korábbi szerkezetüket, ahol azonban szervezett telepítés folyt, mérnöki rendszerű telepes falvak alakultak ki.

A településhálózat fejlődését biztosították a kiváltságos kerületek szabadparaszti önkormányzati lehetőségei és a BOCSKAI István által 1605–1606-ban létrehozott szabad hajdúkerület városai, a „hajdúvárosok universitása", valamint az ősi kiváltságaikat 1745-ben keserves harc és munka árán *(Redemptio)* visszavásárló szabad jász–kun kerületek városai.[3] A 18. század viszonylagos nyugalma kedvezett a fejlődésnek. A búzakonjunktúra és a napóleoni háborúk hadi szállításai megindították a külterületek intenzívebb hasznosítását. A tagosítások és a közföldek tartós bérbeadása pedig elindították a 19. század végére csúcsára érő tanyásodás folyamatát. Az infrastruktúra kiépítésével a vasút- és városközeli falvak indultak fejlődésnek. Sok város szerkezetében ekkor jelent meg fontos elemként a vasútállomást és a városközpontot összekötő főút. Az alföld–fiumei vasút vonala több város határában, a beépített területet elkerülve épült (1870-től). Az új állomások alapvetően befolyásolták a város terjeszkedésének irányát ezeken a településeken.[4] A kiegyezés biztosította konjunktúra a városhálózat dinamikus erősödéséhez és lakosságkoncentráló szerepéhez vezetett. A kiegyensúlyozott fejlődést az első világháborút lezáró trianoni békeszerződés megakasztotta. Magyarország elvesztette a fővárost ellensúlyozó kulturális és ipari centrumait, Kassát, Pozsonyt, Zágrábot, Brassót, Temesvárt, Nagyváradot, Kolozsvárt, Munkácsot. Az ország településhálózata rendkívül kiegyenlítetlenné vált. A máig tartó kiegyenlítési folyamat eredménye az öt nagyváros, Pécs, Szeged, Debrecen, Miskolc és Győr kulturális és gazdasági szerepkörének felértékelődése. Mostanra ez az öt nagyváros túlnőtte a nekik szánt szerepkört, nemcsak ellensúlyozzák az országhatárokon kívülre

3 Többéves gyűjtésből és kölcsönökből sikerült összeszedni az 575 900 forint összeget, amely egyes források szerint az akkori Magyarország költségvetésével összemérhető nagyságú volt. Ezen összegen felül vállalták ezer lovas felszerelését, az általános hadfelkelést, valamint a nádor és más tisztviselők fizetésének megadását (BÁN 1989).

4 Nagyszalonta, Sarkad, Gyula, Békéscsaba, Csorvás, Orosháza, Hódmezővásárhely, Szeged (BLAZOVICH 2021, 30).

Turkish administrative centre. There were six such towns: Buda-Pest, Timişoara (Romania), Fehérvár, Eger, Oradea (Romania), and Pécs. In other places, one or two places of worship of varied significance were built (SUDÁR 2020, 121). There were, however, no "Turkish districts full of corners". The "legends" referring to this, which can be found in several scholarly works, are based on the misinterpretation of the Turkish tax census districts called mahalle. Transylvania was an Ottoman vassal state (e.g. Gabriel BETHLEN was made prince of Transylvania by the Turks!), yet nothing has changed there.

Of course, migration to safer areas was continuous. Many settlements were completely depopulated. The ravages of war reduced the population, but a relative "civil" life, as well as the practice of the Hungarian state, landlord, and church authority, was maintained. The image presented in novels – of constant fighting, bloodshed, persecution, and destruction – is not realistic.

However, the balanced settlement network of mediaeval Hungary was never restored, although some of the destroyed villages and towns were repopulated after the reconquest. A large number of new settlements were established in the depopulated southern countryside, by the establishment of border regions and the transfer of depopulated lowland areas into the hands of those who were loyal to the court. The resettled villages sometimes retained their former structure, but where there was an organised resettling process, the villages received an orderly layout, designed by engineers.

The development of the settlement network was ensured by the free peasant self-government of the privileged districts and the towns of the free hajdú district established by Stephen BOCSKAI in 1605–1606, the so-called "university of hajdú towns", as well as the towns of the free Jász-Cuman districts that had bought back their ancient privileges in 1745 at the cost of bitter struggle and work (*Redemptio*).[6] The relative calm of the 18th century favoured development. The wheat boom and the military transports of the Napoleonic wars led to the intensification of outlying land exploitation. In turn, land consolidation and the permanent leasing of public lands set in motion a process of homestead consolidation that reached its peak at the end of the 19th century. With the development of infrastructure, the railways and peri-urban villages started to develop. In this period, the main street linking the railway station to the town centre became an important element in the structure of many towns. The railway line connecting the Great Hungarian Plane to Rijeka was built (from 1870 onwards) on the outskirts

6 Through several years of fundraising and loans, they managed to raise the sum of 575,900 Florins, which according to some sources was comparable to the budget of Hungary at the time. In addition to this sum, they agreed to equip 1000 horsemen, to undertake a general war levy, and to pay the salaries of the palatine and other officials. (BÁN 1989).

of several towns, avoiding built-up areas. In these towns, the new train stations had a major influence on the direction of urban expansion.[7] The boom provided by the Austro-Hunagrian Compromise led to a dynamic strengthening of the urban network and established its role as a population concentrator. This balanced development was halted by the Treaty of Trianon, which ended WW1. Hungary lost the cultural and industrial centres that had counterbalanced the capital, namely Košice and Bratislava (Slovakia), Zagreb (Croatia), Braşov, Timişoara, Oradea and Cluj (Romania), as well as Mukachevo (Ukraine). The country's settlement network became extremely uneven. The result of this rebalancing process, which continues to this day, has been the enhancement of the cultural and economic role of five major cities, namely Pécs, Szeged, Debrecen, Miskolc, and Győr, which have now outgrown their role, not only counterbalancing the cities outside the country's borders but also exerting a strong attraction. The arbitrary economic and social system that followed WW2 caused serious damage to the settlement network. The destruction of homesteads and small villages, the unjustified, forced development, the forced creation of agricultural cooperatives, etc. drastically changed the settlement landscape in many places, causing serious destruction to the areas between settlements, ultimately adversely affecting the settlement heritage.

került városokat, hanem a határon túl is érezhető vonzerővel bírnak. A második világháborút követő önkényes gazdaságirányítási és társadalmi rendszer komoly károkat okozott a településhálózatnak. A tanyák, aprófalvak pusztulása, a megalapozatlan, erőszakos fejlesztések, az erőszakos téeszesítés stb. a településképet sok helyütt drasztikusan megváltoztatta, a településközi tájban komoly pusztítást végzett – végső soron károsan befolyásolta a települési örökséget.

Bibliográfia / Bibliography

- BÁN Péter (szerk.) 1989: *Magyar történelmi fogalomtár*. Gondolat. Budapest.
- BLAZOVICH László 2021: Az Alföld–Fiumei Vasúttól a villamosig. *Szeged – a Város folyóirata* 10: 27–34.
- LUDWIG Emil 2005: Az államalapítás hétköznapjai. *Magyar Nemzet*, augusztus 19.
- SZENDE Katalin 2013: Az ispánsági vártól a városig: Miért, hogyan – vagy miért nem? In: MENTÉNYI Klára, SIMON Anna & SZENTESI Edit *(szerk.): Kő kövön. Stein auf Stein. Dávid Ferenc 73. születésnapjára. Festschrift für Ferenc Dávid*. Vince. Budapest. 127–142.
- VÉGH András 2009: Buda város középkori helyrajza. Telekosztás és térszervezés egy alapított városban. *Urbs. Magyar Várostörténeti Évkönyv* 4: 35–49.
- SUDÁR Balázs 2020: Pécs a török városhálózatban. In: VONYÓ József (szerk.): *Pécs Története III. A hódoltság korában (1543–1686)*, Pécs –Pécs Története Alapítvány – Kronosz Kiadó – Bölcsészettudományi Kutatóközpont. Budapest. 121–126.

7 Salonta (Romania), Sarkad, Gyula, Békéscsaba, Csorvás, Orosháza, Hódmezővásárhely, Szeged (BLAZOVICH 2021, 30).

■ Liliana ROȘIU[1]

Monumentul istoric între tabu și reconstituire

The Historic Building Between Taboo and Reconstruction

■ **Rezumat:** *Una dintre categoriile de lucrări pe care teoria şi practica restaurării a folosit-o de la primele intervenţii şi continuă să o interpreteze în diferite moduri este reconstituirea. Dincolo de principiile care pretind respectarea autenticităţii de substanţă şi formă a monumentului istoric, aplicarea lor propriu-zisă în lucrările de restaurare se face foarte variat, în forme care pierd uneori esenţa principiilor. Reconstituirea este unul din domeniile în care merită luată în discuţie maniera de aplicare a principiilor. Ea se dovedeşte nu numai o metodă de tratare a patrimoniului cultural ce a suferit pierdere de substanţă istorică, ci şi un instrument posibil de folosit în prevenirea degradării acestuia, în accentuarea impactului ambiental al monumentelor şi în ridicarea calităţii zonelor istorice.*

■ **Cuvinte-cheie:** monument istoric, protejare, restaurare, autenticitate, reconstituire, valoare culturală

■ **Summary:** *Reconstruction is one of the works types the conservation theory and practice have used since the first interventions and still interpret in various ways. While principles claim compliance with the historic building substance and shape authenticity, their implementation in actual conservation works is done in very different ways, which sometimes overlook the essence of these principles. Reconstruction is not only a method to approach cultural heritage having lost some of its historic substance, but also an instrument that can be used to prevent heritage deterioration, to increase the impact of historic buildings on their environment, and to increase the quality of historic areas.*

■ **Keywords:** historic buildings, protection, conservation, authenticity, reconstruction, cultural value

Tendințe contemporane

■ Raportarea la monumentul istoric şi la intervenţiile pentru protejarea şi transmiterea valorii sale constituie un proces în permanentă mişcare, cu redefinirea noţiunilor, a motivaţiilor şi a mijloacelor de operare. Înţelegerea monumentului a suferit în decursul timpului o evoluţie cu amplificare de sensuri. De la unicat, care desemna la început doar vestigii arheologice şi biserici pentru a include apoi toate programele de arhitectură, s-a ajuns la ansambluri şi zone urbane, apoi la conceptul de peisaj cultural, produs al ultimelor decenii. Preocupările teoretice au definit categorii şi au nuanţat înţelegerea, ducând la integrarea monumentului istoric în categoria patrimoniului cultural şi, în acelaşi timp, au favorizat diversificarea practicilor şi principiilor privind intervenţia asupra monumentelor istorice. În toate etapele prin care aceste preocupări au trecut, a fost recunoscută nevoia de accentuare a valorii, dar aceasta a fost înţeleasă în forme foarte variate, care nu au condus niciodată la principii unanim acceptate. De aici, au derivat şi intervenţii care au generat de-a lungul timpului atâtea controverse.

Deşi există încă voci care consideră caducă o bună cunoaştere a experienţei anterioare în restaurarea monumentelor istorice, mai ales cu privire la cea din secolul al XIX-lea, de la începuturile sale, tendinţele contemporane, care îmbracă o multitudine de forme, reiau adesea practici blamate ori contestate în trecut. Aceasta justifică tocmai buna cunoaştere a concepţiilor şi motivaţiilor ce au declanşat restaurări doctrinare sau istorice pe care le regăsim şi astăzi în forme bine camuflate

1 Arhitect, dr., cercetător independent, România.

Contemporary tendencies

■ The relationship with the historic building and with the interventions for the protection and transmission of its value is a perpetuum mobile process, where the notions, the motivations and the operation means are permanently redefined. The understanding of the historic building has suffered an evolution with widening meanings over time. From single elements, consisting first of simple archaeological remains and churches, and then of whole architectural programmes, the historic building has evolved to ensembles and urban areas, then to the cultural landscape, as a concept developed in recent decades. The theoretic concerns have defined different categories and have widened the understanding of historic buildings, which thus integrate the cultural heritage category. Moreover, the practices and principles concerning the intervention upon historic buildings have become more diverse. The need to enhance value has been acknowledged in all the stages of these concerns, but it was understood in very diverse forms, which have never led to principles accepted unanimously.

1 Architect, PhD, independent researcher, Romania.

Hence the interventions have triggered so much controversies over time.

Despite persistent opinions that good knowledge of previous experiences in historic building conservation is obsolete, mainly related to the 19th century, from its beginnings, contemporary tendencies taking various forms often resume previously blamed or contested practices. This is precisely the reason for good knowledge of the concepts and reasons behind doctrinarian or historic conservation works that we still find today in well concealed forms and behind complex reasons that are only superficially adapted to contemporary requirements. Historic buildings are currently understood and acknowledged based on a large variety of material cultural values, and the heritage significance including them extends to immaterial values. However, there are several principles that maintain their validity in relation to historic buildings, despite intervention fluidity and sometimes inconsistency. The Venice Charter still conveys, in the series of international charters and conventions that have followed it, the principles of authenticity, reversibility, unity and the primacy of the value for which the object is designated a historic building.

Over the last thirty years, heritage theory and practice have seen a wide variety of approaches, not always motivated by the cultural field. The same dynamics have occurred in Romania. Model transfer has been widely used to support one type of intervention or another. The need to draw on principles remains central to contemporary intervention in the field of historic buildings protection, however diverse the understanding of them and of the cultural values to which this protection is applied.

Cultural value, subject of protection

■ The direct action in the practice of conservation starts from the way of relating to the type of value attributed to the historic building. The renewal of Shinto temples through permanent remaking and rebuilding over the centuries conveys a piece of symbolic information, identical to itself, but discontinuous as material. This may suggest that authentic material needs not to always take precedence. The completion of the Cologne Cathedral or, nowadays, of the Sagrada Familia, raise the question over the idea of unity, at least regarding the original conception of the historic building. Once again, the Nara Document specification that heritage must be considered within the culture to which it belongs proves to be correct.[2]

However, the need for a common denominator in the definition of built her-

2 The NARA Document on Authenticity, „1994", https://www.icomos.org/fr/accueil-home/179-articles-en-francais/ressources/charters-and-standards/386-the-nara-document-on-authenticity-1994 (accessed May, 2024), point 11.

şi sub justificări elaborate, adaptate doar aparent cerinţelor contemporane. Chiar dacă azi monumentul este înţeles şi recunoscut sub o arie largă de valori culturale materiale, iar semnificaţia patrimonială care îl include se extinde către noţiunea de valori imateriale, există câteva principii care, pentru monumentele istorice, îşi menţin valabilitatea, în ciuda fluidităţii şi uneori inconsecvenţei manierei de intervenţie. Carta de la Veneţia încă transmite, în şirul cartelor şi convenţiilor internaţionale care i-au urmat, principiile autenticităţii, reversibilităţii, unităţii şi primatul evidenţierii valorii pentru care obiectul e desemnat monument istoric.

În ultimii treizeci de ani, teoria şi practica în domeniul patrimonial au înregistrat o mare varietate de abordări, fără ca motivaţia să aparţină totdeauna domeniului cultural. La noi s-a petrecut aceeaşi dinamică. Transferul de modele a fost folosit pe scară largă pentru a susţine un tip sau altul de intervenţie. Nevoia de a recurge la principii rămâne un punct central pentru intervenţia contemporană în domeniul protecţiei monumentelor istorice, oricât de diversă ar fi înţelegerea lor şi a valorilor culturale cărora li se aplică această protecţie.

Valoarea culturală, subiect al protejării

■ Acţiunea directă în practica restaurării pleacă de la modul de raportare faţă de tipul de valoare atribuit monumentului. Reînnoirea prin refacere şi reconstrucţie permanentă de-a lungul secolelor a templelor şintoiste transmite o informaţie simbolică, identică cu sine, dar discontinuă ca material. Aceasta poate sugera că nu totdeauna materialul autentic trebuie să primeze. Completarea catedralei din Köln sau, în zilele noastre, cea a Sagradei Familia pun în discuţie ideea de unitate, cel puţin privitor la concepţia iniţială a monumentului. O dată în plus, se dovedeşte corectă specificaţia Cartei de la Nara, potrivit căreia patrimoniul trebuie gândit în funcţie de cultura căreia îi aparţine.[2]

Şi totuşi, nevoia unui numitor comun în definirea patrimoniului construit şi a principiilor de intervenţie nu poate fi neglijată. Nevoia de reconsiderare şi de întoarcere la fundamente teoretice solide, înţelegerea valorii s-au legat în principal de protejarea imaginii monumentului şi a materialităţii sale, conturându-se principiul autenticităţii în tehnica de intervenţie. Acesta avea în vedere valoarea dată de material, manoperă, volumetrie şi concepţie arhitecturală, integrare în context. Articolul 5 al Convenţiei de la Faro a Consiliului Europei, din 2005, insistă asupra recunoaşterii şi sublinierii valorii în toate strategiile şi acţiunile de protejare şi promovare a patrimoniului cultural.[3] Dar valoarea trebuie întâi definită.

Criteriile sunt laxe, iar în condiţiile în care se presupune că prin clasare ca monument istoric o clădire poate fi protejată mai eficient, numărul celor introduse în categoria monumentelor istorice a crescut semnificativ în România. Aceasta a condus la o relativizare a valorii patrimoniale. Pe de altă parte, s-a ajuns la uniformizarea valorică şi la diminuarea importanţei acordate valorilor de vârf. În ce măsură prin clasare se instituie o protecţie reală este o altă discuţie.

Schimbările în definirea sistemului valoric sunt inerente, dar rapiditatea cu care se petrec nu se corelează cu aducerea la zi a instrumentelor teoretice şi a principiilor pe baza cărora se acţionează. Acestea fac concesii

2 The NARA Document on Authenticity, „1994", https://www.icomos.org/fr/accueil-home/179-articles-en-francais/ressources/charters-and-standards/386-the-nara-document-on-authenticity-1994 (accesat în mai 2024),art. 11.

3 Council of Europe Framework Convention on the Value of Cultural Heritage for Society, „Faro, 27.X.2005," https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=0900001680083746 (accesat în mai 2024).

cerinţelor economice, democratice, utilitare, turistice etc. Vechea dispută asupra utilităţii patrimoniului, care uneori a dus la reinterpretarea semnificaţiei sau la reconfigurarea unor monumente, rămâne încă valabilă.

Recursul la model

■ Indiferent de poziţia faţă de valoarea culturală, în practica restaurării se apelează frecvent la aplicarea şabloanelor. Dacă păstrarea anvelopei monumentului istoric, cu înlocuirea compartimentării şi structurii interioare, a făcut uneori posibilă salvarea imaginii acestuia cu o doză de autenticitate, faţadismul a condus şi la aplicări mecanice. „Dacă în Londra sau Madrid se poate, de ce să nu aplicăm modelul?" este o întrebare care s-a formulat în cazul Fabricii de Ciorapi din Timişoara, care a fost parţial demolată, fără să fie luată în considerare viabilitatea spaţiilor interioare şi soliditatea structurii. Dintr-o asemenea perspectivă, intervenţia asupra clădirilor de patrimoniu, gândită într-un context larg de conservare şi transmitere a valorii culturale, îmbracă forme ale căror rezultate rămân relative.

Un alt şablon prezent în tendinţele actuale, care urmăresc accentuarea minuţioasă a fundamentării intervenţiei, este uniformizarea cerinţelor documentaţiei, fără diferenţierea acestora în funcţie de specificul monumentului şi de nevoile lucrării. Dacă chiar şi pentru rezugrăvirea unei faţade de secol XIX se cere studiu biologic, este iminentă căderea în formalism. Tocmai această lipsă de ierarhizare şi diferenţiere a valorilor şi cerinţelor de intervenţie asupra clădirilor de patrimoniu conduce treptat la aplicarea şabloanelor. Nu se răspunde problemei reale, ci se recurge la metodă.

Paradoxal, studiul istoric, atât de util fundamentării unor decizii, este adesea o piesă secundară, adăugată ulterior documentaţiei, după stabilirea unei soluţii alese aleatoriu. Diminuarea importanţei etapei de analiză face ca per ansamblu, chiar dacă există lucrări gestionate impecabil în domeniul restaurării, reabilitarea monumentelor să pericliteze ea însăşi protejarea şi punerea lor în valoare. Cum fiecare monument ridică probleme specifice, analiza trebuie să răspundă condiţiilor sale concrete, iar recursul la model e o falsă rezolvare. Ceea ce susţine demersul nu este modelul, ci principiul. Poate azi, mai acut ca în perioadele anterioare ale istoriei restaurării, reconsiderarea şi recunoaşterea principiilor după care se intervine este o necesitate. Varietatea mare şi relativitatea intervenţiilor cărora li se reproşează pierderi de valoare culturală se datorează în mare parte ambiguităţii în alegerea criteriilor de intervenţie. Poate din acest motiv se solicită în analiza existentului toate studiile posibile, chiar dacă unele dintre ele nu sunt necesare.

Există, pe de-o parte, tendinţa de a transforma monumentul într-un fel de tabu, pentru care orice fel de atingere şi modificare, chiar şi reversibilă, este socotită agresiune şi o serie de lucrări amânate sau nerealizate au drept cauză asemenea reţineri. Pe de altă parte, la polul opus, există o permisivitate şi deschidere spre semnificaţiile patrimoniale, care admit până şi reeditarea monumentului. Între aceste limite, modul de protejare efectivă a patrimoniului construit îmbracă forme foarte diverse.

Necesitatea aducerii la parametrii cerinţelor contemporane a clădirilor cu valoare istorică implică transformări. Modificările funcţionale, instalaţiile de toate tipurile, consolidarea structurilor, aspectele de confort termic sunt probleme cărora trebuie să li se găsească rezolvare. În acelaşi timp, mutaţiile prin care trece societatea, cu dezvoltare sau regres şi conflicte, se reflectă în patrimoniul construit printr-o permanentă pierdere de substanţă istorică. Se pierd detalii de faţadă, case de scară şi culoare de acces, se transformă curţi interioare, se simplifică şarpante. Uneori, sub scuza practicii larg răspândite a faţadismului, se demo-

itage and the principles of intervention cannot be neglected. The need for reconsideration and a return to solid theoretical background, and the understanding of value were mainly linked to protecting the image of the historic building and its materiality. The principle of authenticity in intervention techniques was thus defined. The principle was based on the value given by the material, the labour, volumetry, architectural design, and integration in the context. Article 5 of the 2005 Faro Convention of the Council of Europe insists on recognizing and emphasizing value in all strategies and actions to protect and promote cultural heritage.[3] But value must first be defined.

The criteria are lax and, given the assumption that the classification of a building as a historic building can protect it more effectively, the number of listed historic buildings has increased significantly in Romania. This has led to making heritage value relative. On the other hand, it has led to standardization of values and a decrease in the importance granted to the top values. The extent to which classification provides real protection is another issue for discussion.

Changes in the definition of the value system are inherent, but the speed with which they occur does not correlate with the updating of the theoretical tools and the background principles. They make concessions to economic, democratic, utilitarian, tourist, and other requirements. The old dispute over the usefulness of heritage, which has sometimes led to reinterpretation of the meaning or reconfiguration of historic buildings, is still valid.

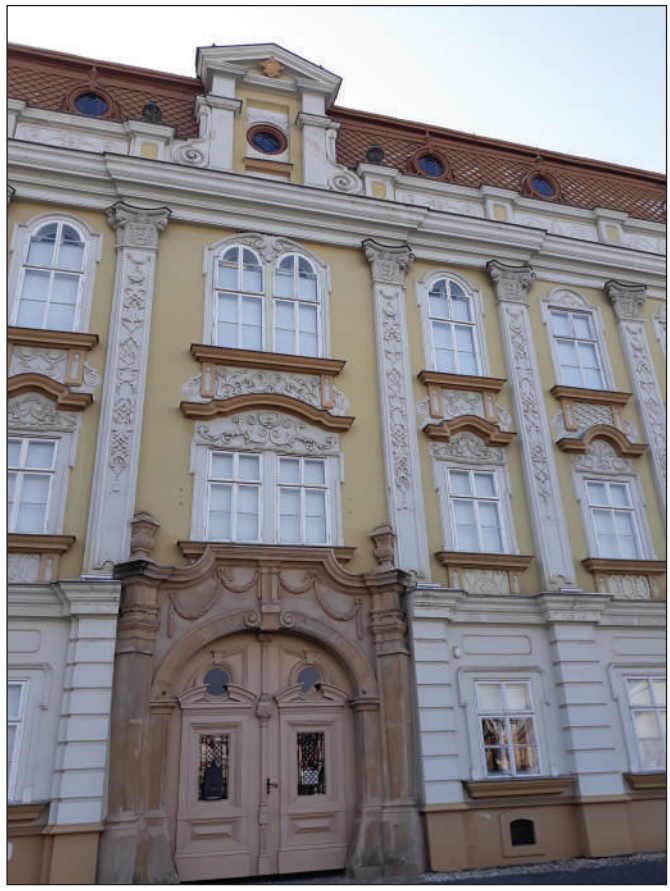
Pattern use

■ Regardless of the position on cultural value, the conservation practice frequently resorts to the use of templates. While the preservation of the historic building envelope, with the replacement of interior partitioning and structure, has sometimes made it possible to save its image with a dose of authenticity, facadism has also led to mechanical implementation. "If London or Madrid can do it, why should we not use the pattern?" is a question that has been asked in the case of the Stockings Factory in Timişoara, which was partially demolished without considering the viability of the interior spaces and the solidity of the structure. From such a perspective, intervention on heritage buildings, conceived in a broad context of conservation and transmission of cultural value, takes forms whose results remain relative.

3 Council of Europe Framework Convention on the Value of Cultural Heritage for Society, „Faro, 27.X.2005, https://rm.coe.int/CoERM-PublicCommonSearchServices/DisplayDCTMContent?documentId=0900001680083746 (accessed May, 2024).



■ ***Fig. 1.*** *Clădire cu structura în stare de colaps, Timișoara, str. Eugen de Savoia nr. 3. © Liliana ROȘIU*
■ ***Fig. 1.*** *Building with collapsed structure, Timișoara, str. Eugen de Savoia no. 3. © Liliana ROȘIU*



■ ***Fig. 2.*** *Travee cu vechea decorație reconstituită pe fațada Vechii Prefecturi. © Liliana ROȘIU*
■ ***Fig. 2.*** *Bay with old decoration reconstructed on the façade of the Old Prefecture. © Liliana ROȘIU*

Another pattern present in current trends, which aim to emphasize the thoroughness of intervention rationale, is the standardization of documentation requirements, without differentiating them according to the specificity of the historic building and the needs for the works. A fall into formalism is imminent when even a mere recoating of a 19th-century façade requires a biological assessment. It is precisely this lack of hierarchization and differentiation of the values and requirements of intervention on heritage buildings that gradually leads to using templates. The real issue is not addressed, but rather a method is used.

Paradoxically, the historical study, which is so useful for informing decisions, is often a secondary piece, added after the documentation, after a randomly chosen solution has been established. The diminished importance of the analysis stage means that, even if conservation works are impeccably managed, overall, the conservation of historic buildings is itself jeopardizing their protection and enhancement. As each building poses specific problems, the analysis must respond to its specific conditions, and using patterns is a false solution. It is not the pattern, but the principle that underpins the approach. Perhaps today, more acutely

lează deliberat structuri viabile, cărora li se păstrează faţadele sau se amână consolidările până când se ajunge la imposibilitatea recuperării altei părţi decât faţada. (Fig. 1) În alte situaţii, demolarea este camuflată sub pretenţia reabilitării. În aceste condiţii, nevoia unor principii solide, care să le aducă la zi şi să le nuanţeze pe cele recunoscute şi aplicate în practica restaurării, nu mai poate fi contestată.

Dacă în trecut prezervarea monumentelor a declanşat dezbaterile şi controversele asupra intervenţiilor din secolul al XIX-lea, păstrarea imaginii, integrităţii şi materialităţii monumentului au condus la principiul autenticităţii. În decursul timpului această normă a nuanţat modificările admise, dar condiţia menţinerii autenticităţii şi integrităţii s-a fixat suficient pentru a susţine protejarea monumentului. Şi totuşi, practica infirmă în suficiente cazuri această cerinţă. Consolidări peste nevoile reale, completări şi reconstituiri simplificate, extinderi contrastante fac parte din practica uzuală. Unele cu justificări, altele îndoielnice. În aceste condiţii, când şi ce principii ajută la luarea unei decizii cât mai benefice pentru reala protejare a valorii monumentului? Una dintre provocările cel mai des întâlnite în practica restaurării cere soluţii pentru rezolvarea elementelor dispărute ori în situaţia de a nu mai putea fi conservate. Aceasta duce la completări şi reconstituiri.

Poziții față de reconstituire

■ Din start, reconstituirea se confruntă cu ideea contrafacerii. Principiile aplicate deja se referă la acceptarea refacerii doar în circumstanţe deosebite, cu intervenţia la scurt timp după distrugere, când există sufi-

ciente date disponibile pentru o asemenea operaţie şi când este păstrată o parte din materialul autentic ce se poate recupera. În ultima vreme, pe lângă specialişti şi organisme abilitate pentru asemenea lucrări, se dovedeşte importantă şi poziţia comunităţii, chiar şi în problema reconstituirilor.

Un exemplu în acest sens este ilustrat de biserica de lemn din Corbeşti, judeţul Bihor, ridicată de la sol şi răsturnată de o tornadă în 1991. Practica reconstituirii bisericilor de lemn, cu mutare pe alt amplasament, a luat amploare în primele două decenii ale secolului XXI. La Corbeşti, comunitatea s-a împotrivit reconstituirii *in situ* a bisericii şi recuperării materialului păstrat în integralitate după răsturnarea sa. Este posibil ca pentru această decizie să fi cântărit dorinţa comunităţii de a avea o biserică nouă de zid, ridicarea unui număr mare de asemenea lăcaşuri de cult fiind un fenomen cunoscut după 1990, după cum posibilă e şi o componentă psihologică de teamă şi îndoială faţă de eficienţa unei refaceri a vechii construcţii. Rezerva comunităţii a dus la reconstituirea bisericii de lemn în incinta Mănăstirii Sfânta Cruce din Oradea, în 1994.[4]

Ce motivează totuşi o decizie de reconstituire? Dacă jumătate de secol Germania a decis păstrarea unor monumente ruinate, ca memento al războiului, poziţia s-a schimbat în ultima vreme, Frauenkirche din Dresda fiind unul dintre cele mai cunoscute exemple. Refacerea sa are în acest caz tot o conotaţie simbolică, dar în egală măsură răspunde nevoii de a corecta contextul urbanistic şi de a-i reconsidera imaginea fixată în decursul evoluţiei sale.

Motivaţii arhitectural-urbanistice

■ Decizia reconstituirii unor volume sau faţade poate avea la bază motive urbanistice sau arhitecturale. Un exemplu clasic este cel al Pieţei Unirii din Timişoara. Revenirea în anii ’80 la decoraţia de factură barocă, în relief de tencuială, a faţadei Vechii Prefecturi, în locul menţinerii faţadei clasiciste, ce a susţinut frontul sudic al pieţei mai bine de 100 de ani, are la bază ideea coerenţei arhitecturale a spaţiului pieţei cu o configuraţie urbanistică şi clădiri purtând amprenta barocului. (Fig. 2) Chiar dacă decoraţia refăcută reprezintă o etapă scurtă din istoria monumentului şi nu a fost aplicată decât pe volumul iniţial al palatului, ce ocupa doar jumătate din faţada actuală, decizia reconstituirii primului tip de ornament pe toată faţada s-a subordonat ideii de unitate compoziţională a clădirii şi de unitate stilistică a ansamblului urban.[5]

În acelaşi spaţiu, reconstituirea faţadei clădirii fostului han „Cei şapte prinţi electori” de pe frontul nordic, cu revenirea schematică la vechea arhitectură a faţadei, se înscrie în aceeaşi idee. (Fig. 3)

În alte cazuri, reconstituirea formelor sau a detaliilor pierdute are ca motivaţie considerente urbanistice legate de volumetrie, siluetă urbană, perspective din anumite unghiuri asupra unei clădiri semnificative. Un detaliu refăcut poate accentua sau scădea valoarea monumentului, dacă reconstituirea nu redă caracteristicile subtile ale elementului reeditat. Lanternoul reconstituit pe acoperişul Liceului Piarist, clădire dominantă în Piaţa Regina Maria din Timişoara, readuce volumul la imaginea iniţială, accentuând atât valoarea construcţiei, cât şi percepţia sa în lungul bulevardului Republicii. (Fig. 4)

4 Dorina ILIEŞ et al., „Geohazards Affecting Cultural Heritage Monuments. A Complex Case Study from Romania,” *GeoJournal of Tourism and Geosites* Year XIII, vol. 31, no. 3 (2020), p. 1105.

5 Liliana ROŞIU, „De la palatul preşedintelui la muzeu de artă,” în *Palatul Baroc şi colecţiile sale* (Timişoara: EST - Samuel Tastet Èditeur, 2006),14.

than in earlier periods of conservation history, the reconsideration and recognition of the intervention principles is a necessity. The great variety and relativity of the interventions that are criticized for loss of cultural value is largely due to ambiguity in the choice of intervention criteria. Perhaps for this reason all possible studies are required in the analysis of the existing situation, even if some of them are not necessary.

There is, on the one hand, a tendency to turn the historic building into a kind of taboo, for which any kind of touch and modification, even reversible, is considered an aggression. A series of delayed or unperformed works are the consequence of such reticence. On the other hand, at the opposite pole, there is a permissiveness and openness towards heritage significance that even admits the reconstruction of the historic building. Between these limits, the way in which the built heritage is actually protected takes very different forms.

The need to bring buildings of historic value up to the parameters of contemporary requirements implies transformations. Functional alterations, installations of all kinds, the strengthening of structures and thermal comfort aspects are all problems that need to be solved. At the same time, the changes that society is undergoing, with growth or decline and conflicts, are reflected in the built heritage through a permanent loss of historical substance. Facade details, staircases and access corridors are being lost, interior courtyards are being transformed, and roof structures are being simplified. Sometimes, under the guise of the widespread practice of facadism, viable structures are deliberately demolished, with their facades retained, or consolidation is delayed until the facade remains the only part that can still be preserved. (Fig. 1) In other cases, demolition is disguised as conservation. In these circumstances, the need for sound principles, bringing up to date and nuancing those recognized and applied in the conservation practice, can no longer be contested.

If in the past the preservation of historic buildings triggered debates and controversies over the 19th century interventions, the preservation of the image, integrity and materiality of the historic building led to the principle of authenticity. In the course of time this rule has nuanced the accepted modifications, but the condition of maintaining authenticity and integrity has become sufficiently fixed to support the protection of the historic building. And yet, in many cases, practice overrules this requirement. Consolidations beyond what is really needed, simplified additions and reconstructions, contrasting extensions are part of common practice. Some are justified, others doubtful. Under these circumstances, when and what principles help to make the most beneficial decision for the real protection of the historic building value? One of the challenges most

often encountered in the conservation practice is the need to find solutions for elements that have disappeared or are no longer conservable. This leads to additions and reconstructions.

Positions towards reconstruction

■ From the outset, reconstruction is confronted with the idea of forgery. The principles already applied accept remaking only in special circumstances, when intervention occurs shortly after destruction, where there are sufficient data available for such an operation and when some of the authentic material that can be recovered is preserved. In recent times, beside the specialists and bodies authorized to carry out such works, the position of the community proves to be important, even in the matter of reconstruction.

One example is the wooden church in Corbeşti, Bihor County, which was raised from the ground and toppled by a tornado in 1991. The practice of reconstructing wooden churches and moving them to another site gained momentum in the first two decades of the 21st century. In Corbeşti, the community resisted the reconstruction *in situ* of the church and the recovery of the material preserved in its entirety after its overturn. This decision may have been influenced by the community's desire to have a new masonry church, as the erection of a large number of such places of worship is a known phenomenon after 1990. A psychological component of fear and doubt about the effectiveness of reconstructing the old building is also a possibility. The reserve of the community led to the reconstruction of the wooden church in the Holy Cross Monastery of Oradea in 1994.[4]

But what motivates a decision to rebuild? While for half a century Germany decided to preserve ruined historic buildings as a reminder of the war, the position has changed recently, with the Frauenkirche in Dresden being one of the best-known examples. In this case, its restoration has a symbolic connotation as well, but it also responds to the need to correct the urban context and reconsider the image it has acquired during its development.

Architectural and urbanistic motivations

■ The decision to restore volumes or facades can be based on urban planning or architectural reasons. A classic example is Unirii Square in Timişoara. The return in the 1980s to the Baroque decoration, in raised plaster, of the façade of the Old Prefecture, instead of maintaining the classicist facade, which supported the southern front of the square for more than 100 years, is based on the idea of architec-

4 Dorina ILIEŞ et al., „Geohazards Affecting Cultural Heritage Monuments. A Complex Case Study from Romania," *GeoJournal of Tourism and Geosites* Year XIII, vol. 31, no. 3 (2020), 1105.



■ ***Fig. 3.*** *Școala Lenau, fost han „Cei șapte prinți electori". © Liliana ROȘIU*
■ ***Fig. 3.*** *Lenau School, former "The Seven Prince-Electors" inn. © Liliana ROȘIU*



■ ***Fig. 4.*** *Fostul Liceu Piarist, azi Liceul Teologic Romano-Catolic „Gerhardinum". © Liliana ROȘIU*
■ ***Fig. 4.*** *Former Piarist Highschool, today "Gerhardinum" Theological Roman-Catholic Highschool. © Liliana ROȘIU*

Tot din raţiuni urbanistice şi arhitecturale, propunerile de intervenţie asupra abatorului din Timişoara, căruia i s-a pierdut o bună parte din substanţa istorică definitorie pentru acest program de arhitectură, sau lucrările de reabilitare planificate pentru remiza de pompieri din cartierul Iosefin au în vedere reconstituiri volumetrice ale vechilor învelitori înalte ale turnurilor.[6] (Fig. 5a, b) Ceea ce motivează deciziile aici sunt considerente arhitecturale şi de ordin urbanistic ce urmăresc accentuarea întregului monument în contextul urban pe care îl influenţează şi definesc. În aceste cazuri, propunerile de reconstituire, în

6 Liliana ROŞIU şi Smaranda BICA, „The Reuse of Industrial Buildings, an Emergency for the Patrimony Protection in the Banat Region of Romania," în *Structural Analysis of Historical Constructions*, editat de Jerzy JASIŃKO (Wroclav, 2012), 2772.



■ ***Fig. 5.a.*** *Remiza de pompieri din cartierul Iosefin la începutul secolului XX. © Josef GEML, Alt-Temesvar im letzten Halbjahrhundert 1870-1920, Banat Verlag, Erding, 2010, pagina 127*
■ ***Fig. 5.a.*** *Fire station in the Iosefin district at the beginning of the 20th century. © Josef GEML, Alt-Temesvar im letzten Halbjahrhundert 1870-1920, Banat Verlag, Erding, 2010, page 127*
■ ***Fig. 5.b.*** *Remiza de pompieri din cartierul Iosefin în prezent. © Liliana ROȘIU*
■ ***Fig. 5.b.*** *Fire station in the Iosefin district at present. © Liliana ROȘIU*

care substanţa istorică nu s-a păstrat şi refacerea presupune folosirea de materiale de construcţie noi, au luat în considerare interpretarea schematică a vechilor volume.

Reconstituirea, ca metodă de protejare

■ Există un alt tip de pierdere de substanţă autentică, pentru care inclusiv poziţia specialiştilor este foarte diferită. Valul demolărilor în zone istorice a adus suficiente prejudicii coerenţei lor arhitectural-urbanistice. Este şi cazul unor clădiri din centrul istoric al Timişoarei. Aici, reconstituirea imaginii arhitecturale, chiar şi doar la nivel de volumetrie



■ ***Fig. 6.*** *Clădirea de pe str. Ungureanu nr. 2. © Liliana ROȘIU*
■ ***Fig. 6.*** *Building at str. Ungureanu no. 2. © Liliana ROȘIU*

tural coherence of the square space with an urban layout and buildings bearing a Baroque imprint. (Fig. 2) Although the restored decoration represents a short stage in the history of the building and was only applied to the original volume of the palace, which occupied only half of the current facade, the decision to restore the first type of ornament on the entire facade was based on the idea of compositional unity of the building and stylistic unity of the urban ensemble.[5]

In the same space, the restoration of the building facade of former inn "The Seven Prince-Electors" on the northern front, with a schematic return to the old architecture of the facade, is part of the same idea. (Fig. 3)

In other cases, the restoration of lost shapes or details is motivated by urban considerations related to volumetry, urban silhouette, perspectives from certain angles on a significant building. A reconstructed detail may emphasize or diminish the value of the historic building, if the reconstruction does not capture the subtle characteristics of the reworked element. The reconstructed lantern on the roof of the Piarist Highschool, a dominant building in Queen Mary Square in Timişoara, restores the volume to its original image, emphasizing both the value of the building and its perception along the Republicii Boulevard. (Fig. 4)

Also for urban and architectural reasons, the intervention proposals for the

5 Liliana ROŞIU, „De la palatul preşedintelui la muzeu de artă," in *Palatul Baroc şi colecţiile sale* (Timişoara: EST - Samuel Tastet Éditeur, 2006), 14.

slaughterhouse in Timişoara, which has lost a good part of its defining historical substance for this architectural programme, or the conservation works planned for the fire station in the Iosefin district, are based on volume restoration of the old high coverings of the towers (Fig. 5a, b)[6] The underlying reasons behind the decisions here are architectural and urban considerations that aim to emphasize the whole building in the urban context that it influences and defines. In these cases, the proposals for reconstruction, where the historical substance has not been preserved and the restoration involves the use of new building materials, have considered a schematic interpretation of the old volumes.

Reconstruction as protection method

■ There is another kind of loss of authentic substance, for which even the position of the specialists differs largely. The wave of demolitions in historic areas has done enough damage to their architectural and urban coherence. This is also the case of some buildings in the historic centre of Timişoara. Here, the reconstruction of the architectural image, even if only in terms of volume and facade treatment, has not been accepted on the grounds that "we could not allow a pastiche of the old façade". But where do we draw the line between reconstruction and pastiche?

What has emerged in the place of the building on 2 Emanuil Ungureanu Street cannot replace the qualities of the demolished building in terms of emphasis on the urban coherence of the street front, nor can it stop the tendency to deliberately destroy similar buildings. (Fig. 6) Such requirements as to restore the facades and volume shape of destroyed buildings might be a means of preventing further disappearances desired by investors in historic areas. In this sense, reconstruction could become a means to protect built heritage against the abuses of demolition and even a call for maintenance, which is sometimes deliberately neglected. (Fig. 7)

However, the problem of the pastiche did not arise in the case of the north-west lock in the 18th-century fortifications of Timişoara, whose archaeological traces were found during the construction of the City Business Centre. The advanced stage of construction of the new volumes, for which it was not possible to change the design, led to the compromise alternative. (Fig. 8a, b) The lock was reconstructed, with a reduction in the size of the component parts, on a site adjacent to the original one.

6 Liliana ROŞIU and Smaranda BICA, „The Reuse of Industrial Buildings, an Emergency for the Patrimony Protection in the Banat Region of Romania," in *Structural Analysis of Historical Constructions*, edited by Jerzy JASIŃKO (Wroclav, 2012), 2772.



■ ***Fig. 7.*** *Urme ale clădirii de pe str. Eugeniu de Savoia nr. 16. © Liliana ROȘIU*
■ ***Fig. 7.*** *Building traces at str. Eugeniu de Savoia nr. 16. © Liliana ROȘIU*

şi tratare de faţadă, nu a fost acceptată sub motivaţia „Nu putem admite o pastişă a vechii faţade". Dar unde se trasează limita între reconstituire şi pastişă?

Ceea ce a apărut în locul clădirii de pe strada Emanuil Ungureanu nr. 2 nu poate înlocui calităţile clădirii demolate, ca factor de accentuare a coerenţei urbanistice a frontului stradal şi nici nu poate opri tendinţele de distrugere cu bună ştiinţă a unor construcţii similare. (Fig. 6) Poate că impunerea reconstituirii faţadei şi volumetriei clădirilor distruse ar putea constitui un mijloc de prevenire a altor dispariţii dorite de investitori în zonele istorice. În acest sens, reconstituirea ar putea deveni un mijloc de protecţie a patrimoniului construit împotriva abuzurilor demolării şi chiar un îndemn la întreţinerea acestuia, uneori voit neglijată. (Fig. 7)

Problema pastişei nu s-a pus, în schimb, în cazul ecluzei nord-vestice din sistemul de fortificaţii de secol XVIII al Timişoarei, ale cărei urme arheologice s-au găsit cu ocazia construirii ansamblului City Business Centre. Lucrările în fază avansată de execuţie ale construcţiei noilor volume, pentru care nu a fost posibilă o modificare a proiectului, au condus la alternativa de compromis. (Fig. 8a, b) Ecluza a fost reconstituită, cu reducerea dimensiunilor elementelor componente, pe un amplasament învecinat celui iniţial.

Conservare sau reconstituire

■ Se mai ridică o problemă, cea a reconstituirilor camuflate sub semnul conservării. Principiul autenticităţii e uneori anihilat de practică. Se păstrează imaginea, mai mult sau mai puţin identică, iar materialul este de aceeaşi factură, dar elementul ce trebuie conservat este înlocuit. Motivul poate fi de natură financiară, din lipsa personalului calificat pentru conservare, din ignoranţă sau condiţionări de încadrare în termene de finalizare. Înlocuirea unor elemente din piatră la Magna Curia din Deva se încadrează în această practică.

La Timişoara, consolidarea podului Traian a antrenat înlocuirea integrală, fără vreo justificare, a elementelor de piatră şi a balustradelor



Fig. 8. *Ecluza din zona City Business Centre* ***a.*** *înainte de reconstituire,* ***b.*** *după mutarea pe noul amplasament. © Liliana ROȘIU*
Fig. 8. *Lock in the City Business Centre area* ***a****. before restoration,* ***b.*** *after relocation to the new site. © Liliana ROȘIU*

din feronerie. Acestora din urmă nu li s-au respectat formele şi dimensiunile detaliilor.[7] În asemenea cazuri, autenticitatea monumentului este serios compromisă.

Clădirii Teatrului Naţional din Timişoara, ce a suportat lucrări de reabilitare, i s-a reconstituit parţial faţada principală, revenindu-se la golurile ce flancau zona centrală. Această imagine hibrid, ce nu corespunde niciuneia dintre cele două etape majore prin care a trecut monumentul în istoria sa, nu îşi găseşte justificarea arhitecturală şi nu se poate susţine pe principiile restaurării. (Fig. 9) Dacă raţiuni urbanistice nu au făcut posibilă revenirea la faţada iniţială, această refacere parţială este cu atât mai greu de motivat.

În loc de concluzii

■ Ne întoarcem ciclic la vechile practici. Chiar dacă îşi lua mai multă libertate, prin ce diferă restaurarea în stil a secolului al XIX-lea, în fond, de practicile contemporane asemănătoare? Poate doar prin modul de a încerca justificări. În secolul XIX se experimenta căutându-se căi de abordare a intervenţiei asupra monumentelor istorice, în vreme ce azi, toată practica a aproape două secole oferă o experienţă vastă, ce favorizează aprecierea critică. A repeta etape controversate şi procedee recunoscute azi ca eronate nu mai are acum nicio justificare. Dezbaterile soldate cu un şir de carte şi convenţii încearcă toate să fundamenteze acest domeniu în permanentă redefinire şi transformare. Se dovedeşte că între teoria asumată şi practică există discrepanţe. Pentru a le diminua e nevoie de întărirea vocii specialiştilor şi de dialogul real între ei, pe de o parte şi, pe de alta, de o informare şi pregătire corectă a societăţii, care devine tot mai mult parte a procesului de protejare şi care trebuie să înţeleagă ce ar trebui să protejeze.

7 Liliana ROŞIU şi Smaranda BICA, „Architectural Elements of Old Bridges in Timişoara – a Subject of Rehabilitation," în *Structures and Architecture, Proceedings of the First International Conference on Structures and Architecture*, editat de Paulo J.S. CRUZ (Paris: Guimaraes, 2010),1200.

Conservation or reconstruction

■ Another problem is that of reconstructions camouflaged under the guise of conservation. The principle of authenticity is sometimes annihilated by practice. The image is preserved, more or less identical, and the material is of the same type, but the item to be conserved is replaced. The reason may be financial, a lack of qualified conservation staff, ignorance or deadline constraints. The replacement of some of the stone elements at the Magna Curia in Deva falls into this practice.

In Timişoara, the consolidation of the Traian bridge involved the complete replacement of the stone elements and the iron railings without justification. The shapes and dimensions of the latter were not respected.[7] In such cases, the authenticity of the monument is seriously compromised.

The building of the National Theatre in Timişoara, which has undergone conservation works, has had its main elevation partially reconstructed, returning to the openings that flanked the central area. This hybrid image, which does not correspond to either of the two major stages through which the monument has passed in its history, has no architectural justification and cannot be sustained on the principles of conservation. (Fig. 9) If urban planning reasons did not make it possible to return to the original elevation, this partial reconstruction is all the more difficult to justify.

7 Liliana ROŞIU and Smaranda BICA, „Architectural Elements of Old Bridges in Timişoara – a Subject of Rehabilitation," în *Structures and Architecture, Proceedings of the First International Conference on Structures and Architecture*, edited by Paulo J.S. CRUZ (Paris: Guimaraes, 2010), 1200.

Instead of conclusions

■ We circle back to old practices. Even if it was taking more liberty, how does 19th-century restoration in style differ in substance from similar contemporary practices? Perhaps only in the way it attempted to justify itself. In the 19th century, people were experimenting with ways of approaching the intervention on historic buildings, while today the whole practice of almost two centuries offers a vast experience that favours critical appreciation. There is no justification today for repeating controversial steps and procedures now recognized as erroneous. Debates resulting in a series of charters and conventions are all attempting to ground this field in constant redefinition and transformation. It turns out that discrepancies exist between assumed theory and practice. In order to reduce them, we need, on the one hand, to strengthen the voice of the specialists and to have a real dialogue between them and, on the other hand, to inform and properly prepare society, which is increasingly becoming part of the protection process and who needs to understand what is to be protected.

Bibliografie

■ Council of Europe Framework Convention on the Value of Cultural Heritage for Society. „Faro, 27.X.2005." https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=0900001680083746 .

■ ILIEŞ, Dorina, Camelia, CACIORA, Tudor, HERMAN, Grigore, Vasile, ILIEŞ, Alexandru, ROPA, Mădălina şi BAIAS, Ştefan. „Geohazards Affecting Cultural Heritage Monuments. A Complex Case Study from Romania." *GeoJournal of Tourism and Geosites* Year XIII, vol. 31, no. 3 (2020).

■ ROŞIU, Liliana şi Smaranda BICA. „Architectural Elements of Old Bridges in Timişoara – a Subject of Rehabilitation." În *Structures and Architecture, Proceedings of the First International Conference on Structures and Architecture*, editat de Paulo J.S. CRUZ. Paris: Guimaraes, 2010.

■ ROŞIU, Liliana şi Smaranda BICA. „The Reuse of Industrial Buildings, an Emergency for the Patrimony Protection in the Banat Region of Romania." În *Structural Analysis of Historical Constructions*, editat de Jerzy JASIŃKO. Wroclav, 2012.

■ ROŞIU, Liliana. „De la palatul preşedintelui la muzeu de artă." În *Palatul Baroc şi colecţiile sale*. Timişoara: EST - Samuel Tastet Éditeur, 2006.

■ The NARA Document on Authenticity. „1994." https://www.icomos.org/fr/accueil-home/179-articles-en-francais/ressources/charters-and-standards/386-the-nara-document-on-authenticity-1994.



Fig. 9. *Fațada principală a Teatrului Național după intervenția din 2019-2021. © Liliana ROȘIU*
Fig. 9. *Main elevation of the National Theatre after the 2019-2021 intervention. © Liliana ROȘIU*

■ FEJÉRDY Tamás[1]

Érték, védelem – érték, alkotás

■ **Kivonat:** *Az értékmegőrzés és -teremtés közötti kölcsönhatás elengedhetetlen az építészeti örökség kontextusában, és olyan kiegyensúlyozott megközelítést igényel, amely összhangba hozza a kortárs beavatkozásokat a történelmi értékekkel. Miközben az innováció keresése gyakran az újdonságra törekszik, alapvető fontosságú, hogy ez a kreativitás fokozza, ne pedig aláássa a meglévő kulturális értékeket. A történelmi kontextus és a közösségi igények alapos megértése elengedhetetlen az autentikus kreativitás előmozdításához, amely egyaránt megőrzi és gazdagítja az örökséget.*

■ **Kulcsszavak:** értékmegőrzés, értékteremtés, kulturális örökség, kreativitás, kortárs beavatkozás, történelmi városok

Bevezetés

■ Talán nem igényel hosszas bizonyítást, hogy napjainkban sokkal inkább a (hagyományos) értékek válságáról, mintsem azok megőrzéséről-védelméről esik szó, és az új értékek létrehozását, azaz az alkotást is inkább egyfajta, erőteljesen pragmatikus megközelítés jellemzi. Különösen zavarba ejtő az az ugyancsak gyakorta tapasztalható megközelítés, amely éppenséggel szembeállítja egymással a meglévő és a létrejövő-létrehozandó értéket. Például oly módon, mint ahogyan azt az Egyesült Királyságban érvényes szabályok lehetővé teszik, hogy – akár védett műemlékek esetében is – attól függhet a „megengedhető beavatkozás" mértéke, hogy a beavatkozással milyen „közösségi haszon" (public benefit) jön létre[2]. A közhasznúságnak ebben az értelmezésében viszonylagossá válhat a meglévő történeti, műemléki érték megőrzése, a közérdekből kinyilatkoztatott, jogilag védett mivoltából következő „közérdekű" védelmének elsődlegessége.

A közvetlen, haszonelvű megközelítés azonban csak egyik hátráltató-veszélyeztető tényező az értékvéde-

1 Építészmérnök, dr., műemlékvédelmi szakmérnök, az ICOMOS Magyar Nemzeti Bizottság tiszteletbeli elnöke, Budapest, Magyarország.

2 Vö.: National Planning Policy Framework – 207. 214 cikk https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf

Value and Protection – Value and Creation

■ **Abstract:** *The interplay between value preservation and creation is crucial in architectural heritage, highlighting the need for a balanced approach that harmonises contemporary interventions with historical assets. While innovation drives the quest for novelty, it is essential to ensure that creativity enhances rather than undermines existing cultural values. Understanding the historical context and community needs fosters authentic creativity in both preserving and enriching heritage.*

■ **Keywords:** value preservation, value creation, cultural heritage, creativity, contemporary intervention, historical context

Introduction

■ It may not require a lengthy argumentation to state that today there is much more discussion about the crisis of (traditional) values, rather than their preservation and protection, while the origination of new values, creation itself is determined by a strongly pragmatic approach. The quite frequently observed practice of contrasting the existing value and the value to be created is particularly bewildering. It is the case in the United Kingdom for example, where regulations allow for the extent of 'permissible interventions', even in case of protected historic buildings, to depend on the degree of 'public benefit' they would result in[2]. In this understanding of public benefit, the preservation of the existing historic or heritage value, and its legally granted priority as a public benefit to be protected might become contingent.

However, the overtly utilitarian approach is only one of the factors impeding and threatening value protection. A similar challenge is posed by the constant search for the new[3], the newer, and even the

1 Architect, PhD, certified conservator, honorary president of the ICOMOS Hungarian National Committee, Budapest, Hungary.

2 See National Planning Policy Framework, Articles 207-214, https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf.

3 The attitude of 'erasing the past completely' has not disappeared without a trace, and, unfortunately, it has been proven that this mindset is not solely characteristic of communist ideology.

newest, often accompanied by the intent to ensure that 'it must be different from what has been before'. The creation of something that 'has not existed before' is, by definition, *creation*, which requires the ability described by the very concept derived from this word: *creativity*. As a result, the existence and pursuit of 'creativity' itself seems to have become a kind of intrinsic value. Based on this, the following will explore the relationship between value protection and value creation – considering both creativity and their interrelationship.

The definition of creativity, as *'the use of imagination or original ideas to create something'*[4], indeed suggests that it is a concept associated with the origination of something new, which has never existed before. It is no coincidence then, that we often understand creativity as something that, by definition, clearly refers to the production of the new, and (though it should not be interpreted this way) holds an entirely adverse meaning to the preservation of the existing assets, to the protection of values.

By narrowing the general interpretation and focusing on the built heritage and the shaping of the built environment, it seems that, due to the previous understanding, there is an almost irreconcilable tension between value preservation and the creation of new works, creative interventions. It is evident that in case of historic buildings, built heritage values, architectural ensembles and historic cities, some form or degree of contemporary intervention(s) or creation(s) are inevitable and necessary. Acknowledging that both the preservation of values and the fulfilment of the demands for development are of fundamental importance, the duality indeed exists. However, the supposedly irreconcilable contradiction between them arises much less from the reality, rather it is the result of an unfortunate – though, sadly, widespread – misunderstanding and erroneous approach. Value protection and creative intervention implying value creation and serving development are not necessarily mutually exclusive.

The preservation of existing values is a natural necessity in historic towns[5]; the creation of new values intended to fulfil community expectations is the 'sine qua non' condition of modern life. Eventually something very similar applies to genuine historic buildings or heritage ensembles as well. Both extremes – 'freezing' a state in the name of value protection, respectively the aggressive, value-destructive interventions carried out for the sake of development under the guise of 'creating new values' – result in

4 See at http://oxforddictionaries.com/definition/english/creativity.

5 Cf.: Charter for the Conservation of Historic Towns and Urban Areas (Washington Charter), ICOMOS, 1987. In: The Book of Charters, 2nd edition – Ed.: Tamás FEJÉRDY, PhD, ICOMOS MNB 2011, p. 30.
Available at: https://www.icomos.org/images/DOCUMENTS/Charters/towns_e.pdf.

lemre nézve. Hasonló kihívást jelent a mindig újnak[3], az újabbnak, sőt: a legújabbnak a keresése, amihez egyfajta „mindenképpen más legyen, mint ami eddig volt" szándék is kapcsolódik. Az „eddig még nem volt" újnak a létrehozása értelemszerűen *alkotás=kreáció*, amelyhez éppen az ebből a szóból képzett fogalommal leírt képesség: a *kreativitás* szükségeltetik, és emiatt a „kreativitás" megléte-keresése mára már önmagában is egyfajta önértékké válni látszik. Innen kiindulva következzék alább az *értékvédelem* és az *értékalkotás* kapcsolatának a vizsgálata – a kreativitással és egymással is.

A kreativitás meghatározása – *a képzelet vagy az eredeti ötletek felhasználása valaminek a létrehozására*[4] – valóban arra utal, hogy az valami új, eddig nem volt megalkotásához kapcsolódó fogalom. Nem véletlen tehát, hogy legtöbbször a kreativitás alatt olyasmit értünk, ami definíció szerint egyértelműen új létrehozására utal, és (bár nem kellene, hogy így értsék…) csaknem szögesen ellentétes jelentéssel bír a meglévő javak megőrzésével, az értékvédelemmel szemben.

A továbbiakban az általános értelmezést leszűkítve és az épített örökség, illetve az épített környezet alakítására összpontosítva, az előzők szerinti felfogás miatt tűnik úgy, hogy csaknem feloldhatatlan feszültség mutatkozik az értékvédelem és az új alkotása: a kreatív beavatkozások között. Nyilvánvaló, hogy a műemlékek, épített örökségi értékek, építészeti együttesek s a történelmi városok esetében is elkerülhetetlen, hogy azokkal kapcsolatban – ilyen vagy olyan módon és mértékben – a (mindenkori) kortárs beavatkozás(ok)ra, alkotás(ok)ra is szükség legyen. Elismerve tehát, hogy az értékek megőrzése és a fejlődés megkívánta igények kielégítése egyaránt alapvető fontosságú, a kettősség valóban fennáll – a közöttük feloldhatatlannak beállított ellentmondás azonban sokkal kevésbé a létező valóságból fakad, mint inkább egy szerencsétlen –, ugyanakkor, sajnos, széles körben elterjedt – félreértés, téves megközelítés eredménye. Az értékvédelem és a fejlődést-fejlesztést szolgáló kreatív érték-alkotói beavatkozás ugyanis egyáltalán nem szükségszerűen zárja ki egymást.

A meglévő értékek megőrzése természetes szükségszerűség a történelmi városokban[5]; az új elemek létrehozása – a közösségek elvárásainak teljesítése érdekében – a jelenlegi élet „sine qua non feltétele". Adott esetben egészen hasonló a helyzet egyedi műemlékek vagy műemléki együttesek vonatkozásában is. Mindkét szélsőség – az értékvédelem érdekében „befagyasztott" helyzet, illetve a fejlesztések érdekében erőszakosan keresztülvitt, értékpusztítással is járó, „új értéket te-

3 A „múltat végképp eltörölni" hozzáállás egyrészt nem múlt el nyomtalanul, másrészt – sajnos – bebizonyosodott, hogy az nemcsak a kommunista ideológiára jellemző attitűd.

4 Definition of creativity: "the use of imagination or original ideas to create something"; http://oxforddictionaries.com/definition/english/creativity.

5 Vö.: Történeti városok védelmének nemzetközi kartája (Washingtoni Karta), ICOMOS 1987. In.: Karták Könyve 2. kiadás – Szerk.: Dr. Fejérdy Tamás, ICOMOS MNB 2011. p. 30.

remtő" beavatkozások – megvalósítása összességében negatív eredménnyel jár. A kiegyensúlyozott és az értékvédelmet és értékteremtést egyaránt szolgáló – igen nagy valószínűséggel egy, korábban soha nem volt megoldás kidolgozása és megvalósítása igényli a legmagasabb szintű értékalkotó tevékenységet. Azaz a kreativitás nem korlátozódhat csak az új beavatkozásokra, hanem nagy szükség van rá a már meglévő (kulturális) örökségi javak harmonikusabb és megfelelőbb védelmének és használásának biztosítása érdekében is[6].

Folytonosság – „megtestesült kreativitás"

■ Azok a ma már kulturális örökségi értékként elismert javak, amelyeket az elődeink kreativitása hozott létre, a jelen nézőpontjából nyilvánvaló módon nem tekinthetők „újító" értelemben kreatív alkotásoknak, még ha a saját korukban azok is voltak. Érdemes azonban analógiaként a meglévő történelmi épületek energiahatékonyságára tekinteni: az úgynevezett megtestesült (beépített) energia[7], amelyet szintén figyelembe kell venni, mint egyfajta „bezárt" energiát, amikor egy-egy történeti épület energiahatékonysági kérdéseivel foglalkozunk.

Azaz, ahhoz hasonlóan: a múltbeli cselekedetek és eredmények „megtestesült kreativitása" még mindig jelen van számunkra, nevezetesen a történelmi helyszínek, épületek stb. értékeibe zárva. Ez pedig olyan érték, amelynek elvesztésével jelentősen szegényebbekké válnának a közösségek, végső soron az emberiség. Érthető tehát, hogy az UNESCO Világörökségi Egyezménye alkalmazásakor, a „kiemelkedő egyetemes érték"-et (KEÉ) vizsgálva, azt a környezetükből adódó természeti és társadalmi kihívásokra adott, kreatív válaszok, azok milyensége alapján állapítják meg, hogy adott örökségi javak valóban megfelelnek-e a kritériumoknak[8].

A megtestesült kreativitás által kínált tanulságok – mint inspirációs forrás! – a jelenlegi generáció számára is rendelkezésre állnak: az épített környezetben materializálódnak, mint minden új beavatkozás számára már adott „környezetben".

Folyamatosság, folytatólagosság

■ A történelmi városok meghatározásuk szerint általában hosszabb idő alatt alakultak ki, évszázadok/korszakok különböző változásai és változó kihívásai által

6 Vö.: Velencei Karta 5. cikk – In: Karták Könyve 2. kiadás (lásd: 4. lábjegyzetnél).

7 Vagy „embodied carbon" – vö.: A Historic England ezzel kapcsolatos vizsgálati jelentése (pl. a 3.7 fejezete) https://historicengland.org.uk/research/results/reports/7955/Performanceandenergyefficiencyoftraditionalbuildings_GapAnalysisUpdate2020 - megtekintve 2024. április.

8 Jukka JOKILEHTO (1938–2023) egy előadásában éppen abban látta a KEÉ elismerhetőségét, hogy milyen mértékben kreatív a környezeti kihívásokra adott, a világörökségi elismerésre felterjesztett alkotás mint humán válasz.

negative outcome overall. A balanced approach, one that serves both value preservation and value creation, most likely requires developing and implementing a solution that has never existed before, demanding the highest level of creative activity. In other words, creativity should not be limited to new interventions alone; it is also greatly needed to ensure a more harmonious and appropriate protection and utilization of existing (cultural) heritage assets.[6]

Continuity – 'Embodied Creativity'

■ The assets recognised today as cultural heritage, produced from the creativity of our ancestors, cannot, evidently, be viewed from the present perspective as 'innovative' creative works, even if they were innovative at the time of their creation. However, it is worth considering an analogy with the energy efficiency of existing historic buildings: the so-called 'embodied energy'[7], – a form of 'enclosed' energy – must be also taken into account when examining the energy efficiency issues related to a historic building. Similarly, the 'embodied creativity' of past actions and achievements remains present for us, encapsulated in the values of historic sites, buildings and so forth. This is a value whose loss would significantly impoverish communities, or ultimately humanity. It is perspicuous that when applying the UNESCO World Heritage Convention, the 'outstanding universal value' is established as the creative response to the natural and social challenges of the environment, as the quality of such response, and whether ensuing given heritage asset truly meets these criteria[8].

The lessons offered by embodied creativity – as sources of inspiration – are available to the present generation is well: they materialise in the built environment, which serves as the 'environment' already present for any new intervention.

Continuity, Persistence

■ Historical cities, by definition, generally developed over extended periods, shaped by different changes and various challenges across centuries

6 Cf.: Venice Charter, Article 5 – In: The Book of Charters, 2nd edition (see: footnote 4).
See at https://www.icomos.org/en/participer/179-articles-en-francais/ressources/charters-and-standards/157-thevenice-charter.

7 Or 'embodied carbon' – cf.: Historic England's related investigation report (i.e. Chapter 3.7). https://historicengland.org.uk/research/results/reports/7955/Performanceandenergyefficiencyoftraditionalbuildings_GapAnalysisUpdate2020 - accessed April 2024.

8 Jukka JOKILEHTO (1938-2023) in one of his lectures, saw the recognition of outstanding universal value as being based on the extent to which a work, nominated for World Heritage status, creatively responds to environmental challenges as a human response.

and eras. With all due differences, the same holds true for historic buildings and heritage ensembles as well. The result of successive interventions and interactions is a form of continuity between the previously existing elements and the 'new additions'. This continuity plays a fundamental role as a factor that carries the identity of these cities and their living (thus changing) communities. In fact, continuity is one of the pillars of community (and personal) resilience.[9]

Creativity

■ Creativity has always been present in human activities over the centuries, in the sense that it involves the creation and introduction of something new. However this has not always occurred at the same level or with the same intensity. This does not necessarily mean that creativity must always result in the creation of something entirely unprecedented. It is important to state clearly that, in most cases, creativity has involved the '*creative adaptation*' of solutions or approaches developed elsewhere to put it more clearly: responding to challenges always requires creativity, but not necessarily in the form of solutions independent of or different from the existing basis and the historical-contextual conditions. Instead, it may also involve the imaginative application of established 'best practices' from other contexts. The most important feature when assessing the efficiency of a creative intervention, is the extent to which the 'creative response' can be both adaptive and innovative, while also producing a measurable added value. Regarding historic cities and buildings, this added value most often allows for a better understanding and a more efficient and proper use of the accumulated values expressing the continuity of the lives of the communities. When considering value preservation, this implies that it is achieved not by preserving the static condition of our assets, but rather by integrating them in an evolving process. *Evolution* is not in conflict with *continuity*; rather it can be and it is closely linked with the concept of sustainability. A 'highly creative' development driven by abrupt changes, essentially a revolutionary approach, often diverges from the continuous, or at least continuity-seeking, perspective of evolution, particularly in the context of historical and cultural heritage values, where it tends to have negative impacts. While acknowledging that 'leaps' (akin to mutations) could have occurred and did occur in the evolution of historic

9 FEJÉRDY, Tamás (2015). 'Cultural Heritage as a Basis for Resilience' [in:] Ferenc MISZLIVETZ & Al.: Creative Cities and Sustainability. ISES Book Series, Savaria University Press, Szombathely, 77-85.

áthatva – és, a szükséges változtatásokkal, az esetek többségében ugyanez áll fenn az egyes műemlékek, műemléki együttesek vonatkozásában is.

Az egymást követő beavatkozások és kölcsönhatások eredménye a korábban létező, majd az „új kiegészítések" között egyfajta folytonosságot képez. A folytonosság alapvető szerepet játszik e városok és élő (ezért változó) közösségeik identitását hordozó tényezőként – valójában az egyik meghatározó jelentőségű alapja a közösségi (és személyi) rezilienciának.[9]

Kreativitás

■ Az emberi tevékenységben a kreativitás abban az értelemben (is) mindig is jelen volt az évszázadok során, amely szerint valami újnak a létrehozása, bevezetése az eredménye, de nem mindig ugyanazon a szinten és nem ugyanolyan intenzitással. Ez azonban nem azonos, nem kell azonosnak lennie azzal, hogy mindig valamilyen eddig még soha nem volt alkotást hoz létre! Világosan ki kell mondani, hogy a kreativitás az esetek többségében a máshol született vagy kifejlesztett megoldások vagy megközelítések *„kreatív adaptációját"* jelentette. Pontosabban megfogalmazva: a kihívásokra való válaszadás mindig kreativitást igényel, de nem minden esetben a meglévő alaptól, történeti-környezeti adottságoktól független vagy eltérő megoldásokat, másrészt lehet máshol bevált „jó gyakorlat" alkotó módon átformált alkalmazása is.

A kreatív beavatkozás hatékonyságának mérésében a legfontosabb jellemzőnek az tekinthető, hogy az a bizonyos „kreatív válasz" milyen szinten lehet adaptív és mégis újító, valamint hogy valóban mérhető, hozzáadott értéket teremt. A történelmi városok, műemlékek esetében ez a hozzáadott érték a legtöbb esetben a közösségek életének folytonosságát kifejező, koncentráltan felhalmozott értékek jobb megértésének, jobb és méltóbb használásának lehetőségét teremti meg.

Az értékvédelemre gondolva, ez azt is jelenti, hogy az nem a javak statikus helyzetének megtartásával, hanem inkább egy fejlődő folyamatba illesztve valósul meg. A *fejlődő* jelleg nem áll ellentétben a *folyamatossággal*, viszont erőteljesen összekapcsolódhat, összekapcsolódik a fenntarthatóság kérdésével. Az éles váltásokkal elgondolt, „nagyon kreatív" fejlesztés, mint a fejlődés előmozdítója, mint egyfajta revolúciós megközelítés, a történeti-kulturális örökségi értékek esetében különösen is (és legtöbbször nem pozitív hatással járó módon) eltér az evolúcióval járó változások folyamatos, de legalábbis a folytatólagosságot kereső szemléletétől. Nem tagadva, hogy lehettek s voltak is „ugrások" (mintegy mutációk) a történeti örökség kialakulásának

9 FEJÉRDY, Tamás (2015). "Cultural Heritage as a Basis for Resilience" [in:] Ferenc MISZLIVETZ & Al.: Creative Cities and Sustainability. ISES Book Series, Savaria University Press, Szombathely, 77–85.

folyamatában,[10] általánosabb az a helyzet, amelyben, hagyományosan, az adott közösségek és az általuk uralt földdarabok erőforrás-feltételei által meghatározott körülmények között az alkotások egymásra épülő rétegeikben is fenntarthatóak maradtak. Az (időben és térben) egymás után felmerülő kihívásokra adott „kreatív válaszok" felhalmozódása általában gazdag, többrétegű örökséget eredményezett.

Kreativitás és globalizáció

■ Fontos kiemelni, hogy a – több rétegben kialakult – örökség nem csupán „eredmény", hanem előretekintően is a kreativitás inspirációs forrása, ezért annak is kell tekinteni. Ezzel pedig valamennyire „helyhez is kötődik", a meglévő értékekkel kapcsolatos, azokból forrásozó vagy azokra épülő új értékteremtés. Adódik tehát egy megválaszolandó kérdés: hogyan lehet különbséget tenni a valódi kreativitás és a „világszerte elismert", úgynevezett kreatív, de inkább csak divatos beavatkozás egyszerű ismétlése között?

Ismert jelenség ugyanis, hogy a globalizálódó világban könnyen előfordul egy különleges beavatkozás „importálása"; a széles körben elismert és ünnepelt példák a kreativitás kifejeződéseiként és „összetéveszthetetlen jeleiként" csábítják a döntéshozókat az ilyen nagyon új(szerű) megoldások utánzására. A kreativitás ilyen értelmezésének köszönhetően szinte az egész világon megtalálhatjuk számos „starchitecte", azaz nagyon híres sztárépítésznek a munkáit. És bár az építészeknek általában nem áll szándékukban másolatot készíteni a már megvalósult műveikről, éppen ellenkezőleg, megpróbálnak kreatívan alkalmazkodni a helyhez, az esetek nagy többségében ezek az importált és „beültetett" alkotások inkább feszültségeket és ellentéteket eredményeznek, mintsem a meglévő, építészeti örökségben gazdag környezet fejlődő folytonosságát szolgálnák. Valószínűleg közhelyes, de mégis megkockáztatható annak a kijelentése, hogy *nincsenek a kreativitásnak globálisan érvényes megnyilvánulásai*. A sikeres és fenntartható kreatív beavatkozásoknak egy adott helyen vagy helyszínen, egy adott környezetben kell gyökerezniük – fizikai és társadalmi értelemben egyaránt.

10 A kontrasztos beavatkozások kihívást jelentő eszközének használata nem zárható ki teljesen, de mindig gondosan meg kell indokolni. Ha ennek lehetséges pozitív hatását keressük, utalhatunk a mutáció biológiai jelenségére, amely különleges szerepet játszik az evolúció folyamatában. Annak érdekében, hogy a fajok sikeresebbek legyenek a környezeti kihívásokhoz való alkalmazkodás legmagasabb fokú képességének teljesítésében, a mutáció eredményeként létrejövő ugrásszerű változások pozitív ösztönzést jelentenek a fajok fejlődése szempontjából. Természetesen nem csak pozitív tulajdonságok vannak, és ha a mutáció káros, ennek következtében a faj akár ki is pusztulhatott – hasonlóan a kontrasztos beavatkozásokhoz, ha bebizonyosodik, hogy káros... egy adott örökségi érték, helyszín identitása is „kihal", vagy legalábbis egy megállapított veszély fenyegeti.

heritage,[10] it is more common that, traditionally, creations have remained sustainable within the conditions determined by the resources available to the communities and the lands they inhabited, with each layer building upon the previous one. The accumulation of the 'creative responses' to successive challenges (in both time and space) has generally resulted in a rich and multi-layered heritage.

Creativity and Globalisation

■ It is important to highlight that heritage, in its subsequently built-up layers, is not merely an 'outcome', but also a forward-looking source of inspiration for creativity, and should be regarded as such. Thus, it is also 'grounded into locality' to a certain extent, linked to existing values, used as a resource and basis to produce new values. This raises a crucial question: how can we distinguish between genuine creativity and the mere repetition of so-called 'creative' but predominantly fashionable interventions that are globally recognised?'

It is a well-known phenomenon that in a globalising world, the 'importation' of a distinctive intervention can easily occur; widely recognised and celebrated examples of creativity, seen as 'unmistakable markers', often tempt decision-makers to mimic these novel solutions. Due to such interpretations of creativity, the works of numerous 'starchitects' – highly famous architects – can be found all around the world. While architects generally do not intend to replicate their previous works – in fact, they often strive to creatively adapt to the local context – these imported and 'transplanted' works, in most cases, tend to generate tensions and conflicts rather than contributing to the evolving continuity of the existing environment determined by a unique, rich built heritage. It might be a cliché, but it is still worth stating that *creativity has no globally legitimate manifestations*. Successful and sustainable creative interventions must be rooted in a specific place or setting – both in a physical and social sense.

10 Interventions resulting in contrasts cannot be excluded entirely from the range of challenging tools, but these always have to be carefully justified. When thinking about the eventual positive impact, one might draw an analogy to the biological phenomenon of mutation, which plays a significant role in the process of evolution. In order for species to achieve the highest degree of adaptability to environmental challenges, the abrupt changes brought about by mutation provide a positive impetus for the development of the species. Of course, not all mutations yield beneficial results; if a mutation is detrimental, it can lead to the extinction of the species. In a similar manner, contrasting interventions, if proven harmful, may cause the 'extinction' of a particular heritage site's identity, or at the very least, expose it to significant risk.

Regarding Contrast

■ The everyday life of communities and the improvement (or even the maintenance) of quality of life often require creative interventions, which always produce new or added value. These interventions emphasise existing values, and enhance the attractiveness of the location by adding something new. Such intention to emphasise is not foreign to those engaged in heritage preservation either, since they might aim for creating contexts through their interventions, which allow for a better and more impactful presence of heritage values. Therefore, the restoration, repurposing, and rehabilitation of historic buildings and heritage ensembles often requires as much, if not more, creativity than the creation of a 'greenfield, new wonder complex'. This value-preserving creativity is not only a quality-based, continuity-ensuring tool or a specialised approach, but also an endeavour to harmonize surprisingly new – and therefore often highly contrasting – tools and features. However, harmonisation is by no means synonymous with blending or conflating elements. When addressing 'contrasting creativity', it is useful to clarify that the use of contrast, in itself, is neither inherently good nor bad – much like 'change'.[11] This is equally true regarding historic environments and buildings! 'Change' and 'contrast' or 'contrasting new' are regarded 'by definition' as good and valuable, subsequently are quite often referred to as synonyms of 'creativity'. Creating contrast can indeed serve as a powerful tool for highlighting or emphasising the existing values of (built) heritage. Such use of contrast requires the highest level of creativity and responsible artistic judgement. In particular, the use of highly contrasting interventions or solutions in relation to existing values can lead to situations in which those values are, in fact, compromised. The negative impact is most evident in the case of historic cityscapes or the surroundings of historic buildings, where it is manifested trough the disruption of visual integrity or the alteration of scale, resulting in valuable historic elements being relegated to a secondary position.[12] It is rather unfortunate that although the negative effects of such new works are difficult – or even impossible – to deny, they are often highly praised in the name of bold artistic spirit and 'creativity', when in fact, they are proofs of a certain 'compulsive creativity'. Such 'new value creation' typically occurs under the pretext of 'modernization' or adaptation to contemporary human needs and demands, but in reality, they often merely reflect fashionable political will. This global phenomenon, almost 'epidemic' in nature, is characterised by the

11 'Change' is often represented as inherently positive and desirable outcome; however it is by no means guaranteed that such change will not be detrimental.

12 A classic example are the high-rise buildings constructed in the surroundings of the London Tower…

A kontrasztról

■ A közösségek élete, az életminőség szintjének emelése (gyakorta még csak a szinten tartása is) kreatív beavatkozásokat igényel, amelyek mindig új/többletértéket teremtenek, kiemelve a meglévőt és az új hozzáadásával növelve a helyszín vonzerejét. Az ilyen kiemelési szándék valójában nem idegen a meglévő értékekkel foglalkozók számára sem, hiszen céljuk lehet, hogy beavatkozásaikkal olyan helyzetet hozzanak létre, amely elősegíti az örökségi javak jobb, hatásosabb érvényesülését. A műemlék-helyreállítások, -újrahasznosítások, műemléki együttesek rehabilitációja éppen ezért az esetek nagy többségében ugyanakkora, ha nem még nagyobb kreativitást igényel, mint valamely „zöldmezős, új csoda-komplexum" létrehozása. Ez az értékőrző kreativitás nem csupán a minőségalapú, folyamatosságot biztosító eszköz vagy speciális megközelítés, hanem a meglepően új – ezért sok esetben erősen ellentétes – eszközök, jellemzők harmonizálására irányuló törekvés is. A harmonizálás azonban egyáltalán nem azonos az összemosással – a „kontrasztos kreativitásról" szólva hasznosnak tűnik kijelenteni, hogy a kontraszt alkalmazása önmagában sem nem jó, sem nem rossz – csakúgy, mint a „változás".[11] És ez a történeti környezetben, műemlékek esetében is így van! A „változást" és a „kontrasztot" vagy „kontrasztos újat" „definíció szerint" jónak és értékesnek tekintik, nevezetesen elég gyakran úgy használják, mintha a „kreativitás" szinonimái lennének. A kontraszt létrehozása hatékony eszközként használható az (épített) örökség meglévő értékeinek kiemelésére vagy hangsúlyozására. A kontraszt eszközének ilyen módon történő használata a kreativitás, a felelős alkotói magatartás legmagasabb minőségi szintjét igényli. Különösen az erősen kontrasztos beavatkozások vagy megoldások alkalmazása a meglévő értékek vonatkozásában olyan helyzethez vezethet, amelyben azok valójában hátrányos helyzetbe kerülnek.

A negatív hatás leginkább a történelmi városkép, illetve műemlék környezete esetében a vizuális integritás sérülésén vagy a lépték megváltoztatásán keresztül valósul meg, és ezzel a meglévő (értékes) történelmi elemek másodlagos helyre kerülnek.[12] Eléggé sajnálatos, hogy az ilyen új alkotásokat, amelyek negatív hatását nehéz lenne – nem is lehet – eltagadni, általában nagyra értékelik a bátor alkotói szellem, a „kreativitás" nevében, de ezek valójában inkább egyfajta „kényszerkreativitás" tanúbizonyságai. Az ilyen „új értékteremtés" általában a „modernizáció" vagy az emberek kortárs igényeihez és szükségleteihez való alkalmazkodásra való hivatkozás nevében történik, de a valóságban ezek csak a divatos politikai akarat kifejeződései.

11 A „változást" gyakorta már önmagában is jó, elérendő dolognak szokás beállítani, holott az egyáltalán nem biztosított, hogy nem lehetne akár káros is.

12 Klasszikus példa a Londoni Tower környezetében épült magasházak esete…

Ennek a világméretű jelenségnek csaknem „járványszerű” jellemzője a történelmi városokon belül vagy legalábbis azok látványát zavaró közelségben épített magasházak, felhőkarcolók elszaporodása.[13] Nem arról van szó, hogy – ahogyan már említettük – a kontrasztalkalmazás teljesen kizárt a meglévő értékek védelmére gondolva. Olyasmire kell gondolni, hogy a megfelelően alkalmazott kontrasztos beavatkozás egy meglévő örökségi környezetben úgy működhet, mint a barokk idők híres festői által használt, látszólag könnyeden, valójában azonban hatalmas tehetséggel és beleérzéssel „odapöttyintett” fényes-fehér kiemelések.

A második világháború pusztításai nyomán a történeti városi együttesekben keletkezett hiányokat pótló, úgynevezett foghíjbeépítések esetében az új kiegészítések és a meglévő elemek közötti kontraszt kreatív és megfelelő (nem elidegenítő!) alkalmazása az egyik, alighanem mással nem is nagyon helyettesíthető eszköz a meglévő értékek tiszteletteljes kezelése és a későbbi, építészeti alkotások hitelességének biztosítása szempontjából.[14]

Új alkotások, kreativitás – történeti értékek közegében

■ A kreatív megközelítés, a kreativitás kiemelkedő potenciállal rendelkezik, de mindig felelősséggel is jár; a kreativitás soha nem létezik légüres térben, kapcsolatok nélkül. A kreativitásnak támaszkodnia kell, alapozódnia a szélesebb körű tudás szilárd alapjára, ugyanakkor meg kell őriznie az innovációban rejlő „szabadságát” és a minőségi gondolkodás legmagasabb szintű törekvéseit.

A kreativitás hasonlóságot mutat a szürrealizmussal az irodalomban és a festészetben, ahogy SZERB Antal idézi APOLLINAIRE Guillaume magyarázatát e stílus képeiről: „Az ember a járást akarta utánozni, és feltalálta a kereket, ami egyáltalán nem hasonlítható a lábhoz”. A meglévő és ismertből kiindulva valami „eredeti és szokatlan” alkotáshoz jutni, ahogy a kreativitás már idézett definíciója mondja.

A különleges tulajdonságú helyek, amelyek az inspiráció forrásai és a folytonosságot támogató/erősítő kezdeményezések, kivétel nélkül többrétegűek mind fizikai létezésükben, mind (társadalmi) funkcióikban, beleértve az értékek felismerésére nyitott, a környezetre jellemző szellemiséget. Ez a kreativitás fő forrása és

13 A nemrég felépített dél-budai (120 + 23 = 143 méter) magas irodaház, bár a budapesti világörökségi helyszínen és annak a védőzónáján is kívül helyezkedik el, látványával szinte minden nézetből zavaró hatású.

14 Tanulságos eset a Budai Várnegyed (polgárváros) esetében lefolytatott vita, amelynek eredményeként elvetették a semleges – „nikotex” – építészeti megközelítést, teret engedve az akkori kortárs (azaz a modern) építészeti beavatkozásoknak. A legjobb ilyen alkotások ma már védendő értékként bizonyítják, hogy megfelelő mértékben „adagolt” kontraszt paradox módon harmonizálhat is a történeti környezettel.

proliferation of high-rise buildings and skyscrapers built within historic centres, or at least in disruptive proximity to their visual surroundings.[13] It is not to say that – as mentioned earlier – the use of contrast should be entirely excluded when considering the protection of existing values. It is rather to say that appropriately applied contrasting interventions in a heritage environment can function like the seemingly effortless yet masterfully executed bright white highlights used by renowned Baroque painters, added with great talent and sensitivity.

In the aftermath of the destruction caused by the Second World War, the so-called infill developments that sought to fill gaps within historic urban ensembles represent a key opportunity for the creative and appropriate (non-alienating) use of contrast between new additions and existing elements. This approach is likely one of the few, if not irreplaceable, methods for respectfully managing existing values while ensuring the authenticity of future architectural works.[14]

New Creations, Creativity – Within the Context of Historic Values

■ Creative approach, and creativity itself, holds tremendous potential, but it always implies responsibility; creativity never exists in a vacuum, disconnected from its context. Creativity has to rely on and be grounded in a solid foundation of a broader knowledge, while still preserving its ‘freedom’ for innovation and striving for the highest standards of quality thinking.

Creativity bears a resemblance to surrealism in literature and painting, just as Antal SZERB quotes the explanation of Guillaume APOLLINAIRE regarding the images of surrealism: ‘Man sought to imitate walking, and invented the wheel, which bears no resemblance to the foot at all’. Starting from the existing and familiar, one arrives at something ‘original and unusual’, as the quoted definition of creativity explains.

Places with special qualities, that serve as sources of inspiration and foster initiatives supporting/consolidating continuity are, without exception, multi-layered – both in their physical existence and in their (social) functions, including an openness to rec-

13 The recently completed high-rise office building in South Buda (120+23= 143 metres), though it is located outside the Budapest World Heritage site and its protection zone, its visual impact is disruptive from almost every vantage point.

14 A notable case is the debate regarding the Buda Castle District (the Bürgerstadt), which ultimately resulted in giving up a neutral architectural approach, often referred to as ‘Nikotex’, allowing for contemporary architectural interventions to take precedence. Today, the best examples of such works stand as protected values, proving that a contrast of a proper ‘dosage’ paradoxically can be aligned to its historic environment.

ognising values and the spirit unique to their environment. This forms the main source and foundation of creativity, which is equally capable of preserving existing values while creating and embracing new ones. In this approach, acknowledging, respecting and maintaining continuity is necessary, but not solely for the preservation, reuse and repurposing of the heritage.

It is therefore entirely erroneous, though unfortunately not uncommon, to adopt the approach that distinguishes between 'creative architects' and 'heritage specialists'. Conservation and rehabilitation efforts often require exceptional creativity, artistic imagination, and innovation to develop appropriate solutions that ensure both preservation and the fulfilment of contemporary needs - whether they be functional or aesthetic.

Closing Remarks

■ The duality of value preservation and value creation, alongside the unique approach to creativity in relation to historical and heritage assets, must always be guided by the inherent qualities of the existing values and their identity, which must be recognised and respected. Therefore, certain boundaries, identified as the defining, inherent characteristics of a heritage asset, should never be crossed by imposing forced and adverse interventions – such as introducing 'imported patterns' – merely to demonstrate how open a place or community is to fashionable, so-called 'creative'. In most cases there is no real need to align with some sort of 'mainstream' intervention trend, which, although seemingly current, appears short-lived. Heritage sites are particularly privileged places, endowed with sufficient 'built-in creativity' 'accumulated' through the values inherited from their past. These values serve as sources of inspiration, providing nourishment for present and future creations as well. They possess enough openness and flexibility to renew themselves and to provide a creative environment for their communities – whether to residents, visitors or other 'users'. It is widely accepted that our era is strongly determined by the increasing importance of connections and network issues. Thus, it is to be mentioned also that heritage assets do not exist in a vacuum, which also means that their 'creative capacities and opportunities' are significantly influenced – either strengthened or limited –by the abilities and qualities of their immediate and broader surroundings. The complementarity and competitiveness of neighbouring communities (for example by creating clusters) must also be explored and leveraged in order to create and sustain mutual benefits for both the preservation of existing values and the creation of new ones.

alapja, amely egyaránt képes a meglévő értékek megőrzésére, valamint újak létrehozására és elfogadására. Ebben a megközelítésben a folytonosság felismerése, tiszteletben tartása és fenntartása szükségszerű, de nem csak az örökség megőrzése és újrafelhasználása-újrahasznosítása érdekében.

Teljesen téves tehát az a, sajnos, nemritkán hangoztatott megközelítés, amely szerint vannak a „kreatív építészek" és a „műemlékesek". A helyreállítás, restaurálás során gyakran rendkívüli kreativitásra, alkotói fantáziára és innovációra van szükség a megfelelő megoldások kidolgozásában, hogy egyszerre biztosítsák a megőrzést és a kortárs igények (legyenek azok használatiak vagy esztétikaiak) kielégítését.

Záró megjegyzés

■ Az értékmegőrzés és értékalkotás kettőssége, a kreativitás különleges megközelítése a történeti, örökségi javak vonatkozásában mindig a meglévő értékek, az identitásuk azon tulajdonságai alapján kell, hogy történjen, amelyeket fel kell ismerni és tiszteletben kell tartani. Ezért bizonyos határvonalakat, amelyeket az adott örökségi érték meghatározó, immanens tulajdonságaiként azonosítottak, soha nem szabad átlépni erőltetett, ellentétes beavatkozásokkal – például „importált minták" bevezetésével, csak azért, hogy megmutassák, hogy az adott hely/közösség mennyire nyitott divatos, ilyen értelemben vett „kreatív" változások befogadására.

Az esetek nagy többségében valójában nincs is igazán szükség arra, hogy valamiféle „fősodor" ihlette, de rövid távúnak tűnő, aktuális beavatkozási divathoz csatlakozzanak, mert az örökségi helyszínek: különösen kedvezményezett helyek, amelyek a múltjukból származó értékekben „elraktározott", elegendő, „beépített kreativitás" felhalmozásával rendelkeznek, amelyek – az inspiráció forrásaként – a jelen és a jövő alkotásainak is táplálékául szolgálnak. Elég nyitottsággal és rugalmassággal rendelkeznek ahhoz, hogy megújuljanak, és kreatív környezetet nyújtsanak közösségeiknek – a lakosoknak, odalátogatóknak és egyéb „felhasználóinak".

Széles körben elfogadott, hogy korunkat erősen jellemzi a mindenféle kapcsolatok és hálózati kérdések növekvő fontossága. Ezért azt is meg kell említeni, hogy az örökségi javak természetesen nem léteznek légüres térben, ami azt jelenti, hogy „kreatív képességeiket és lehetőségeiket" nagymértékben befolyásolják – erősítik vagy korlátozzák – a közeli és távoli környezetük képességei és tulajdonságai. A szomszédos közösségek komplementaritását és versenyképességét (pl. klaszterek létrehozása) is fel kell tárni és ki kell használni annak érdekében, hogy az értékek megőrzése és az új értékek létrehozása számára egyaránt kölcsönös előnyöket teremtsünk és tartsunk fenn.

■ Andreea-Paraschiva MILEA[1]

Viața fortificațiilor în evoluția orașelor. Exemplificări transilvănene

The Life of Fortifications in Urban Evolution. Transylvanian Examples

■ **Rezumat:** *Pornind de la prezentarea modelului european de formare, evoluţie, alterare şi eventuală supravieţuire a structurilor fortificaţiilor în peisajul urban, lucrarea explorează valabilitatea acestui model în cazul a trei dintre oraşele importante transilvănene: Braşov, Cluj şi Sibiu. Deşi rostul iniţial al acestor structuri este de mult timp perimat şi chiar dacă unele dintre acestea au fost demolate, prezenţa lor persistă în diferite forme în devenirea oraşelor pentru care au fost construite.*

■ **Cuvinte cheie:** fortificaţii urbane, compoziţie urbană, evoluţie urbană, istorie urbană, Transilvania, Braşov, Cluj, Sibiu

■ Am putea privi fortificaţiile oraşelor ca pe animale fantastice, adesea adormite, ale structurii urbane. Ele aparţin unor timpuri îndepărtate, nu întru totul descifrate, iar alcătuirea lor specializată pentru un program care nu ne este familiar păstrează necunoscute. Dacă arhitectura *concepută* a fortificaţiilor a ţinut întotdeauna pasul cu tehnica militară a timpului său, totuşi, arhitectura *construită* a fortificaţiilor, presupunând amenajări şi structuri elaborate a căror realizare dura ani şi ani de zile, a fost adesea cu un pas în urmă. Nu de puţine ori, momentul încheierii construcţiei fortificaţiilor a coincis cu momentul în care acestea au devenit irelevante scopului pentru care au fost construite. Lucrarea de faţă îşi propune schiţarea unei discuţii despre relevanţa în timp a învechitelor, uneori chiar dispărutelor fortificaţii pentru viaţa oraşului.

Interesul lucrării se fixează asupra fortificaţiilor urbane, întrucât acestea, spre deosebire de cele extraurbane, nu vizează doar crearea unor incinte concentrate relativ strâns în jurul vreunui obiectiv semnificativ (cum ar fi biserica), ci urmăresc, din stadiile lor timpurii, protejarea porţiunilor semnificative ale aşezării cu toată diversitatea programatică a conţinutului lor. Din acest motiv, existenţa lor este una dinamică, asemenea oraşului, aducând transformări, crearea de noi incinte, abandon, demolare, reconversie, restructurare. Existenţa fortificaţiilor îşi pune amprenta asupra evoluţiei ulterioare a oraşului, la fel cum evoluţia oraşului va avea un efect asupra continuităţii existenţei fortificaţiilor.

Gândul de a privi mai atent asupra acestui subiect a venit din două direcţii. Pe de o parte, din preocupările legate de compoziţia urbană, unde, discutând cu studenţii aspecte legate de limita oraşului, inevitabil ne-am întrebat dacă fosta limită, zidită, mai are ceva de spus oraşului contemporan. Pe de altă parte, din interesul pentru parcurile şi grădinile istorice, a căror cercetare a dezvăluit cum tocmai unele dintre fortificaţiile urbane au

1 Arhitect, doctor, Universitatea Tehnică din Cluj-Napoca, România.

■ **Summary:** *Starting with a presentation of the European pattern of fortified structure building, evolution, decay and potential survival in the urban landscape, this paper explores the validity of this pattern in three important Transylvanian cities i.e., Braşov, Cluj, and Sibiu. Although the initial purpose of these structures has gone obsolete for a long time, and even if some of them have been demolished, their presence persists in different forms in the making of the cities for which they were built.*

■ **Keywords:** urban fortification, urban composition, urban evolution, urban history, Transylvania, Braşov, Cluj, Sibiu

■ We could see city fortifications as fantastic animals, often asleep, in the urban structure. They belong to remote times, that have not been completely deciphered. Their specialized composition designed for a programme unfamiliar to us still has unknown aspects. Although the *designed* architecture of the fortifications has always kept pace with the military technique of its time, the *built* architecture of the fortifications, involving complex works and structures whose completion would last for several years, was often a step behind. It often happened that by the time a fortification was completed, the purpose for which it had been built was no longer relevant. This paper is intended to outline a discussion on the relevance in time of the old, sometimes even disappeared fortifications for the life of the city.

This paper is focused on urban fortifications, because, unlike extra-urban fortifications, they not only aim at setting up enclosures concentrated relatively close around a significant building (such as the church), but also intend to protect, already in their early stages, significant parts of the settlement that have a wide variety of components. Therefore, their existence is dynamic, similarly to the city, it brings in alterations, new enclosures, abandonment, demolition, reconversion, restructuring. The fortification existence influences the further development of the city, and similarly the city development

1 Architect, PhD, Technical University of Cluj-Napoca, Romania.

will have an impact on the fortification existence continuity.

The thought of looking more closely into this topic has come from two directions. On the one hand, from the interest in urban composition, where, talking with students about aspects related to city borders, an inevitable question was whether the old, built wall still had something to say to the contemporary city. On the other hand, from the interest in historic parks and gardens, whose study has revealed how precisely some of the urban fortifications had facilitated the integration of public planted areas into the settlements by transforming the fortified tracks into walking paths.[2]

As the initial purpose for which the fortifications were designed and built has been lost, they are either seen as simple exhibits in the urban landscape or seen for their potential new life. The interest in them as heritage is high precisely for their features, both structural and architectural. While contemporary architecture deals with adaptability and means to obtain it, urban fortifications seem to be some of the most difficult to adapt compositions. One of the reasons is their massiveness, then their spatial singularity (in terms of shape, size, and proportion) designed for purposes completely different from today's needs.

The choice of the Transylvanian cities for which to study the life of fortifications in this paper is not based on a very clear reason, although we have tried criteria such as period, region, and fortification type. Three cities were finally chosen as examples for their historic significance in terms of Transylvanian urban life, as well as for the complex evolution of their urban body, which could give the opportunity to check the European pattern regarding the fortification life. These cities are Braşov, Cluj and Sibiu, with both similarities and particularities in relation with the topics under discussion.

Brief overview of European fortification history[3]

■ In general, fortification construction was made with high financial and physical effort. As not all cities afforded fortifications,[4] they are not present everywhere. Sometimes, natural elements helped to defend the settlement. Some other times, the fortification works started with simple gestures, such as the creation of an earth bank and a ditch, with or without water. Arranging the outlying houses in a compact ring blind to the outside could also be a first stage of fortification.

When the fortifications are made of masonry consisting of massive stone and/or

2 Andreea MILEA, Începuturile parcurilor publice urbane transilvănene"/ „The Beginnings of Transylvanian Public Urban Parks", *Transsylvania Nostra*, anul XII, nr. 45 (1/2018): 50-56.

3 Spiro KOSTOF, „The city edge", in *The City Assembled: The Elements of Urban Form Through History* (New York: Thames & Hudson, 2005): 11-69.

4 Whether we are referring to the fact that they have received royal or senior approval, to their economic capacity, or to the means to put such a project into practice.

înlesnit integrarea în aşezări a spaţiilor plantate publice prin transformarea traseelor fortificate în promenade.[2]

Cum rostul iniţial pentru care au fost gândite şi construite s-a pierdut, atunci când fortificaţiile nu sunt privite doar ca exponate în cadrul urban, interesul pentru ele se leagă de eventuala lor nouă viaţă. Interesul patrimonial este mare tocmai datorită particularităţii lor, atât structurale, cât şi arhitecturale. Dacă în arhitectura contemporană ne referim la adaptabilitate şi căutăm mijloace de-a o asigura, fortificaţiile urbane par a fi unele dintre cele mai dificil de adaptat alcătuiri. La acest fapt contribuie masivitatea construcţiei lor, dar şi unicitatea spaţială (în termeni de forme, dimensiuni, proporţii) croită pentru un program cu totul aparte faţă de cele necesare azi.

Pentru lucrarea de faţă, alegerea oraşelor transilvănene în cazul cărora să urmărim viaţa fortificaţiilor nu şi-a găsit un argument foarte precis, deşi am tatonat criterii de perioadă, regiune, tip de fortificaţie. Alegerea s-a oprit până la urmă, într-un demers de exemplificare, la trei oraşe cu semnificaţie istorică pentru viaţa urbană transilvăneană, dar şi cu o evoluţie complexă a organismului urban, care să dea ocazia verificării modelului european în ceea ce priveşte viaţa fortificaţiilor. Astfel, oraşele discutate sunt Braşov, Cluj şi Sibiu. După cum vom vedea, acestea prezintă atât asemănări, cât şi particularităţi în cadrul problematicii discutate.

Scurtă incursiune în istoria fortificațiilor europene[3]

■ Construcţia fortificaţiilor a presupus, în general, mari eforturi financiare şi fizice. Cum nu toate oraşele îşi puteau permite construcţia fortificaţiilor,[4] nu s-a recurs întotdeauna la ele. Uneori, elementele naturale ajutau la apărarea aşezării. Iar alteori, lucrările de fortificare începeau cu gesturi simple, precum amenajarea unui val de pământ şi a unui şanţ, cu sau fără apă. Dispunerea caselor periferice într-un inel compact orb spre exterior putea constitui, de asemenea, o primă formă de fortificare.

Odată recurs la o fortificaţie zidită prin construcţii masive de piatră şi/sau cărămidă, putem întâlni fortificaţiile cu incintă simplă sau pe cele devenite mai complexe prin dublarea sau chiar triplarea (parţială sau totală) a incintei, fapt ce permitea o mai bună apărare şi organizare militară. Incintele fortificate multiple apar atunci când oraşul se dezvoltă spaţial de-a lungul timpului, ivindu-se necesitatea cuprinderii într-un inel fortificat a unei zone mai extinse. De-a lungul zidurilor de fortificaţie întâlnim turnuri şi un număr mic de porţi. Chiar dacă formau puncte slabe, porţile aveau un rol foarte important, asigurând legătura oraşului cu teritoriul, filtrând la nevoie intrarea în şi ieşirea din cetate. Uneori ele însele adevărate mecanisme de apărare, porţile se remarcau adesea arhitectural, inclusiv prin corpuri mai înalte (turnuri de poartă). Spre ele convergea circulaţia importantă atât în cetate, cât şi în teritoriu.

Prezenţa fortificaţiilor a generat modele specifice de folosire a terenului în preajma lor sau raportat la ele. *Intra muros* s-a produs o ierarhizare a valorii terenului şi s-a putut reglementa păstrarea unei fâşii de spaţiu liber de-a lungul fortificaţiei până la o densificare ulterioară (spontană sau planificată). În dreptul porţilor, atât în interior, cât şi în exterior, s-au putut păstra

2 Andreea MILEA, Începuturile parcurilor publice urbane transilvănene"/ „The Beginnings of Transylvanian Public Urban Parks", *Transsylvania Nostra*, anul XII, nr. 45 (1/2018): 50-56.

3 Spiro KOSTOF, „The city edge", în *The City Assembled: The Elements of Urban Form Through History* (New York: Thames & Hudson, 2005): 11-69.

4 Indiferent dacă ne referim la faptul a fi primit încuviinţarea regală sau seniorială, la capacitatea lor economică, respectiv la mijloacele de a transpune în practică un astfel de proiect.

spaţii libere care să acomodeze aglomerarea, perceperea vămii, târgurile; într-o primă instanţă, aceste spaţii din dreptul porţilor nu sunt formal definite, ele urmând să se închege odată cu închegarea contextului construit în preajma lor. *Extra muros* sunt efectuate amenajări pentru apărare (canal cu apă, escarpă, contra-escarpă). Extinderea oraşului (fie o ieşire dinspre interior spre exterior, fie o acumulare dinspre exterior) se face întâi de-a lungul drumurilor de acces ce duc la porţi; aceste suburbii, dezvoltându-se, încercuiesc încetul cu încetul fortificaţia, înlocuind terenurile comune libere de construcţii.

Fortificaţiile bastionare, devenite un model în secolul al XVII-lea european pentru a lua locul, acolo unde s-a putut, fortificaţiilor din zid, au produs un spaţiu uriaş între ţesutul construit al oraşului şi teritoriul agricol sau peisaj. Pentru realizarea lor au fost necesare lucrări ample de teren. Plantaţii au fost întrebuinţate, atât pentru stabilizarea terenului nou modelat, cât şi pentru ascunderea imaginii oraşului.

În mediul urban sau raportat la acesta întâlnim şi fortificaţii care, totuşi, nu sunt ale întregului oraş istoric dintr-un moment al evoluţiei sale. Acestea pot fi obiective fortificate precum bisericile sau cetăţuile, acestea din urmă construite pentru a supraveghea oraşul şi, uneori, pentru a cuprinde şi proteja instituţii reprezentative.

Devenirea în timp a fortificațiilor urbane

■ Dacă abandonarea, alterarea sau desfiinţarea fortificaţiilor se petrecea de obicei odată cu instalarea limitelor multiple (o incintă fortificată mai nouă putând anula rostul unei incinte fortificate mai vechi) sau la schimbarea tipului de fortificaţie (adoptarea celor bastionare), aceasta se produce generalizat odată cu pierderea rostului oricărui tip de fortificaţie.

Fortificaţiile s-au păstrat atâta timp cât au fost necesare sau, odată rolul lor încheiat, dacă nu au împiedicat viaţa ulterioară a oraşului. Totuşi, oraşele atractive, care au tins să se extindă ca urmare a densificării sau prin aşezarea celor din exterior la periferia lor, au ajuns, vrând-nevrând, la un moment dat, să vadă fortificaţiile ca pe o piedică ce se cerea înlăturată.

Pentru fortificaţiile zidite, punctele de legătură dintre *intra-muros* şi *extra-muros* erau prea puţine, astfel încât fie s-au deschis noi puncte de legătură, păstrând o vreme curtinele, fie demolându-se curtinele sau o parte semnificativă din ele, lucru care s-a întâmplat oricum la un moment dat. Pentru fortificaţiile bastionare, suprafeţele mari de teren pe care le foloseau şi care erau libere de alte construcţii au fost apropriate sau alocate pentru diverse programe, materializate în amenajări exterioare sau clădiri. Este notorie preluarea traseului fortificat pentru promenadă, generând amenajarea specifică unui nou tip stradal, bulevardul, cu un profil bogat echipat cu vegetaţie şi cu favorizarea parcursului pietonal.

Dar, chiar dacă au fost desfiinţate, amprentele fortificaţiilor au dăinuit în timp, căci pe parcursul vieţii lor mediul construit a evoluat împrejur în funcţie de ele. În urma fortificaţiilor rămân:

- amprente în reţeaua de circulaţie: „inelul” drumului (uneori atât interior, cât şi exterior) desfăşurat aproximativ de-a lungul traseului fortificaţiilor, intersecţiile importante din dreptul fostelor porţi, convergenţa drumurilor spre porţi;
- spaţiile şi programele ample ale „zonei de centură”, care şi-a găsit loc în apropierea fostelor fortificaţii, pe fâşiile de teren iniţial libere: pieţe, spaţii verzi, clădiri instituţionale (administraţie, cultură, educaţie, sănătate, armată etc.);
- vestigii (mai mult sau mai puţin) punctuale: păstrătoare ale memoriei, integrate în configuraţia şi viaţa oraşului în forme compatibile caracterului lor;

brick constructions, they are either simple enclosure fortifications, or more complex fortifications with two or three (partial or full) enclosures, enabling better defence and military organisation. Multiple fortified enclosures occur when the city expands over time and new areas need to be included in a fortified ring. Along the fortification walls, there are towers and a small number of gates. Even if they were weak points, the gates had a very important role, ensuring the connection of the city with the countryside, filtering the entrance and exit of the citadel when necessary. Sometimes the gates themselves were true defensive mechanisms. They were often architecturally remarkable, including higher buildings (gate towers). They were the focal point of important traffic both inside the fortress and in the countryside.

The presence of fortifications triggered specific patterns of land use around or related to them. A hierarchy of land value was established *intra muros* and it became possible to regulate the preservation of a strip of free land along the fortification until further densification (spontaneous or planned). In front of the gates, both inside and outside, it was possible to keep free areas to accommodate the agglomeration, the customs duty collection, the fairs; in the first instance, these areas in front of the gates are not formally defined, but they will take shape as the built context around them takes shape. Defence facilities (water channel, scarp, counterscarp) are developed *extra muros*. The expansion of the town (either an outward extension or an inward accumulation) is first carried out along the access roads leading to the gates; these suburbs, as they develop, gradually encircle the fortification, replacing the common land free of buildings.

The bastion fortifications, which became a model in 17th century Europe to take the place, where possible, of walled fortifications, produced a huge gap between the built fabric of the city and the agricultural land or landscape. Extensive groundworks were required to create them. Plantations were used both to stabilise the newly shaped terrain and to conceal the image of the city.

In the urban environment or in relation to it we also find fortifications which, however, do not belong to the whole historic city at a certain point in its evolution. These may be fortified places such as churches or citadels, the latter built to watch over the city and sometimes to contain and protect representative institutions.

Development of urban fortifications over time

■ Whereas the abandonment, deterioration or dismantling of fortifications usually occurred with the installation of multiple boundaries (a newer fortified enclosure might have cancelled out the purpose of an older fortified enclosure) or when the type of fortification was changed (adoption of bastion fortifications), this happened everywhere when any type of fortification lost its purpose.

The fortifications were preserved as long as they were needed or, once their role was

over, if they did not hinder the further life of the city. However, attractive towns, which tended to expand as a result of densification or by settlement of outsiders on their outskirts, came, willingly or unwillingly, at some point to see fortifications as a hindrance that needed to be removed.

For the walled fortifications, there were too few points of connection between intra muros and extra muros, so either new points of connection were opened, keeping the curtain walls for a while, or the curtain walls or a significant part of them were demolished, which happened anyway at some point. For the bastion fortifications, the large areas of land they used, and which were free of other buildings were appropriated or allocated for various programmes, materialised in landscaping or buildings. As common practice, the fortified route was taken over for the promenade, creating a new type of street, the boulevard, with a richly vegetated profile and a pedestrian-friendly layout.

But even if they were dismantled, the imprints of the fortifications have endured over time, as during their lifetime the built environment evolved around them. In the wake of fortifications, we have:

- imprints in the traffic network: the "ring" road (sometimes both inner and outer) running roughly along the route of the fortifications, the important junctions at the former gates, the convergence of the roads to the gates;
- extensive areas and uses of the "ring area", which has found its place near the former fortifications, on the strips of land originally free i.e., squares, green spaces, institutional buildings (administration, culture, education, health, army, etc.);
- more or less specific vestiges, which preserve memories, are integrated into the configuration and life of the city in forms compatible with their character;
- the hierarchy of urban land value and the social hierarchy created by the presence of the ring of fortifications: higher value intra muros, lower value extra muros, as the fortifications separated the city dwellers from the non-city dwellers; this hierarchy has lasted even if the fortifications have disappeared, as their former route still sets a hierarchy between the areas of the city, persisting as a psychological boundary.

Transylvanian examples

■ To check the aspects mentioned above in the Transylvanian area, we have considered the cities of Brasov, Cluj, and Sibiu as relevant for the moment, as they have both similarities and differences, which will be discussed by addressing issues related to the formation and type of the fortifications, their development over time, and the survival of their impact within the city. For all three cities we can speak of more than one reinforcing enclosure or fortification. However, the last enclosure is perhaps of greater interest because the moment when this type of defence became completely obsolete and significant parts of these structures were

- ierarhia valorii terenului urban şi ierarhia socială creată prin prezenţa inelului fortificaţiilor: valoare mai mare *intra-muros*, valoare mai mică *extra-muros*, căci fortificaţiile separau citadinii de ne-citadini; această ierarhie a dăinuit chiar dacă fortificaţiile au dispărut, căci fostul lor traseu în continuare ierarhizează zonele oraşului, păstrându-se ca o limită psihologică.

Exemplificări transilvănene

■ Pentru urmărirea în arealul transilvănean a celor prezentate mai sus, am considerat pentru moment ca fiind relevante oraşele Braşov, Cluj şi Sibiu, prezentând atât asemănări, cât şi diferenţe, şi pentru discutarea cărora vor fi abordate aspecte legate de formarea şi tipul fortificaţiilor, devenirea lor în timp, respectiv supravieţuirea impactului lor în cadrul oraşului. Chiar dacă pentru toate trei oraşele putem vorbi despre mai mult de o incintă de întărire sau fortificare, de interes mai mare poate că este ultima incintă, întrucât demodarea cu totul a tipului de apărare asociat acestor structuri împreună cu renunţarea, în secolul XIX, la părţi semnificative din ele, coincide cu afirmarea de noi programe arhitecturale de scară mare în cadrul urban. Fără a semnala exhaustiv urmele materiale care au supravieţuit, uneori în mai mare măsură (Sibiu, Braşov), alteori în mai mică măsură (Cluj), lucrarea încearcă să identifice impactul de durată al prezenţei fortificaţiilor asupra formei urbane.

■ În cazul **Braşovului**[5] [6] (Fig. 1, 2) au putut fi identificate, de-a lungul secolelor XIII şi XIV, mai multe posibile etape de întărire a cadrului urban, materializate în incinte succesive, chiar dacă nu zidite. Forme de întărire a bisericii parohiale (Biserica Neagră) pot fi, de asemenea, presupuse şi reconstituite încă din secolul XIII, clarificându-se formal în secolul XIV.

5 Paul NIEDERMAIER, *Geneza oraşelor medievale în Transilvania* (Bucureşti: Editura Academiei Române, 2016), 345, 376-377, 387, 453, 457-458, 463, 523

6 Irina BĂLDESCU, *Transilvania medievală: topografie şi norme juridice ale cetăţilor Sibiu, Bistriţa, Braşov, Cluj* (Bucureşti: Simetria, 2012), 230.



■ ***Fig. 1.*** *Harta Braşovului în 1836. © Ministerul Apărării, Institutul şi Muzeul de Istorie Militară Ungaria (Honvédelmi Minisztérium Hadtörténeti Intézet és Múzeum, Magyarország), nr. inventar: G I h 29*

■ ***Fig. 1.*** *Map of Braşov in 1836. © Military Institute and Museum Hungary, inventory number: G I h 29*

Incinta de fortificare zidită a aşezării a fost una singură, dar cu complexităţi diferite (simplă, dublă, triplă etc.) de-a lungul perimetrului său. La sfârşitul secolului al XIV-lea, la momentul demarării lucrărilor de construcţie a zidurilor de apărare, acestea fie au însoţit trasee stradale perimetrale constituite deja (laturile sud-vestică şi nord-estică), fie s-au aşezat pe fundurile de lot ale suprafeţelor parcelate (laturile sud-estică şi nord-vestică). Fortificarea globală a oraşului s-a încheiat în secolele XVI-XVII. Construcţia ansamblului Cetăţuii de pe Strajă, cu castelul şi incinta sa bastionară, având rol de apărare a oraşului, a durat de prin 1500 până în secolul XVII.

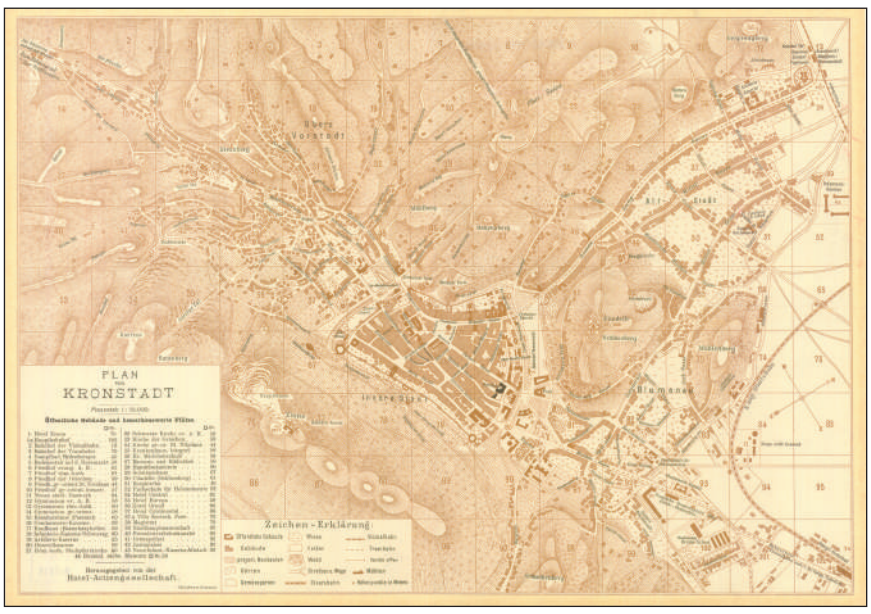
Traseele stradale ce însoţeau perimetrul zidurilor de apărare persistă în trama stradală actuală a oraşului interior:

- pe latura sud-vestică: strada George Coşbuc (Turnschulgasse), strada Paul Richter (Breiter Bach, ca excepţie în relaţionarea faţă de zid, având un şir de parcele interpus) - observăm programele mari situate imediat în exterior de-a lungul întregii laturi;
- pe latura nord-estică: strada Politehnicii (Schustergasse), strada Mihail Sadoveanu (Goldschmiedgasse), segmentul vestic al străzii Sf. Ioan (Johannisgasse, iniţial ca excepţie în relaţionarea faţă de zid, având un şir de parcele interpus) - observăm schimbarea de scară la nivelul parcelarului şi fondului construit odată cu modificările aduse cvartalului nordic şi prelungirii bulevardului Eroilor, dar şi, în general, de-a lungul întregii laturi.

Acolo unde iniţial nu existau, trasee noi însoţitoare ale liniei de fortificare s-au format în exterior: pe latura sud-estică, aleea Tiberiu Brediceanu; iar pe latura nord-vestică, strada După Ziduri. Pe aceste două laturi ale aşezării regăsim trasee interioare paralele şi premergătoare liniei de fortificare: pe latura sud-estică, strada Castelului (Burggasse); pe latura nord-vestică, strada Gheorghe Bariţiu (Roßmarkt), continuând cu strada Mureşenilor (Kloster-gasse).

Prezenţa fortificaţiilor, respectiv poziţia unora dintre porţi au condus la conturarea de spaţii publice semnificative:

- întărirea Bisericii Negre (biserică evanghelică, înainte a Sf. Fecioare) a dat forma Curţii Johannes Honterus (fosta Kirchhof);
- raportat la întăriturile anterioare fortificaţiilor zidite, putem aminti capătul sudic al străzii Diaconu Coresi (intersecţia neregulată a cinci străzi, fostul Târg de Vaci), dar şi capătul sudic, evazat, al străzii Apollonia Hirscher;



■ ***Fig. 2.*** *Harta Braşovului la începutul secolului al XX-lea (19??, posibil de datat în 1917 prin analogie cu alte hărţi datate). © Institutul şi Muzeul de Istorie Militară Ungaria, nr. inventar: G I h 31*

■ ***Fig. 2.*** *Map of Braşov at the beginning of the 20th century (19??, potentially dated in 1917 by analogy with other dated maps). © Military Institute and Museum Hungary, inventory number: G I h 31*

abandoned in the 19th century coincides with the emergence of new large-scale architectural programmes in the urban setting. Without being exhaustive about the material traces that have survived, sometimes to a greater extent (Sibiu, Brasov), sometimes to a lesser extent (Cluj), this paper attempts to identify the lasting impact of the presence of fortifications on the urban form.

■ For **Braşov**[5] [6] (Fig. 1, 2), several potential fortification stages of the urban framework could be found throughout the 13th and 14th centuries. They consisted of successive enclosures, even if not walled. Forms of reinforcement of the parish church (Black Church) can also be assumed and remade as early as the 13th century, becoming formally clear in the 14th century. There was only one walled fortification enclosure of the settlement, but with different complexities (single, double, triple, etc.) along its perimeter. At the end of the 14th century, when the construction of the defensive walls began, they either accompanied already established perimeter road routes (south-western and north-eastern sides) or were built on the bottoms of plots of land (south-eastern and north-western sides). The overall fortification of the city was completed in the 16th - 17th centuries. The construction of the fortress complex on the Straja hill, with its castle and bastion enclosure, to defend the city, lasted from the 1500s to the 17th century.

The street routes along the perimeter of the defensive walls persist in the current street layout of the inner city:

- on the south-western side: George Coşbuc Street (Turnschulgasse), Paul Richter Street (Breiter Bach, as an exception in relation to the wall, having a row of interposed plots) - we point out the large projects located immediately outside along the entire side;
- on the north-eastern side: Politehnicii Street (Schustergasse), Mihail Sadoveanu Street (Goldschmiedgasse), the western segment of Sf. Ioan Street (Johannisgasse, originally as an exception in relation to the wall, with a row of interposed plots) - we point out the change of scale at the level of the plots and the building stock with the changes to the northern block and the extension of the Eroilor Boulevard, but also generally along the whole side.

Where originally there were none, new paths accompanying the fortification line were formed outside: on the south-eastern side, Tiberiu Brediceanu Alley; and on the north-western side, După Ziduri Street. On these two sides of the settlement, there are parallel inner paths preceding the fortification line: on the south-eastern side, Castlelului Street (Burggasse); on the north-western side, Gheorghe Bariţiu Street (Roßmarkt),

5 Paul NIEDERMAIER, *Geneza oraşelor medievale în Transilvania* (Bucureşti: Editura Academiei Române, 2016), 345, 376-377, 387, 453, 457-458, 463, 523.

6 Irina BĂLDESCU, *Transilvania medievală: topografie şi norme juridice ale cetăţilor Sibiu, Bistriţa, Braşov, Cluj* (Bucureşti: Simetria, 2012), 230.

continuing with Mureşenilor Street (Klostergasse).

The presence of fortifications and the position of some of the gates led to the creation of significant public spaces:

- the fortification of the Black Church (Evangelical Church, formerly St. Mary's Church) shaped the Johannes Honterus Courtyard (formerly Kirchhof);
- concerning the fortifications that were built before the walls, we can mention the southern end of Diaconu Coresi Street (the irregular intersection of five streets, the former Cow Market), but also the southern, flared end of Apollonia Hirscher Street;
- beyond the walled fortifications, opposite the Katharinentor (Schei Gate), along the wall to the south, the regular and generous Turn Platz, the size of which was later used to integrate two projects with large space requirements (high school and sports arena); between the Schei Gate and the Blacksmiths' Bastion (Schmiederbastei), a relatively rectangular planted space, superimposed on the present Gheorghe Dima Park; between the former Klostertor (Monastery Gate) and Purzengaessertor (at the ends of Mureşenilor and Republicii streets), the tree-lined strip of the Untere Promenade (Lower Promenade), over which the current Eroilor Boulevard will be superimposed; and beyond the latter, to the north, the Bahnhof Promenade (now Nicolae Titulescu Park), in a row with other smaller planted areas (the current so-called Rudolf and Eroilor parks, as well as the one in front of the Prefecture); the northern side of the Bahnhof Promenade accommodated, as it does today, the beginning of the climb to the Citadel on the Straja Hill. The Graft and Tâmpa hills also received more pronounced landscaping at the base, near the fortifications, even if we cannot speak of clearly delimited spaces. Even the Post Office Park, north of the route of the city fortifications and quite clearly delimited by the arms of the road, continues indefinably around the White Tower and the Black Tower.

Since historical times, associated with the successive reinforcement enclosures, we find at the edge of the settlement projects of wider interest, even if not all have much more land: the Dominican monastery (now Catholic church) at the northern end of the main road crossing the settlement, the chapel at the current intersection of Nicolae Bălcescu Street (Schwarzgasse) with an alley (Kniegasse), as well as the large land reserved for the king, located opposite the Dominican monastery.

After the construction of the walled fortification, the space between the walls remains open for quite some time, as does a wide, irregular strip of land outside the city walls. The existence of this space will later allow the integration of public spaces (already mentioned) and programmes with greater space requirements such as:

- on the south-western side: the ice rink (Eis Palast), the evangelical girls' school (Ev. Mädchenschule), and the Turn Platz

- dincolo de fortificaţiile zidite, în dreptul Katharinentor (Poarta Şchei), de-a lungul zidului, spre sud, regulata şi generoasa Turn Platz, de a cărei dimensiune s-a profitat ulterior pentru integrarea a două programe cu necesar mare de spaţiu (liceu, respectiv arenă sportivă); între Poarta Şchei şi Bastionul Fierarilor (Schmiederbastei), un spaţiu relativ rectangular plantat, suprapus actualului parc Gheorghe Dima; între fostele Klostertor (Poarta Mănăstirii) şi Purzengaessertor (la capetele străzilor Mureşenilor şi Republicii), fâşia aliniată cu arbori a Untere Promenade (Promenada de Jos), peste care se vor suprapune amenajările actualului bulevardul Eroilor; şi dincolo de aceasta din urmă, spre nord, Bahnhof Promenade (în prezent, parcul Nicolae Titulescu), în rând cu alte spaţii plantate de dimensiune mai mică (actualele aşa-numite parcuri Rudolf şi Eroilor, dar şi cel din faţa Prefecturii); latura nordică a Bahnhof Promenade acomoda, ca şi în prezent, începutul urcuşului spre Cetăţuia de pe Strajă. Dealurile Graft şi Tâmpa au primit şi ele amenajări mai pronunţate la bază, în apropierea fortificaţiilor, chiar dacă nu putem vorbi despre spaţii clar delimitate. Chiar şi parcul Livada Poştei, la nord de traseul fortificaţiilor oraşului şi fiind destul de clar delimitat de braţele drumului, continuă nedefinit împrejurul Turnului Alb şi Turnului Negru.

Încă din perioadele istorice, asociat incintelor succesive de întărire, regăsim la marginea aşezării programe de interes mai larg, chiar dacă nu toate dispun de mult mai mult teren: mănăstirea dominicană (în prezent biserică catolică) la capătul nordic al drumului principal de traversare a aşezării, capela din actuala intersecţie a străzii Nicolae Bălcescu (Schwarzgasse) cu o alee (Kniegasse), dar şi amplul teren rezervat regelui, situat faţă-n faţă cu mănăstirea dominicană.

După construirea fortificaţiei zidite, spaţiul dintre ziduri rămâne liber pentru o bună perioadă de timp, la fel şi o largă şi neregulată fâşie de teren din afara zidurilor oraşului. Existenţa acestui spaţiu va permite mai târziu integrarea de spaţii publice (deja amintite) şi programe cu necesar mai mare de spaţiu precum:

- pe latura sud-vestică: patinoarul (Eis Palast), şcoala evanghelică de fete (Ev. Mädchenschule), iar Turn Platz ajunge să fie ocupată de un liceu şi o arenă sportivă;
- pe latura nord-vestică: biserica şi cimitirul grecesc (Kirche und Friedhof der Griechen), respectiv gimnaziul romano-catolic (Gymnasium röm.-kath.);
- pe latura nord-estică: biroul de turism (Fremdenverkehrskanzlei), Handelsakademie, palatul de justiţie (Justizpalais), poşta, primăria.

Demersul a continuat şi după începutul secolului al XX-lea, aducând noi programe publice şi clădiri în zona proximă fostelor fortificaţii, precum:

- pe latura sud-vestică: Facultatea de Silvicultură şi Exploatări Forestiere Braşov (luând locul şcolii evanghelice de fete);
- pe latura nord-vestică: Biblioteca Judeţeană „George Barițiu" (la baza Livezii Poştei), Spitalul Clinic de Obstetrică şi Ginecologie „Doctor Ioan Aurel Sbârcea" (la ieşirea din dreptul Bastionului Fierarilor);
- pe latura nord-estică: Cercul Militar (integrat în parcul Rudolf); Colegiul Naţional Unirea, clădiri universitare (Universitatea Transilvania: Facultatea de Inginerie Mecanică, Facultatea de Drept, Facultatea de Litere, Facultatea de Sociologie şi Comunicare, Centrul de Tehnologii, Inventică şi Business etc.), Compania Naţională de Căi Ferate, clădiri muzeale (Muzeul Amintirilor din Comunism, Muzeul de Artă, Muzeul de Etnografie etc.), clădiri hoteliere (Hotel Aro Palace), toate acestea acomodate în fosta fâşie liberă de construcţii dintre ziduri; teatrul, imediat în afara fostei limite zidite;
- pe latura sud-estică: Direcţia Judeţeană pentru Sport şi diverse dotări sportive.

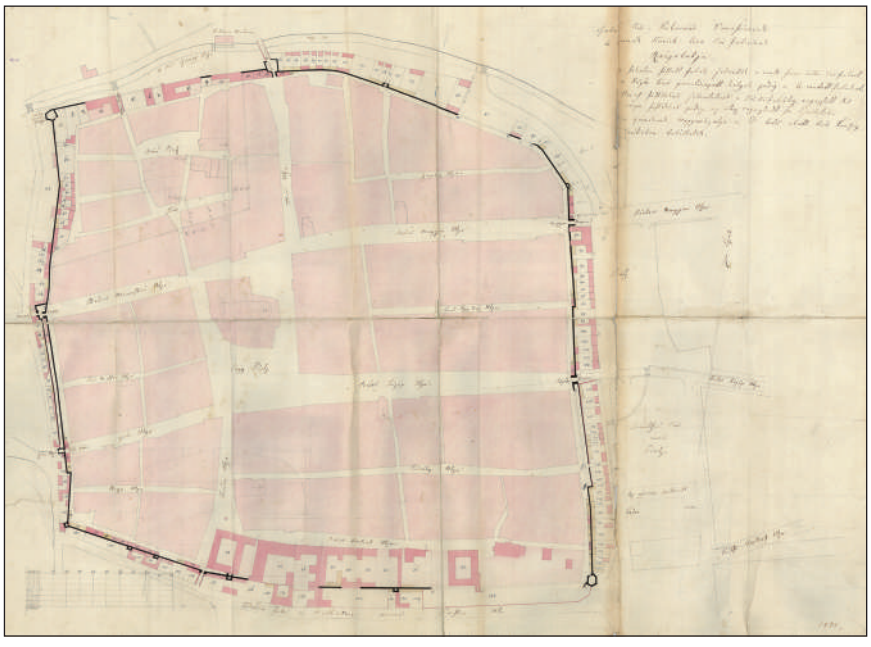
■ **Clujul**[7] [8] (Fig. 3, 4) a avut două incinte fortificate zidite formate în perioade diferite. Prima incintă a fost una simplă, provenind din aşezarea romană, fiind astfel preexistentă aşezării medievale, care, la începuturile sale afânate, s-a aşezat înăuntrul acestei fortificaţii. Incinta zidită a bisericii catolice Sf. Mihail a fost conturată în secolele XIII-XIV, iar perimetrul închegat al aşezării în oricare din fazele dezvoltării sale îndeamnă la presupunerea existenţei şi a altor posibile elemente de delimitare înainte de construirea, la începutul secolului al XIV-lea, a celei de-a doua incinte zidite pentru a cărei protecţie a fost prevăzută şi o fâşie de teren neconstruit. Cea de-a doua incintă fortificată era, de asemenea, preponderent simplă, excepţie făcând câte o parte din laturile vestică, estică şi sudică. Lucrările de fortificare s-au încheiat în secolele XVI-XVII. Fortificaţia bastionară Cetăţuia, construită pe dealul omonim în prima partea a secolului al XVIII-lea, a avut în acest caz un rol de supraveghere a oraşului la instalarea stăpânirii austriece.

Caracteristică ambelor incinte zidite ale Clujului a fost existenţa câte unei fâşii de teren neconstruit adiacentă zidurilor. Pentru prima incintă, fâşia identificabilă de teren liber s-a aflat în interiorul zidurilor atâta timp cât spaţiul cetăţii nu a fost complet ocupat. Pentru cea de-a doua incintă, fâşia de teren liber s-a aflat în exteriorul zidurilor. Ocuparea treptată prin construcţie a fâşiilor de teren liber a condus la ascunderea parţială a zidurilor, dar şi la conturarea a câte două inele de circulaţie, interior şi exterior, aproximativ paralele cu traseele fortificaţiilor. Inelele de circulaţie s-au păstrat până în prezent, chiar dacă nu există o coerenţă ierarhică a segmentelor din care sunt alcătuite:

- relativ la prima incintă fortificată, inelul interior este format din strada Virgil Fulicea (Heiliggeistgasse), strada Pavel Chinezu (Kinizsigasse), strada Octavian Petrovici (Biergasse), strada Victor Deleu (Franziskanergasse), strada Émile Zola (Kornissgasse, de legătură între două străzi paralele cu zidurile), strada Sextil Puşcariu (Bocskaygasse, Turmgasse), iar inelul exterior este format din strada Me-

7 Paul NIEDERMAIER, *Geneza oraşelor medievale în Transilvania* (Bucureşti: Editura Academiei Române, 2016), 141-142, 279, 359, 361, 381, 395, 452.

8 Irina BĂLDESCU, *Transilvania medievală: topografie şi norme juridice ale cetăţilor Sibiu, Bistriţa, Braşov, Cluj* (Bucureşti: Simetria, 2012), 292.



■ ***Fig. 3.*** *Desen al orașului liber regal Cluj și al fortificației din apropiere la 1831. © Arhivele Naționale ale Ungariei, cod de referință: HU-MNL-OL-S 105-43*

■ ***Fig. 3.*** *Drawing of the free royal city of Cluj and the nearby fortification in 1831. © National Archives of Hungary, reference code: HU-MNL-OL-S 105-43*

come to be occupied by a high school and a sports arena;
- on the north-western side: the Greek church and cemetery (Kirche und Friedhof der Griechen) and the Roman Catholic gymnasium (Gymnasium röm.-kath.);
- on the north-eastern side: the tourist office (Fremdenverkehrskanzlei), the Handelsakademie, the palace of justice (Justizpalais), the post office, and the town hall.

The process continued after the beginning of the 20th century, bringing new public projects and buildings to the area near the former fortifications, such as:

- on the south-western side: the Braşov Faculty of Forestry and Logging (which has taken the place of the evangelical girls' school);
- on the north-western side: the "George Bariţiu" County Library (at the base of the Post Office Orchard), the "Doctor Ioan Aurel Sbârcea" Clinical Hospital of Obstetrics and Gynaecology (at the exit from the Blacksmiths' Bastion);
- on the north-eastern side: the Military Circle (integrated into Rudolf Park); Unirea National College, university buildings (Transylvania University: Faculty of Mechanical Engineering, Faculty of Law, Faculty of Letters, Faculty of Sociology and Communication, Centre for Technologies, Inventions and Business, etc.), the National Railway Company, museum buildings (Museum of Communism Memories, Museum of Art, Museum of Ethnography, etc.), hotel buildings (Aro Palace Hotel), all accommodated in the former strip free of buildings between the walls; the theatre, just outside the former walled boundary;
- on the south-eastern side: the County Directorate for Sports and various sports facilities.

■ **Cluj**[7] [8] (Fig. 3, 4) had two fortified walled enclosures built in different periods. The first enclosure was simple, originating from the Roman settlement, thus pre-existing the medieval settlement, which, in its loose early days, was built within this fortification. The walled enclosure of St. Michael's Catholic Church was laid out in the 13th - 14th centuries. The formed perimeter of the settlement in any of its phases of development suggests the existence of other possible boundary elements prior to the construction of the second walled enclosure at the beginning of the 14th century, for the protection of which a strip of unbuilt land was also provided. The second fortified enclosure was also predominantly simple, except for parts of the western, eastern and southern sides. Fortification works were completed in the 16th-17th centuries. The Citadel bastion fortification, built on the hill of the same name in the first part of the 18th century, played here a role in guarding the city during the Austrian rule.

7 Paul NIEDERMAIER, *Geneza oraşelor medievale în Transilvania* (Bucureşti: Editura Academiei Române, 2016), 141-142, 279, 359, 361, 381, 395, 452.

8 Irina BĂLDESCU, *Transilvania medievală: topografie şi norme juridice ale cetăţilor Sibiu, Bistriţa, Braşov, Cluj* (Bucureşti: Simetria, 2012), 292.

Characteristic of both walled enclosures of Cluj was the existence of a strip of unbuilt land adjacent to the walls. For the first enclosure, the identifiable strip of open land was inside the walls as long as the fortress space was not completely occupied. For the second enclosure, the strip of open land was outside the walls. The gradual occupation by construction of the strips of free land led to the partial concealment of the walls, and to the outline of two rings of traffic, inner and outer, roughly parallel to the routes of the fortifications. The traffic rings have been preserved to the present day, even if there is no hierarchical coherence of the segments of which they are made:

- Concerning the first fortified enclosure, the inner ring consists of Virgil Fulicea Street (Heiliggeistgasse), Pavel Chinezu Street (Kinizsigasse), Octavian Petrovici Street (Biergasse), Victor Deleu Street (Franziskanergasse), Émile Zola Street (Kornissgasse, connecting two streets parallel to the walls), Sextil Puşcariu Street (Bocskaygasse, Turmgasse), and the outer ring consists of Memorandumului Street (Monostorergasse), Emil Isac Street, George Bariţiu Street, Regele Ferdinand Street, Unirii Square;
- Concerning the second fortified enclosure, the inner "ring" (only partially, as it stops in the area of the first fortified enclosure) consists of Samuil Micu Street (Rosengasse), Potaissa Street (Kerkergasse), Mihail Kogălniceanu Street (Wolfgasse), Baba Novac Street (Bethlengasse), Tipografiei Street (Hinter der Mauer), and the outer "ring" (complete, with the observation that part of it overlaps with the outer ring of the first fortified enclosure) consists of Gheorghe Şincai Street, Republicii Street, Avram Iancu Street, Ştefan cel Mare Square, Avram Iancu Square, Cuza Vodă Street, Andrei Şaguna Street.

The presence of fortifications and the position of the access points also led to the creation of significant public spaces in Cluj:

- regarding the first fortified enclosure: the entrance on the southern side generated a space flared inwards (which later became the northern end of Matei Corvin Street) and conditioned the positioning of the western front of Unirii Square, gradually outlined between the first fortified enclosure and an incipient development towards the south;
- regarding the second fortified enclosure: at the northern gate (Milltor), towards the outside, the Mihai Viteazul Square which, in the past, was more gradually joined to the linear dimension of George Bariţiu Street, the beginning of the widening coinciding somewhat with the alley between buildings no. 18 and 20 and the former bridge over Someşul Mic towards the Citadel, namely the beginning of the climb towards the Citadel (the presence of this climb and of the Citadel itself eventually led, after clearing interventions, to the transformation of the space into a promenade, later extended on the surface of the current Cetăţuia Park); at the eastern gates (Ungertor and

morandumului (Monostorergasse), strada Emil Isac, strada George Bariţiu, strada Regele Ferdinand, Piaţa Unirii;

- relativ la cea de-a doua incintă fortificată, „inelul" interior (parţial doar, căci se opreşte în suprafaţa aferentă primei incinte fortificate) este format din strada Samuil Micu (Rosengasse), strada Potaissa (Kerkergasse), strada Mihail Kogălniceanu (Wolfgasse), strada Baba Novac (Bethlengasse), strada Tipografiei (Hinter der Mauer), iar „inelul" exterior (complet, cu menţiunea că o parte se suprapune inelului exterior aferent primei incinte fortificate) este format din strada Gheorghe Şincai, strada Republicii, strada Avram Iancu, Piaţa Ştefan cel Mare, Piaţa Avram Iancu, strada Cuza Vodă, strada Andrei Şaguna.

Prezenţa fortificaţiilor, respectiv amplasarea punctelor de acces, a condus şi la Cluj la conturarea de spaţii publice semnificative:

- relativ la prima incintă fortificată: intrarea de pe latura sudică a generat un spaţiu evazat spre interior (devenit ulterior capătul nordic al străzii Matei Corvin) şi a condiţionat poziţionarea frontului vestic al Pieţei Unirii, conturată treptat între prima incintă fortificată şi o dezvoltare incipientă spre sud;
- relativ la cea de-a doua incintă fortificată: în dreptul porţii nordice (Milltor), spre exterior, piaţa Mihai Viteazul care, pe vremuri, se racorda mai treptat la dimensiunea liniară a străzii George Bariţiu, începutul lărgirii coincizând oarecum cu aleea dintre imobilele nr. 18 şi 20 şi fostul pod de traversare a Someşului Mic spre Cetăţuie, respectiv cu începutul urcuşului spre Cetăţuie (prezenţa acestui urcuş şi a Cetăţuii înseşi a condus într-un final, după intervenţii de eliberare, la transformarea spaţiului într-unul de promenadă, extins ulterior pe suprafaţa actualului Parc Cetăţuia); în dreptul porţilor estice (Ungertor şi Mitteltor), spre exterior, valorificarea spaţiului liber prin desfăşurarea pieţelor Avram Iancu şi Ştefan cel Mare; în dreptul porţii sudice (Thorenburgertor), instalarea şi dezvoltarea cimitirului Házsongárd; în dreptul porţii vestice secundare (Schusterturm), persistenţa unei intersecţii neregulat lărgite care va deveni Piaţa Lucian Blaga. Deşi şi în dreptul porţii vestice principale (Monostor Tor) s-a conturat în timp o lărgire semnificativă a drumului, ea nu a devenit propriu-zis o piaţă; dată fiind importanţa acestui drum (strada Memorandumului – Piaţa Unirii – bulevardul 21 Decembrie 1989/ Monostorergasse – Marktplatz – Langgasse) în circulaţia teritorială în scopul traversării oraşului, fapt păstrat până în ziua de azi, nici spre vest (Monostor Tor), nici spre est (Ungertor) nu s-au suprapus acestui drum pieţe (ca locuri de posibilă oprire şi activităţi), ci ele de fiecare dată au primit o poziţie tangenţială cu drumul (Piaţa Unirii, Piaţa Avram Iancu).

Fosta incintă a bisericii Sf. Mihail nu a influenţat configuraţia Pieţei Unirii care, de la începuturile constituirii sale, a fost mult mai mare şi diferită formal (cvasi-dreptunghiulară) faţă de perimetrul incintei (poligonal neregulat). Timp de două secole, până la sfârşitul secolului al XIX-lea, incinta bisericii a fost aglomerată cu construcţiile unor prăvălii care asigurau venituri suplimentare parohiei.

Cu excepţia drumurilor importante, străzile din interiorul celei de-a doua incinte fortificate se încheiau în dreptul acesteia. În afara zidurilor, suburbiile prezentau o organizare la scară mai mare decât în interior: loturi mai mari, străzi mai distanţate, fapt care a permis instalarea unor programe publice (de exemplu, spitalul Sf. Elisabeta, înfiinţat în secolul XIV la nord de oraşul interior). Oricum, la Cluj, programe cu alocare mare de spaţiu şi-au găsit întotdeauna loc şi în interior: mănăstirea dominicană, biserica reformată, universitatea ş.a. Evoluţiei urbane clujene îi este caracteristic faptul că centrul istoric nu a rămas îngheţat în parcelarea şi scara sa istorică, ci a primit actualizări care i-au modificat treptat scara şi aspectul. Chiar



■ ***Fig. 4.*** *Harta orașului liber regal Cluj la 187?. © Institutul și Muzeul de Istorie Militară Ungaria, nr. inventar: G I h 351/5*

■ ***Fig. 4.*** *Map of the free royal city of Cluj in 187?. © Military Institute and Museum Hungary, inventory number: G I h 351/5*

și așa, spațiile disponibile sau disponibilizate aferente incintei fortificate au fost, de asemenea, valorificate pentru spații și programe publice ample:

- pe latura nordică, în dreptul primei incinte fortificate: învățământ universitar (Facultatea de Construcții a Universității Tehnice), spațiu public plantat (așa-numitul Parc Caragiale), clădirea Poștei, Palatul Telefoanelor, sediu bancar; această paletă funcțională se repetă pe latura opusă a străzii George Barițiu, îmbogățită cu rezidențial de scară mare (Palatul Széky, unul dintre cele patru palate care marchează capetele podului ce traversează Someșul Mic) și fosta Casă de Modă. La mică distanță de colțul nord-vestic al incintei fortificate, regăsim două programe publice semnificative: cel teatral (Teatrul și Opera Maghiară), respectiv cel al parcului public urban (Parcul Central Simion Bărnuțiu);
- în condiții de ocupare mult mai aglomerată decât cele de pe latura nordică, latura vestică a primei incinte a primit și ea programe ample: învățământ universitar (clădiri ale Universității Tehnice) și preuniversitar (Colegiul Național George Barițiu), sediu bancar (fosta Bancă Austro-Ungară) convertit ulterior pentru învățământul universitar (Universitatea Tehnică). În proximitatea porții vestice dinspre nord (Monostor Tor) a celei de-a doua incinte fortificate, a primit loc noua clădire a Primăriei. În dreptul porții vestice dinspre sud (Schusterturm), sistematizarea Pieței Lucian Blaga s-a făcut și cu introducerea unor programe semnificative: Biblioteca Centrală Universitară, respectiv Casa de Cultură a Studenților;
- de-a lungul laturii sudice, atât în interiorul, cât și în exteriorul incintei, au primit loc învățământul universitar (Facultatea de Drept a Universității Babeș-Bolyai, Clinica de Stomatologie a Universității de Medicină și Farmacie) și preuniversitar (Liceul Teologic Reformat, Liceul Teoretic Báthory István, Colegiul Național Gheorghe Șincai);
- pe latura estică primesc loc Cercul Militar și Prefectura, iar în spațiul pieților Avram Iancu și Ștefan cel Mare: Catedrala Ortodoxă, Teatrul și Opera Română, Casa Învățătorului, Catedrala Greco-Catolică. Pe frontul vestic, opus incintei, al pieților amintite, aflăm palatele

Mitteltor), towards the outside, the open space was enhanced by developing the Avram Iancu and Ștefan cel Mare squares; at the southern gate (Thorenburgertor), the foundation and development of the Házsongárd cemetery; at the secondary western gate (Schusterturm), the persistence of an irregularly widened intersection that would become the Lucian Blaga Square. Although a significant widening of the road has also taken shape at the main western gate (Monostor Tor) over time, it has not become a square as such; given the importance of this road (Memorandumului Street – Unirii Square – 21 December 1989 Boulevard/ Monostorergasse – Marktplatz – Langgasse) in the territorial traffic for the purpose of crossing the city, which is still the case today, neither to the west (Monostor Tor) nor to the east (Ungertor) have squares been superimposed on this road (as places for possible stops and activities), but they have always been tangent to the road (Unirii Square, Avram Iancu Square).

The former St. Michael's Church precinct did not influence the configuration of Unirii Square which, from the beginning of its creation, was much larger and of different shape (quasi-rectangular) than the outline of the precinct (irregular polygonal). For two centuries, until the end of the 19th century, the church precinct was crowded with the buildings of shops that provided additional income for the parish.

Except for the main roads, the streets inside the second fortified enclosure ended all at this square. Outside the walls, the suburbs had an organisation at a scale larger than inside: larger lots, more widely spaced streets, which allowed for the establishment of public projects (e.g., St. Elizabeth's Hospital, established in the 14th century north of the inner city). However, in Cluj, there has always been place for projects with a large space allocation in the interior, such as the Dominican monastery, the Reformed church, the university, etc. It is characteristic of Cluj urban development that the historic centre has not remained frozen in its historical layout and scale but has received updates that have gradually modified its scale and appearance. Even so, the spaces available or made available in connection with the fortified enclosure have also been used for extensive public spaces and projects:

- on the northern side, next to the first fortified enclosure: university education (Faculty of Civil Engineering of the Technical University), planted public space (the so-called Caragiale Park), the Post Office building, the Palace of Telephones, bank headquarters; this functional palette is repeated on the opposite side of George Barițiu Street, enriched with large-scale residential buildings (Széky Palace, one of the four palaces that mark the ends of the bridge crossing Someșul Mic River) and the former Fashion House. At a short distance from the north-western corner of the fortified enclosure, there are two significant public projects i.e., the theatre (Hungarian Theatre and Opera) and

the urban public park (Simion Bărnuţiu Central Park);
- in much more crowded occupation conditions than on the northern side, the western side of the first enclosure also received extensive projects: university education (Technical University buildings) and pre-university education (George Barițiu National College), bank headquarters (former Austro-Hungarian Bank) later converted for university education (Technical University). Near the western gate (Monostor Tor) of the second fortified enclosure, the new Town Hall building was built to the north. South to the west gate (Schusterturm), the Lucian Blaga Square has been developed by adding significant projects such as the Central University Library and the Students' Cultural Centre;
- along the southern side, both inside and outside the enclosure, space was granted for university buildings (Faculty of Law of Babeş-Bolyai University, Dentistry Clinic of the University of Medicine and Pharmacy) and for pre-university buildings (Reformed Theological High School, Báthory István Theoretical High School, Gheorghe Şincai National College);
- on the eastern side, space is allocated for the Military Circle and the Prefecture, and, in the Avram Iancu and Ştefan cel Mare squares, for the Orthodox Cathedral, the Romanian Theatre and Opera, the Teacher's House, the Greek-Catholic Cathedral. On the western front of the aforementioned squares opposite to the enclosure, we find the palaces of the Romanian Railway Company, the Orthodox Metropolitan Church, the Regional Directorate of Public Finance, the Court, the Military Hotel and the Military Museum. The northern front of Avram Iancu Square is further supported by the Protestant Theological Institute and the Reformed University College.

■ Although the beginnings of **Sibiu**[9] [10] (Fig. 5, 6) were set in the Lower Town, the first fortified elements emerged in the Upper Town. The first fortified walled enclosure, built in the 13th century, was simple, belonging to the fortress church (Evangelical Church). A second fortified walled enclosure was also built in the 13th century adjacent to the first, and the two enclosures together were reinforced by doubling. It is possible that elements of reinforcement of the settlement extension areas existed, but they were not actually walled. The construction around the fortified core of a much more extensive walled belt began in the mid-14th century. The belt of the Upper Town fortifications (double outwards, single towards the Lower Town) was first completed, and then the simple belt of the Lower Town fortifications in the 15th century. Artil-

9 Paul NIEDERMAIER, *Geneza oraşelor medievale în Transilvania* (Bucureşti: Editura Academiei Române, 2016), 197-198, 212-213, 375, 405, 460-461, 491, 532-534, 539, 551, 559.

10 Irina BĂLDESCU, *Transilvania medievală: topografie şi norme juridice ale cetăţilor Sibiu, Bistriţa, Braşov, Cluj* (Bucureşti: Simetria, 2012), 123.

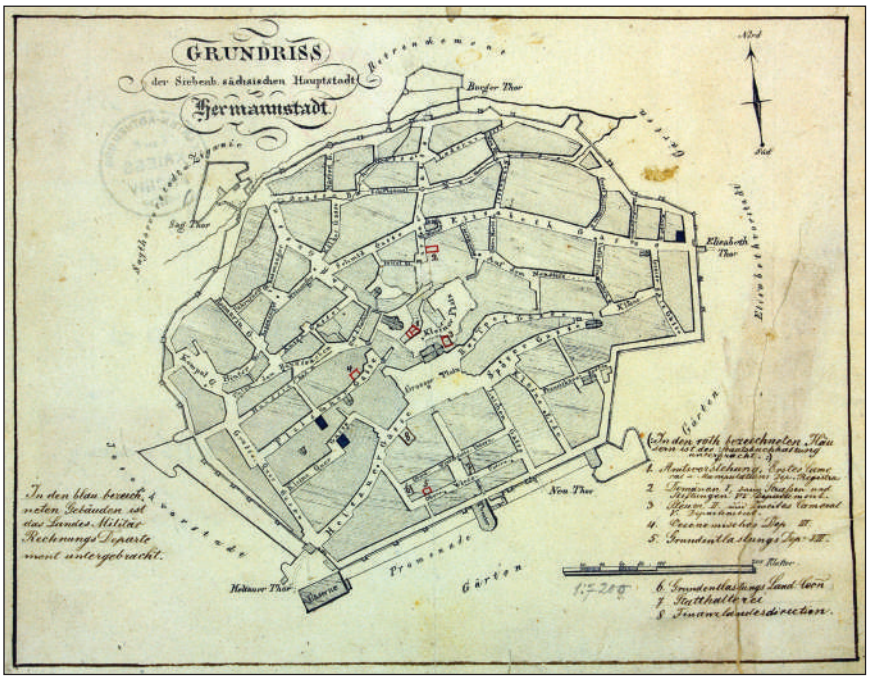
Regionalei CFR, Mitropoliei Ortodoxe, Direcţiei Regionale a Finanţelor Publice, Tribunalului, Hotelul Militar şi Muzeul Militar. Frontul nordic al pieţei Avram Iancu este susţinut şi el de Institutul Teologic Protestant şi Colegiul Universitar Reformat.

■ Deşi începuturile **Sibiului**[9] [10] (Fig. 5, 6) au fost fixate în Oraşul de Jos, primele elemente de fortificare au apărut în Oraşul de Sus. Prima incintă fortificată zidită, de secol XIII, a fost una simplă, aparţinându-i bisericii cetate (Biserica Evanghelică). O a doua incintă fortificată zidită a fost construită tot în secolul XIII adiacent celei dintâi, urmând ca ansamblul celor două incinte să fie întărit prin dublare. Este posibil să fi existat elemente de întărire a zonelor de extindere ale aşezării, dar care să nu fi fost propriu-zis zidite. Construirea în jurul nucleului fortificat a unei centuri zidită mult mai extinsă a fost demarată la mijlocul secolului al XIV-lea, finalizându-se mai întâi centura fortificaţiilor Oraşului de Sus (dublă spre exterior, simplă spre Oraşul de Jos), iar în secolul XV centura simplă a fortificaţiilor Oraşului de Jos. În secolele XVI şi XVII sunt construite rondelele de artilerie şi bastioanele.

Incinta fortificată a bisericii cetate (Biserica Evanghelică) a dat ulterior forma Pieţei Huet (Huetplatz/ Kirchhof), iar cea de-a doua incintă fortificată a conturat spaţiul Pieţei Mici (Kleiner Ring). Condiţiile topografice dar şi prezenţa lacurilor şi bălţilor, care au contribuit la îngreunarea accesului la aşezare, nu au asigurat condiţii pentru o claritate formală a traseului fortificaţiilor. De asemenea, inelele drumurilor apropiate fortificaţiilor în interiorul şi exteriorul incintei, deşi urmăresc traseul fortificaţiilor, nu au putut face aceasta cu fidelitate, ci adaptându-se de fiecare dată condiţiilor locale, fiind astfel, uneori mai apropiate, alteori mai îndepărtate de linia zidurilor:

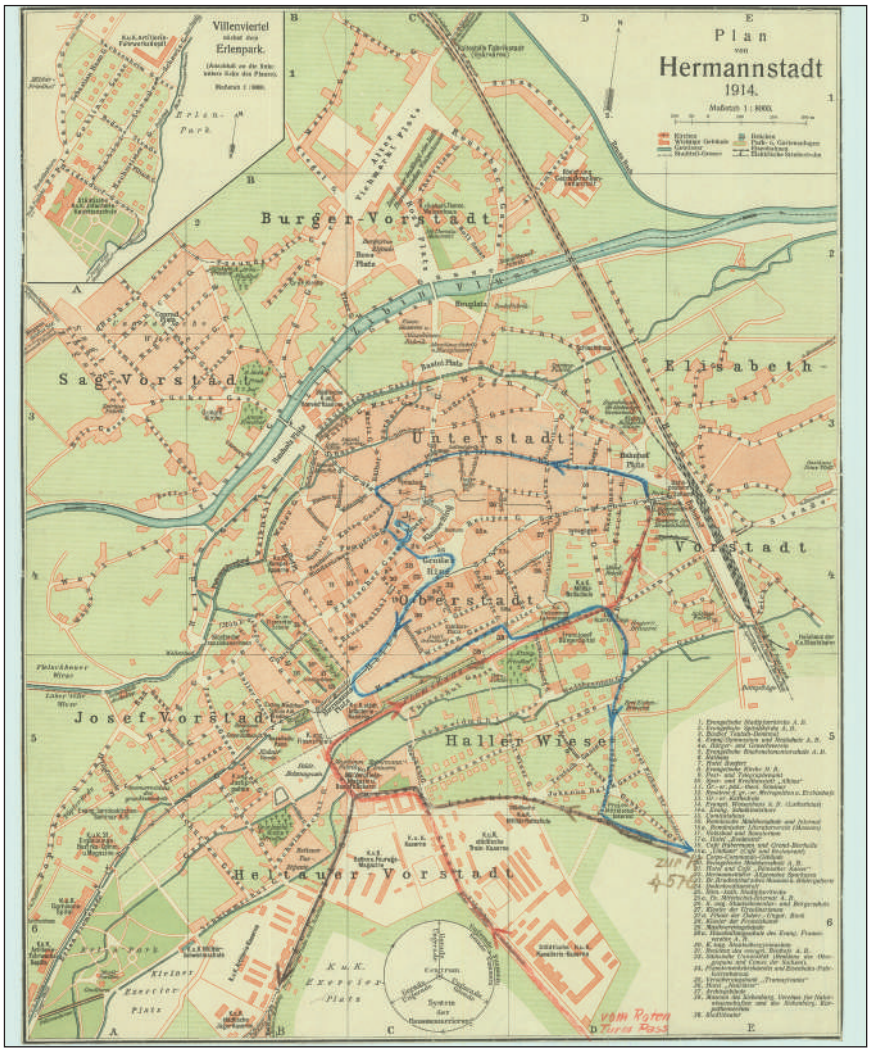
9 Paul NIEDERMAIER, *Geneza oraşelor medievale în Transilvania* (Bucureşti: Editura Academiei Române, 2016), 197-198, 212-213, 375, 405, 460-461, 491, 532-534, 539, 551, 559.

10 Irina BĂLDESCU, *Transilvania medievală: topografie şi norme juridice ale cetăţilor Sibiu, Bistriţa, Braşov, Cluj* (Bucureşti: Simetria, 2012), 123.



■ ***Fig. 5.*** *Harta oraşului Sibiu în 1850. © Institutul și Muzeul de Istorie Militară Ungaria, nr. inventar: G I h 440*

■ ***Fig. 5.*** *Map of Sibiu in 1850. © Military Institute and Museum Hungary, inventory number: G I h 440*



■ ***Fig. 6.*** *Harta oraşului Sibiu în 1914. © Institutul şi Muzeul de Istorie Militară Ungaria, nr. inventar: G I h 443*

■ ***Fig. 6.*** *Map of Sibiu in 1914. © Military Institute and Museum Hungary, inventory number: G I h 443*

- prin dimensiunile lor mici, prima şi cea de-a doua incintă fortificată au cuprins în interior, ca spaţiu public, doar câte o piaţă: Piaţa Huet (Huetplatz/ Kirchhof) şi Piaţa Mică (Kleiner Ring), iar condiţiile topografice (căderea mare de teren la nord către Oraşul de Jos) fac imposibilă conturarea unui inel complet de circulaţii exterior: Pasajul Scărilor (Pempflingergasse), strada Alexandru Odobescu (Pempflingergasse), strada Samuel von Brukenthal (Unter dem Hundsrücken), Piaţa Mare (Großer Ring), în timp ce pe laturile nord-vestică şi nord-estică se instalează diferenţa de nivel dintre Oraşul de Sus şi Oraşul de Jos;
- cea de-a treia centură fortificată, oprindu-se la vest şi la est în primele două incinte fortificate şi cuprinzând Oraşul de Sus, este susţinută cu întreruperi, la interior de strada Mitropoliei (Fleischergasse), strada Ioan Lupaş (Hechtgasse), strada Cetăţii (Harteneckgasse), strada Manejului (Reitschulgasse), strada Avram Iancu (Reispergasse); iar la exterior de strada Centumvirilor (Hundsrücken, Johannisrech), şoseaua Alba Iulia, strada Bastionului, strada George Bariţiu, Piaţa Unirii, b-dul Corneliu Coposu, strada Constituţiei, strada Movilei (Neustift), Piaţa Aurarilor (Fingerlingsplatz), Pasajul Pieţei Aurarilor (Fingerlingsstiege)
- asemănător celei de-a treia centuri fortificate, cea de-a patra, cuprinzând Oraşul de Jos, este însoţită cu întreruperi, la interior de strada

lery roundels and bastions were built in the 16th and 17th centuries

The fortified enclosure of the fortress church (Evangelical Church) later shaped the Huet Square (Huetplatz/ Kirchhof), and the second fortified enclosure shaped the Small Square (Kleiner Ring). The topographical conditions, as well as the presence of lakes and ponds, which made access to the settlement more difficult, did not provide the conditions for a clear shape of the fortification route. Likewise, although they follow the route of the fortifications, the road rings close to the fortifications inside and outside the enclosure could not do so faithfully but adapted each time to the local conditions. They are thus sometimes closer, sometimes further away from the line of the walls:

- Due to the small size of the first and second fortified enclosures, they could shelter within only one square as public space: the Huet Square (Huetplatz/ Kirchhof) and the Small Square (Kleiner Ring). The topographical conditions (the steep land drop to the north towards the Lower Town) make it impossible to outline a complete traffic outer ring: Stairs Passage (Pempflingergasse), Alexandru Odobescu Street (Pempflingergasse), Samuel von Brukenthal Street (Unter dem Hundsrücken), the Large Square (Großer Ring), while on the north-western and north-eastern sides the difference in level between the Upper Town and the Lower Town is established;
- The third fortified belt stops west and east at the first two fortified enclosures. It encompasses the Upper Town, is supported, with interruptions, on the inside by the Mitropoliei Street (Fleischergasse), Ioan Lupaş Street (Hechtgasse), Citadel Street (Harteneckgasse), Manejului Street (Reitschulgasse), Avram Iancu Street (Reispergasse), and outside by Centumvirilor Street (Hundsrücken, Johannisrech), Alba Iulia Road, Bastion Street, George Bariţiu Street, Unirii Square, Corneliu Coposu Boulevard, Constituţiei Street, Movilei Street (Neustift), Aurarilor Square (Fingerlingsplatz), Aurarilor Square Passage (Fingerlingsstiegede);
- Similarly to the third fortified belt, the fourth, comprising the Lower Town, is accompanied, with interruptions, inside by the Ropemakers' Street (Klostergasse), the Furriers' Street (Kürschnergasse), the Wheelwrights' Street (Wagnergasse), the Stonemasons' Street (Wagnergasse), the Wall Street (Maurergasse), the Gunpowder Mill's Street (Pulvergasse), the Tailors' Street (Schneidergasse), the Weavers' Street (Webergasse), and outside, again with interruptions, by Uzinei Street, King Ferdinand Street, Nicolae Teclu Street, Ocnei Street, the former school alley (Schülerschanz Gasse), Cibin Square, Dârstelor Street.

Significant public spaces have emerged in relation to the fortifications and access points. As already mentioned, the Huet Square and the Small Square are literally defined by the first and second fortified enclosures, and the Large Square is gradually

emerging as a space at the edge of the second fortified enclosure (connected to the Town Hall Tower), bordered by the new developing settlement. In relation to the third fortified enclosure (Upper Town), we can see Unirii Square (next to the Heltauertor). In relation to the fourth fortified enclosure (Lower Town) we can see the 1 December 1918 Square (railway station square) (next to Elisabethentor), the former Hay Market (next to the Burgertor Gate) (its space seems to be divided, it is now perceived more as an intersection), the Cibinului Square (next to Sagtor), as well as the intersection opposite the Soldisch bastion between the Bastion Street, Alba Iulia Road, Andrei Şaguna Street and Dealului Street.

Much more present than in the case of Braşov and Cluj, we find green spaces associated with the last two fortified belts. A contribution to this comes from the bastioned configuration of the fortifications:

- The Astra Park along the south-western courtyard of the Upper Town, between the Soldisch and Cisnădiei Gate bastions, themselves landscaped, although not both open to the general public (the Soldisch bastion currently houses a children's community services complex, and the Cisnădiei Gate bastion houses Unirii Square and the Boulevard Park);
- The Citadel Park along the south-eastern curtain wall of the Upper Town, between the Cisnădiei Gate bastion and the Gros Tower, beyond which, up to the Haller bastion, a succession of small green spaces continue the line of the Citadel Park, namely The Garden of the Natural History Museum and, beyond the former Ropemakers' Tower at the south-eastern end of Gheorghe Lazăr Street, a green strip reaching the Haller Bastion. The latter houses the Neurology Clinic and is a garden itself, although not of general public interest;
- The Corneliu Coposu Park runs parallel to the Citadel Park, opposite to Corneliu Coposu Boulevard;
- The Youth Park runs along the eastern curtain wall, north of the Haller Bastion.

It can be noticed that they are all located in the Upper Town.

Projects with a large allocation of space in the fortification area can be found in Sibiu too:

- part of the Soldisch Bastion is occupied by a community service complex, part of the Cisnădiei Gate Bastion was occupied for a time by the infantry cadet barracks building (later demolished), and the Haller bastion houses the Neurology Clinic;
- the Town Theatre was associated with the Gros Tower on the south-eastern side, and a short distance from it, the Museum of Natural History and further on the Hospital of Paediatrics were built;
- while the Haller Bastion housed the Military Riding School at the beginning of the 20th century, in time it came to house, along with the Youth Park, the Ballet Theatre and an Orthodox church;
- the railway station and the bus station came to be associated with the 1 December 1918 Square;

Funarilor (Klostergasse), strada Blănarilor (Kürschnergasse), strada Rotarilor (Wagnergasse), strada Pietrarilor (Wagnergasse), strada Zidului (Maurergasse), strada Pulberăriei (Pulvergasse), strada Croitorilor (Schneidergasse), strada Pânzarilor (Webergasse); iar la exterior, din nou cu întreruperi, de strada Uzinei, strada Regele Ferdinand, strada Nicolae Teclu, str. Ocnei, fosta alee a şcolii (Schülerschanz Gasse), Piaţa Cibin, str. Dârstelor;

Spaţii publice semnificative s-au conturat în relaţie cu fortificaţiile şi punctele de acces. După cum am amintit deja, Piaţa Huet şi Piaţa Mică sunt definite propriu-zis de prima şi cea de-a doua incintă fortificată, iar Piaţa Mare se conturează treptat ca un spaţiu la marginea celei de-a doua incinte fortificate (conectat la Turnul Primăriei), mărginit de noua aşezare în dezvoltare. Raportat la cea de-a treia incintă fortificată (Oraşul de Sus) putem observa Piaţa Unirii (în dreptul Heltauertor). Raportat la cea de-a patra incintă fortificată (Oraşul de Jos) putem observa Piaţa 1 Decembrie 1918 (piaţa gării) (în dreptul Elisabethentor), fosta Piaţa Fânului (în dreptul porţii Burgertor) (spaţiul său părând a fi divizat, este percepută în prezent mai degrabă ca o intersecţie), Piaţa Cibinului (în dreptul Sagtor), dar şi intersecţia din dreptul bastionului Soldisch dintre str. Bastionului, Şoseaua Alba Iulia, str. Andrei Şaguna şi str. Dealului.

Mult mai prezente decât în cazul Braşovului şi Clujului aflăm spaţii verzi asociate ultimelor două centuri fortificate, la această situaţie contribuind şi configuraţia bastionară a fortificaţiilor:

- Parcul Astra de-a lungul curtinei sud-vestice a Oraşului de Sus, între bastioanele Soldisch şi Porţii Cisnădiei, ele însele amenajate peisagistic chiar dacă nu ambele deschise publicului larg (în prezent, bastionul Soldisch adăposteşte un complexul de servicii comunitare pentru copii, iar bastionul Porţii Cisnădiei adăposteşte Piaţa Unirii şi Parcul Bulevard);
- Parcul Cetăţii de-a lungul curtinei sud-estice a Oraşului de Sus, între bastionul Porţii Cisnădiei şi Turnul Gros, dincolo de care, până la bastionul Haller se mai succed mici spaţii verzi continuând linia Parcului Cetăţii şi anume: Grădina Muzeului de Istorie Naturală precum şi, dincolo de fostul Turn al Frânghierilor la capătul sud-estic al străzii Gheorghe Lazăr, o fâşie verde ce ajunge la bastionul Haller; acesta din urmă, găzduind Clinica de Neurologie, este şi el o grădină, chiar dacă nu de interes public general;
- Parcul Corneliu Coposu se desfăşoară în paralel cu Parcul Cetăţii, pe partea opusă a bulevardului Corneliu Coposu;
- Parcul Tineretului se desfăşoară de-a lungul curtinei estice, la nord de bastionul Haller.

Se poate observa că toate sunt situate în Oraşul de Sus.

Şi la Sibiu, programe cu alocare mare de spaţiu se regăsesc în zona fortificaţiilor:

- o parte din bastionul Soldisch este ocupat de un complex de servicii comunitare, o parte din bastionul Porţii Cisnădiei a fost ocupat pentru o vreme de clădirea cazarmei cadeţilor de infanterie (demolată ulterior), iar bastionul Haller adăposteşte Clinica de Neurologie;
- Teatrul orăşenesc a fost asociat Turnului Gros de pe latura sud-estică şi, la mică distanţă de acesta a fost ridicat Muzeul de Istorie Naturală şi, mai departe, Spitalul Clinic de Pediatrie;
- dacă bastionul Haller adăpostea la începutul secolului al XX-lea Şcoala Militară de Călărie, cu timpul a ajuns să adăpostească, alături de Parcul Tineretului, Teatrul de Balet şi o biserică ortodoxă;
- gara şi autogara au ajuns să fie asociate Pieţei 1 Decembrie 1918;
- la nord de bulevardul Corneliu Coposu, între strada Uzinei şi şinele de cale ferată, sunt situate siturile industriale ale Electrica Distribuţie Transilvania Sud;

- la nord de strada Nicolae Teclu sunt amenajate situri industriale;
- la nord de fosta Piaţă a Fânului este alocat spaţiu pentru o mare platformă industrială (Independenţa) dar şi, mai recent, pentru Tribunalul şi Judecătoria Sibiu;
- la nord-est de piaţa Cibinului, unde pe vremuri se afla cazarma gărzii naţionale, în prezent se desfăşoară o dotare mixtă; de asemenea, la sud-vest de Piaţa Cibinului avem în prezent piaţa agroalimentară;
- Colegiul Naţional Octavian Goga a primit loc între bastionul Soldisch şi Parcul Astra;
- de-a lungul laturii sud-estice a centurii fortificate, pe partea opusă bulevardului Corneliu Coposu, aflăm în prezent Teatrul Naţional Radu Stanca, Spitalul Clinic Judeţean de Urgenţă Sibiu, Facultatea de Medicină şi o serie de clinici.

Discuţii şi concluzii

■ Dacă lucrarea de faţă a pornit de la prezentarea modelul european de evoluţie a vieţii urbane a fortificaţiilor, propunându-şi să verifice validitatea acestui model în arealul transilvănean, cele trei cazuri prezentate, cu asemănările şi diferenţele lor, confirmă ipoteza, justificând un posibil interes pentru extinderea studiului la o paletă mai largă de oraşe din regiune. Centurile fortificate, păstrate sau nu, lasă amprente durabile în forma urbană, vizibile îndeosebi în configuraţia reţelei de circulaţie (sublinierea mai mult sau mai puţin coerentă a traseului fortificaţiilor prin circulaţii conduse de-a lungul lor), în modificarea de scară şi densitate (scară mai mică, densitate mai mare în interior; scară mai mare, densitate mai mică în exterior), respectiv în caracterul programelor implementate (programe cu necesar mare de spaţiu în fostele spaţii libere aferente fortificaţiilor). Dat fiind că pierderea rostului fortificaţiilor şi modificările spaţiale legate de dezafectarea lor s-au manifestat în arealul transilvănean cu predilecţie în secolul al XIX-lea, se poate observa recurenţa prezenţei unor programe publice atunci apărute în zona fortificaţiilor: spaţii publice plantate, teatru, poştă, prefectură etc. Subiectul, în ansamblul său, poate fi de interes nu doar pentru înţelegerea felului în care cadrul amenajat al oraşelor a evoluat, ci şi pentru identificarea acelor caracteristici care conferă valoare patrimonială formei urbane. Astfel, subiectul este de interes inclusiv (şi poate mai ales) în contemporaneitate, când fortificaţiile sau urmele lor devin „material" de lucru în cadrul diverselor intervenţii urbane. Atitudinea noastră prezentă faţă de ele în mod necesar trebuie calibrată atât pentru folosirea cu rost a ceea ce intră în cadrul urban, cât şi pentru recunoaşterea şi susţinerea valorii patrimoniale a structurilor fortificaţiilor şi amenajărilor aferente lor.

Bibliografie / Bibliography

■ BĂLDESCU, Irina. *Transilvania medievală: topografie şi norme juridice ale cetăţilor Sibiu, Bistriţa, Braşov, Cluj.* Bucureşti: Simetria, 2012.

■ Hungaricana. „Colecţia de hărţi." https://maps.hungaricana.hu/en .

■ KOSTOF, Spiro. *The City Assembled: The Elements of Urban Form Through History*. New York: Thames & Hudson, 2005.

■ MILEA, Andreea. „Începuturile parcurilor publice urbane transilvănene"/ "The Beginnings of Transylvanian Public Urban Parks." *Transsylvania Nostra*, anul XII, nr. 45 (1/2018): 50-56.

■ NIEDERMAIER, Paul. *Geneza oraşelor medievale în Transilvania*. Bucureşti: Editura Academiei Române, 2016.

- north of Corneliu Coposu Boulevard, between Uzinei Street and the railway tracks, there are the industrial sites of Electrica Distribuţie Transilvania Sud;
- north of Nicolae Teclu Street there are industrial sites;
- north of the former Hay Market there is space allocated for a large industrial platform (Independenţa), and, more recently, for the Sibiu Tribunal and Court of First Instance;
- north-east of Cibinului Square, where once stood the barracks of the National Guard, there is now a mixed development; moreover, south-west of the Cibinului Square we now have the agri-food market;
- the Octavian Goga National College was given a place between the Soldisch Bastion and Astra Park;
- along the south-eastern side of the fortified belt, opposite to Corneliu Coposu Boulevard, we now find the Radu Stanca National Theatre, the Sibiu County Emergency Clinical Hospital, the Faculty of Medicine and a number of clinics.

Discussion and conclusions

■ This paper started with the presentation of the European pattern of fortification urban life evolution. Its aim was to check the validity of this model in the Transylvanian area. The three cases presented, with their similarities and differences, confirm the assumption, and justify a possible interest in extending the study to a wider range of towns in the region. The fortified belts, whether preserved or not, leave lasting traces in the urban shape, particularly visible in the configuration of the traffic network (more or less coherent emphasis on the route of the fortifications through flows running along them), in the change of scale and density (smaller scale, higher density inside; larger scale, lower density outside), and in the nature of the implemented projects (programmes with high space requirements in the former free spaces related to the fortifications). The fortifications lost their role and spatial changes linked to their dismantling occurred in the Transylvanian area, particularly in the 19th century. At the same time, recurrent public projects are implemented around the fortifications, such as planted public spaces, theatres, post offices, prefecture, etc. The overall topic may be of interest not only to understand the way in which the urban form evolved, but also to find the characteristics that give heritage value to the urban landscape. The topic is thus of interest even (and perhaps especially) in contemporary times when the fortifications or their traces become working "material" for various urban interventions. Our present attitude towards them necessarily needs to be calibrated both for the meaningful use of what pertains to the urban form and for the recognition and support of the heritage value of fortification structures and their associated developments.

■ Daniela MARCU-ISTRATE[1]

Arheologia turnului de sud-est al castelului Károlyi din Ardud: între nevoile restaurării și provocările cercetării

Archaeology of the Southeast Tower of the Károlyi Castle in Ardud: Between Conservation Needs and Research Challenges

■ **Rezumat:** *Lucrarea analizează evoluţia turnului de sud-est al castelului baroc construit de familia KÁROLYI la Ardud (jud. Satu Mare), pe baza cercetărilor şi observaţiilor arheologice înregistrate în anii 2010-2011. Turnul, acum ruinat, nu a avut pivniţă, astfel că în suprafaţa ocupată de el s-au păstrat o serie de vestigii medievale, aparţinând perioadei în care domeniul Ardud şi situl castelului se aflau în proprietatea familiei Drágfy. Au fost înregistrate două faze medievale în care s-au ridicat construcţii, iniţial din lemn, apoi din piatră, rezultatul celei din urmă fiind o cetate de dimensiuni ample, de formă patrulateră neregulată, cu turnuri rotunde la colţuri şi un turn de poartă pătrat. Este de asemenea analizat modul în care a fost construit turnul baroc şi evoluţia acestuia până la transformarea în ruină.*

■ **Cuvinte cheie:** Ardud, cetate medievală, familia Drágfy, castelul Károlyi, intervenţie barocă

■ În anul 2010 pe locul fostului castel al familiei nobiliare KÁROLYI din localitatea Ardud se păstrau doar câteva ruine, care sugerau un ansamblu patrulater cu turnuri la colţuri, înconjurat parţial de un şanţ larg, parţial de pante abrupte. Un turn în colţul de sud-vest se păstra aproape intact, totuşi abandonat şi într-o stare de conservare foarte proastă. Din perechea lui de pe latura sudică mai rămăsese o ruină care sugera un fost turn rotund cu cel puţin trei niveluri de locuire, iar pe partea opusă, către nord, doar denivelarea terenului ne putea duce cu gândul la existenţa altor clădiri. (Fig. 1)

Demararea unui proiect de restaurare parţială (BUDA 2011), sub coordonarea prof. Bálint SZABÓ, a oferit oportunitatea realizării unor studii interdisciplinare pentru cunoaşterea şi analiza structurilor construite care încă se păstrau în sit. În acest context au fost planificate şi realizate cercetări arheologice, în anul 2010, urmate de o supraveghere a lucrărilor propriu-zise de restaurare, în anul 2011. Investigaţiile arheologice au fost concentrate, ca întreaga restaurare, pe latura de sud a castelului, acolo unde se păstrau cele două turnuri în stare mai mult sau mai puţin avansată de ruină. (Fig. 2) Obiectivele au fost desigur legate de problemele tehnice ale restaurării, respectiv clarificarea unor aspecte legate de structura clădirilor vizibile şi conectarea celor din urmă cu ansamblul din care se putea presupune că făcuseră parte cândva. Cercetările au furnizat date generale despre sit şi au identificat limitele zidurilor de incintă

1 Arheolog, Academia Română, Institutul de Arheologie „Vasile Pârvan” Bucureşti, România.

■ **Abstract:** *The paper analyses the evolution of the southeast tower of the Baroque castle built by the KÁROLYI family in Ardud (Satu Mare County), based on archaeological research and observations recorded in 2010-2011. The tower, now in ruins, did not have a cellar, which allowed for the preservation of several mediaeval vestiges within its footprint, dating back to the period when the Ardud estate and the castle site were owned by the Drágfy family. Two mediaeval construction phases were recorded: initially, wooden structures were built, followed by stone constructions, resulting in a large, irregular quadrilateral castle with round towers at the corners and a square gate tower. The paper also examines how the Baroque tower was constructed and its evolution until it fell into ruin.*

■ **Keywords:** Ardud, mediaeval fortification, Drágfy family, Károlyi castle, Baroque

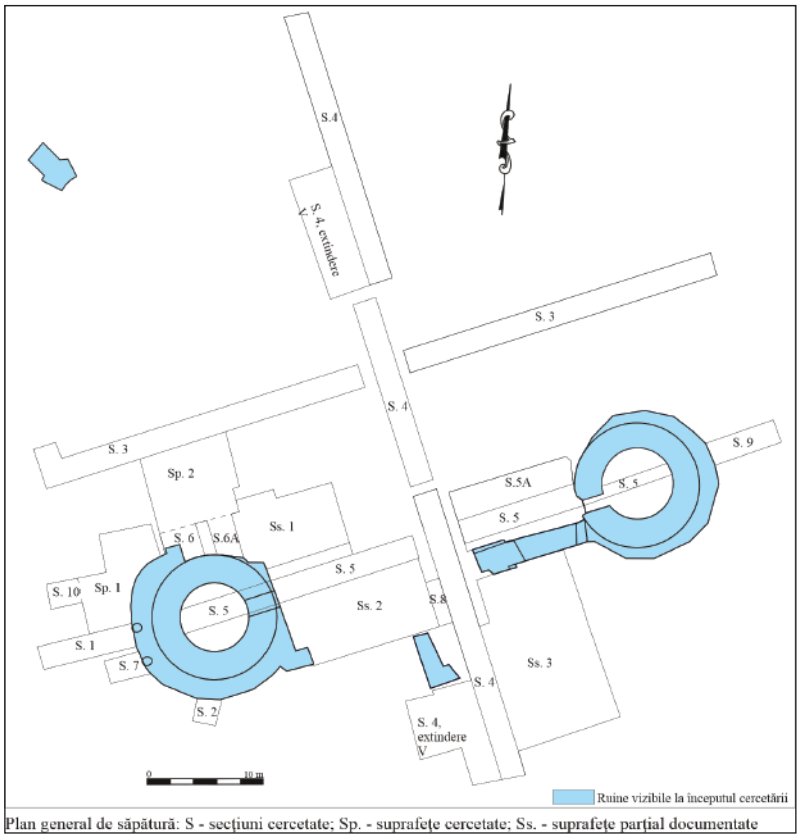
■ In 2010, only a few ruins were still standing on the site of the former castle of the aristocratic KÁROLYI family in Ardud, hinting at a quadrilateral ensemble with corner towers, partially surrounded by a wide ditch and partially by steep slopes. A tower in the southwest corner was almost intact, although abandoned and in a very poor condition. Its counterpart on the southern side had been reduced to ruins, suggesting a former round tower with at least three floors, while on the opposite side, towards the north, only the unevenness of the terrain hinted at the existence of other buildings. (Fig. 1)

The launch of a conservation project (BUDA 2011) coordinated by Professor Bálint SZABÓ provided the opportunity to conduct interdisciplinary studies for the understanding and analysis of the site. In this context, archaeological excavation was planned and carried out in 2010, followed by the survey of the

1 Archaeologist, Romanian Academy, Institute of Archaeology “Vasile Pârvan” Bucharest, Romania.



■ ***Fig. 1.*** *Ruinele colțului de sud-est al castelului înainte de începerea cercetărilor și lucrărilor din anul 2010 © Daniela MARCU-ISTRATE*
■ ***Fig. 1.*** *Ruins of the southeast corner of the castle before archaeological excavations and conservation and works in 2010 © Daniela MARCU-ISTRATE*



■ ***Fig. 2.*** *Planul general al cercetărilor arheologice © Daniela MARCU-ISTRATE*
■ ***Fig. 2.*** *General plan of the archaeological excavations © Daniela MARCU-ISTRATE*

pe toate cele patru laturi, dar pe latura de sud, mai ales în zona turnului porţii, o aglomerare neaşteptată de ruine, din diferite etape, ar fi necesitat o cercetare mult mai amplă pentru a fi studiate şi etapizate în funcţie de contextul lor.

Deşi în final restaurarea a rămas concentrată pe cele două turnuri vizibile pe partea sudică, în jurul lor marcând doar anumite ruine, datele arheologice au fost importante pentru reconstituirea istoriei castelului şi în egală măsură a antecedentelor acestuia, dar poate cel mai important aspect a fost stabilirea unor repere pentru o cercetare sistematică a întregului ansamblu. Informaţii generale despre aceste cercetări au fost publicate destul de repede după încheierea lucrărilor, dar totuşi o analiză detaliată a documentaţiei arheologice şi artefactelor descoperite este în derulare (MARCU ISTRATE 2011; 2015).

Această lucrare urmăreşte să detalieze cercetarea turnului de sud-est, evidenţiind contribuţia acestei cercetări la reconstituirea generală a istoriei castelului de la Ardud şi a precedentelor medievale ale acestuia. Motivul acestei opţiuni este acela că, spre deosebire de toate celelalte componente ale castelului, turnul de sud-est a rămas o construcţie la nivelul parterului, în consecinţă în mod fericit s-au păstrat unele vestigii din perioadele mai vechi, oferind mărturii valoroase pentru reconstituirea istorică.

Descrierea cercetării arheologice

■ Turnul de sud-est (numit în continuare turnul baroc) se află la intersecţia dintre corpurile de clădiri de pe laturile de sud şi est ale castelului, aproximativ un sfert din circumferinţa sa fiind iniţial înglobată în

actual conservation work in 2011. The archaeological investigations, like the entire conservation, were focused on the southern side of the castle, where the two towers, in varying states of ruin, were still standing. (Fig. 2) The objectives were, of course, related to the technical challenges of conservation, respectively understanding the extant remains and connecting them to the original structure they could be presumed to have once been a part of. The investigation provided general data about the site and identified the boundaries of the curtain walls on all four sides. However, on the southern side, particularly in the area of the gate tower, an unexpected concentration of ruins from different periods would have required much more extensive research to be studied and sequenced according to their context.

Although the conservation ultimately remained focused on the two southern towers, with only certain ruins around them being marked, the archaeological data were crucial for reconstructing the history of the castle and, equally, its antecedents. Perhaps the most important outcome was finding important clues for a systematic investigation of the entire complex. General information about these investigations was published relatively quickly after the completion of the work, but a detailed analysis

of the archaeological documentation and the discovered artefacts is still ongoing (MARCU ISTRATE 2011; 2015).

The paper aims to detail the research on the southeast tower, highlighting the contribution of this investigation to the overall reconstitution of the history of the Ardud castle and its mediaeval predecessors. The reason for this option is that, unlike all other components of the site, the southeast tower remained a structure at ground level, which fortunately preserved some vestiges from earlier periods, providing valuable evidence for historical reconstruction.

Description of the archaeological research

■ The today southeast tower (hereafter referred to as the Baroque tower) is located between the south and east wings of the castle, with approximately one-quarter of its circumference originally integrated into these buildings, now completely disappeared. The remaining part features a flared base that starts near the outer walls of the adjacent buildings, likely attached to them (a relationship that still needs to be investigated), and gradually thickens towards the east, reaching a maximum of 1.70 m at the tower's axis, resulting in a maximum wall thickness of over 4 m at ground floor level. When viewed from the inside, the tower has a circular plan, with an interior diameter of 6 m and a wall thickness of about 2.60 m on the courtyard side. (Fig. 3, 4)

At the beginning of the excavation, only ruins outlining the circular layout were visible of the tower, with remnants of two or three levels, and walls constructed of brick that still bore traces of plaster in some areas, especially on the exterior. The interior of the roofless ruin was filled with a large amount of debris and earth, and after it was cleared, a ground floor, slightly sunken compared to the courtyard level emerged, with its brick vault collapsed in the rubble.

The tower was archaeologically investigated along an east-west axis that passed through the entrance at the first level (S.5 – the main section through the entire southern wing of the castle, and S.5A), continuing outward to the east through S.9. Later, the research on the courtyard side was extended to clarify the layout of the surrounding buildings, and the area of the tower and the eastern curtain wall connection was investigated from the outside in 2011. Inside, after removing the rubble and completing the main unit of investigation, S.5, the entire surface was cleaned down to the Baroque level, the excavation continuing on smaller areas to study a number of contexts and artefacts. However, this cannot be considered a complete investigation, as more extensive excavations would have been necessary both on the southern side and towards the interior of the enclosure – also considering that



■ ***Fig. 3.*** *Turnul de sud-est al castelului în anul 2010, la începutul cercetărilor arheologice © Daniela MARCU-ISTRATE*
■ ***Fig. 3.*** *Southeast tower of the castle in 2010, at the beginning of the archaeological excavations © Daniela MARCU-ISTRATE*

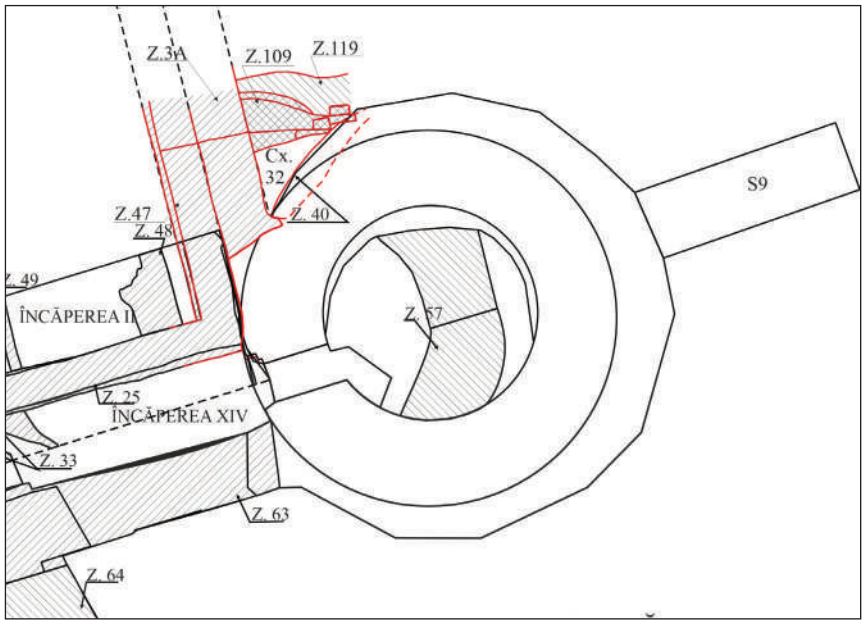


■ ***Fig. 4.*** *Turnul de sud-est, vedere dinspre exteriorul incintei, în timpul lucrărilor de refacere a soclului © Daniela MARCU-ISTRATE*
■ ***Fig. 4.*** *Southeast tower, view from outside the enclosure, during the conservation works on the base © Daniela MARCU-ISTRATE*

aceste clădiri, astăzi complet dispărute. Partea rămasă în exteriorul incintei prezintă un soclu evazat, care porneşte de lângă zidurile exterioare ale corpurilor de clădiri adiacente, fiind probabil adosat acestora (o relaţie care însă trebuie cercetată) şi se îngroaşă treptat spre est, ajungând la un maxim de 1,70 m în axul turnului, ceea ce a dat peretelui o grosime maximă de peste 4 m la nivelul de călcare. Dacă privim din interior, turnul are un plan circular, cu diametrul interior de 6 m şi grosimea peretelui dinspre curte de cca 2,60 m la nivelul elevaţiei. (Fig. 3, 4)

La începutul săpăturii, din turn se vedeau doar ruine ce conturau planul circular, cu rămăşiţe din două sau trei niveluri, cu pereţi construiţi din cărămidă ce păstrau pe ici pe colo urme de tencuială, mai ales în exterior. Ruina fără acoperiş avea în interior o umplutură enormă, după degajarea căreia s-a conturat un parter uşor adâncit faţă de nivelul curţii, a cărui boltă din cărămidă a fost găsită prăbuşită în moloz.

Turnul a fost cercetat arheologic pe o axă est-vest care a trecut prin intrarea de la primul nivel (S.5 – secţiunea magistrală care a traversat întreg corpul sudic al castelului, şi S.5A), continuând în exterior spre est, prin S.9; ulterior cercetările din partea către curte au fost extinse pentru a clarifica planimetria clădirilor din jur, iar zona de la intersecţia turnului cu zidul de incintă estic a fost cercetată din exterior în timpul supravegherii arheologice din anul 2011. În interior, după evacuarea umpluturii de moloz şi realizarea săpăturii de control S.5, întreaga suprafaţă a fost curăţată până la nivelul de călcare baroc, săpătura continuând pe suprafeţe mai mici pentru cercetarea ruinei descoperite. Totuşi, nu se poate vorbi despre o cercetare completă, pentru care ar fi fost necesare săpături mai ample atât pe latura de sud, cât şi spre interiorul incintei – ţinând cont şi de faptul că observaţiile înregistrate în timpul

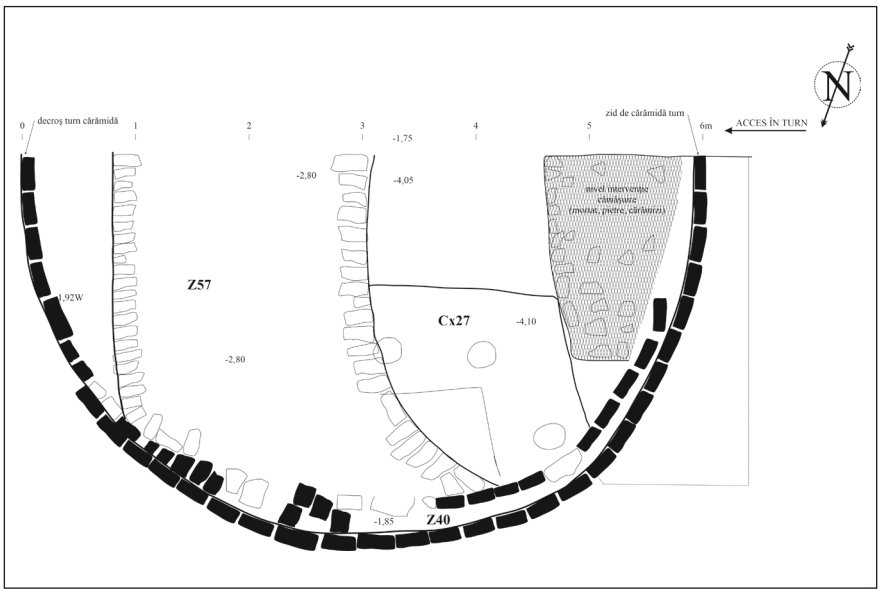


■ ***Fig. 5.*** *Detaliu de plan cu cercetarea turnului de sud-est și vestigiile descoperite: Z.3A – forma barocă a zidului de incintă estic; Z.40 – fundația spartă a turnului baroc; Z.57 – ruina turnului medieval; Z.63 – forma barocă a zidului de incintă sudic; Z.109 – ruina zidului din cărămidă al latrinei baroce; Z.119 – zidărie din piatră medievală; Cx32 – latrina medievală © Daniela MARCU-ISTRATE*

■ ***Fig. 5.*** *Detail of the plan showing the research of the southeast tower and the discovered remains: Z.3A – the Baroque form of the eastern curtain wall; Z.40 – the broken foundation of the Baroque tower; Z.57 – the ruin of the mediaeval tower; Z.63 – the Baroque form of the southern curtain wall; Z.109 – the ruin of the brick wall of the Baroque latrine; Z.119 – mediaeval stone masonry; Cx.32 – mediaeval latrine © Daniela MARCU-ISTRATE*

supravegherii ar trebui pe viitor verificate şi completate prin cercetări arheologice propriu-zise. (Fig. 5)

Săpătura arheologică a arătat că turnul baroc a fost construit în cel puţin două etape, pe locul unui turn mai vechi (numit în continuare turnul gotic), care la rândul lui fusese construit peste o structură din lemn – etape pe care le vom introduce pe scurt în paginile următoare.



■ ***Fig. 6.*** *Detaliu cu ruina turnului medieval Z.57 și vestigiile unei structuri mai vechi, din lemn Cx.27 © Daniela MARCU-ISTRATE*

■ ***Fig. 6.*** *Detail with the ruin of the mediaeval tower Z.57 and the remains of an older wooden structure Cx.27 © Daniela MARCU-ISTRATE*

the observations recorded during the monitoring should be verified and supplemented by actual archaeological research in the future. (Fig. 5)

The archaeological excavation revealed that the Baroque tower was built in at least two stages, on the site of an older tower (hereafter referred to as the Gothic tower), which itself had been constructed over a wooden structure – these stages will be briefly introduced in the following pages.

Older, wooden structures on the site of the current tower

■ Approximately in the middle of the tower, at a depth of -2.30 m, an L-shaped trench was observed, oriented east-west and north-south (towards the exterior of the current castle), filled with a brownish-yellow clay, lightly pigmented with charcoal, mortar, and small brick fragments (archaeologically recorded as Cx.27). (Fig. 6) Within this trench, three post holes were identified – two on the long arm and one on the short arm – circular in shape, with a diameter of 0.25 m, placed at relatively equal distances. The posts were fixed in the trench without being sunk deeper than its base (at -3.20 m), with their lower parts rounded rather than pointed. Later, the trench was filled with the clay resulting from its excavation, which also contained construction debris. Over time, the wood almost completely disappeared, but the post impressions remained, filled with rubble and brick fragments from the upper layers, though no archaeological material that could assist with dating was found. (Fig. 7)

Although we did not pay much attention to this structure initially, assuming that it most likely belonged to scaffolding, further analysis of the archaeological information revealed that we are actually dealing with a fragment of a structure older than the Gothic tower that existed before the current tower. A decisive observation was that the wooden structure was cut to the east by the foundation trench of the Gothic tower, which still bears the impression of one of the wooden posts. This means that when the Gothic tower was built, the wooden structure was preserved at least below the walking level of that period, at a height of approximately 2 m.

The identified fragment clearly represents the corner of a building (?), which was set on wooden posts, extending to the east, outside the perimeter of the later fortification and castle. The foundation system does not help much in establishing a chronology, as it was used in various circumstances over a long period of time.

However, a black layer mixed with a lot of ash, very loose (layer 39, complex 24) likely matches the same wooden stage from before the Gothic tower. The deposit contains abundant archaeological material: pottery sherds, many bones (from both domestic animals and those obtained





■ ***Fig. 7.*** *Amprenta structurii din lemn cu urmele celor trei piloni © Daniela MARCU-ISTRATE*
■ ***Fig. 7.*** *The imprint of the wooden structure with the traces of the three piles © Daniela MARCU-ISTRATE*

through hunting and fishing), and finds such as a bone knife handle with a bronze sleeve, and bronze and iron pieces. Based on the pottery, this deposit, resulting from a fire, can be dated to the 14th-15th centuries and was later disturbed by the foundation trench of the tower. (Fig. 8)

The Gothic tower

■ The next construction on exactly the same spot was a stone tower, the ruins of which were discovered inside the current Baroque tower. It had a shape curving towards the interior of the enclosure and an irregular width, substantially thicker towards the extremities, where it reached 2.40 m. The ruinous state resulted from a demolition that occurred at approximately -0.80 m, but towards the edges, where it was overlapped by the current tower, it remained taller, almost immediately below the Baroque level. The discovered segment thus appears as an arch with an opening towards the castle's courtyard, with the exterior less than 1 m from the wall of the current tower. (Fig. 9)

For the construction of this tower, a foundation trench was dug into prehistoric layers, going deeper than -3.30 m – the limit at which the excavation had to stop due to the very limited available space. The trench, and subsequently the actual foundation, intersected the remains of the wooden structure and the layer of ash described above, partially incorporating one of the wooden posts. The uniform masonry was made of stone, using the emplecton system, meaning the exterior was built with larger stones, some showing signs of carving attempts, while the interior was filled with smaller stones embedded in a whitish-grey mortar, with visible unslaked lime granules in its sandy composition, but with a hard consistency. Small, rare brick fragments were also observed at the edges of the foundation trench. (Fig. 10)

The preserved masonry on both faces appears embedded in coarse mortar and seems to have entirely belonged to the

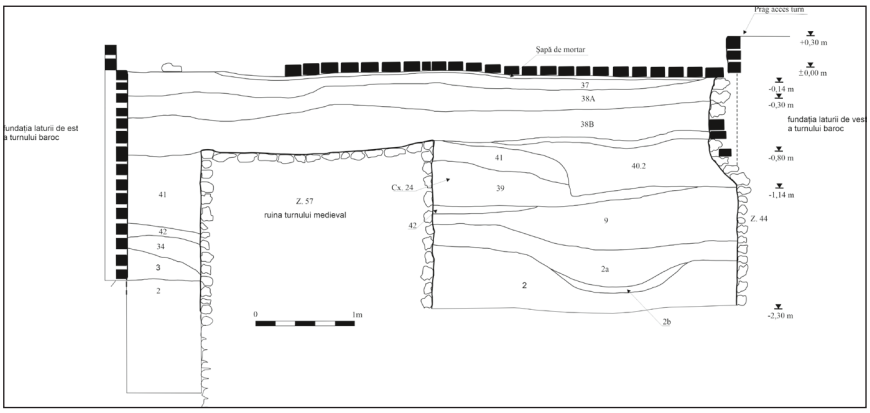
Structuri mai vechi, din lemn, pe locul turnului actual

■ Aproximativ în zona mediană a turnului a fost observat, la -2,30 m, un şanţ în formă de „L" cu braţele orientate EV-SN (spre exteriorul castelului actual), umplut cu lut maroniu-gălbui, pigmentat slab cu cărbune, mortar şi fragmente mici de cărămidă (înregistrat arheologic ca fiind Cx.27). (Fig. 6) În acest şanţ s-au conturat trei gropi de stâlpi, două pe braţul lung şi una pe braţul scurt, de formă circulară, cu diametrul de 0,25 m, amplasate la distanţe relativ egale. Stâlpii au fost fixaţi în şanţ fără să se adâncească faţă de baza acestuia (la -3,20 m), partea lor inferioară fiind cel mai probabil rotunjită, nu ascuţită. Ulterior, şanţul a fost umplut cu lutul rezultat din săparea lui, în care au fost antrenate şi resturi de materiale de construcţie. În timp, lemnul a dispărut aproape în totalitate, dar au rămas amprentele stâlpilor, în care a curs moloz şi fragmente de cărămidă din straturile superioare, dar nu şi material arheologic care ne-ar putea ajuta la datare. (Fig. 7)

Deşi iniţial nu am acordat mare atenţie acestei structuri, considerând că a aparţinut cel mai probabil unei schele, prelucrarea informaţiilor arheologice a arătat că de fapt avem de-a face cu un fragment dintr-o amenajare care a precedat construcţiile din zidărie şi mortar, mai exact turnul gotic anterior turnului actual. Decisivă în acest sens a fost observaţia că această amenajare a fost intersectată în partea estică de şanţul pentru construirea fundaţiei turnului gotic, care de altfel păstrează amprenta unuia dintre stâlpii de lemn. Aceasta înseamnă că în momentul edificării turnului gotic, structura din lemn încă se păstra intactă cel puţin sub nivelul de călcare al acelui moment, pe o înălţime de aproximativ 2 m.

Fragmentul identificat reprezintă în mod evident colţul unei clădiri (?) care era aşezată pe piloţi din lemn, dezvoltându-se spre est, în afara perimetrului cetăţii şi castelului de mai târziu. Sistemul de fundare nu ne ajută prea mult în fixarea unei cronologii, deoarece a fost folosit în diferite împrejurări pe o perioadă lungă de timp.

În schimb, probabil din aceeaşi etapă sau oricum înainte de construirea turnului gotic, datează un strat negru amestecat cu multă cenuşă, foarte afânată (stratul 39, complexul 24), care conţine material arheologic foarte abundent: ceramică întregibilă, foarte multe oase (provenite din animale atât domestice cât şi din vânat, pescuit), respectiv obiecte precum o prăsea de cuţit din os, cu manşon de bronz, piese de bronz şi fier. Pe baza ceramicii, această depunere rezultată dintr-un incendiu poate fi datată în secolele XIV-XV, ulterior fiind deranjată de şanţul pentru construirea turnului. (Fig. 8)



■ ***Fig. 8.*** *Detaliu stratigrafic din interiorul turnului de sud-est, cu ruina turnului medieval Z.57: 2, 2A: depuneri preistorice; 3: nivelare cu lut negru compact; 34: lut amestecat cu mortar și fragmente de piatră; 39: pământ negru cu cenușă și cărbune; 42: arsură cu cenușă, cărbune și materiale arheologice; 40: depuneri legate de construirea turnului baroc; 41: nivelare cu lut; 37-38: nivelări din perioada barocă © Daniela MARCU-ISTRATE*

■ ***Fig. 8.*** *Stratigraphic detail from inside the southeast tower, showing the ruin of the mediaeval tower Z.57: 2, 2A: prehistoric deposits; 3: levelling with compact black clay; 34: clay mixed with mortar and stone fragments; 39: black soil with ash and charcoal; 42: burnt layer with ash, charcoal, and archaeological materials; 40: deposits related to the construction of the Baroque tower; 41: levelling with clay; 37-38: levelling from the Baroque period © Daniela MARCU-ISTRATE*

Turnul gotic

■ Următoarea construcţie pe acelaşi loc a fost un turn din piatră, a cărui ruină a fost descoperită în interiorul turnului baroc actual, cu o formă arcuită spre interiorul incintei şi lăţime neregulată, substanţial mai groasă către extremităţi, unde ajunge la 2,40 m. Starea de ruină a fost rezultatul unei demolări care s-a produs aproximativ la -0,80 m, dar spre margini, acolo unde a fost suprapusă de turnul actual, a rămas mai înaltă, aproape imediat sub nivelul de călcare baroc. Segmentul descoperit apare astfel ca un arc de cerc cu deschiderea către incinta castelului şi exteriorul la mai puţin de 1 m de peretele turnului actual. (Fig. 9)

Pentru construirea acestui turn a fost săpat un şanţ de fundare în straturile preistorice, coborând mai jos de -3,30 m – limita la care săpătura a trebuit să se oprească din cauza spaţiului foarte mic disponibil. Şanţul, şi ulterior fundaţia propriu-zisă, au intersectat rămăşiţele construcţiei din



■ ***Fig. 9.*** *Vedere generală cu ruina turnului gotic © Daniela MARCU-ISTRATE*

■ ***Fig. 9.*** *General view of the ruins of the Gothic tower © Daniela MARCU-ISTRATE*

mediaeval foundation; therefore, its construction and use level was situated approximately at the level where the current ruin is preserved or slightly higher. We also observed that during the construction of this tower, likely beforehand, the surface was levelled with a layer of clay that covers the ash deposits and the older wooden structures described above. This clay layer (layer 41) rises to the level of the current ruin and is directly overlapped by rubble from the demolition of the tower. This means that we could not identify any information from the period when this tower was in use, but it is assumed that a walking level was established at the upper part of the clay layer.

Looking at the general plan of the existing and archaeologically discovered walls, we notice that the Gothic tower describes an arch with an estimated diameter of about 7 m. Attempts to find the other half, towards the courtyard, were unsuccessful, as no traces of this structure were identified. Consequently, we had to conclude that the Gothic tower was initially built with a wide opening of about 4-5 m towards the courtyard, with its original shape resembling a more ellipsoidal loop, connecting the southern and eastern sides of the curtain wall. This hypothesis was later confirmed by observations made on the curtain walls, the foundations of which were initially constructed simultaneously with the tower's foundation.

The connection between the current tower and the eastern wing of the castle was observed during the archaeological monitoring in 2011, during landscaping works and the conservation of the lower part of the Baroque tower. In fact, while working at the tower base, the ruins of some brick walls were notice beneath a layer of rubble – a situation which required archaeological monitoring. The very research unit uncovered the ruins of an 18th-century latrine, constructed from reused bricks over a foundation primarily made of stone. The latrine was actually formed by a single wall that connected the Baroque tower with the curtain wall, closing off the corner between them. During this process, the curtain wall and possibly the tower wall were clad with bricks. Analysing the situation, it was found that the latrine was built over a huge masonry of stone and brick, the latter being broken through to a depth that we could not determine. (Fig. 11) It is also impossible to specify, based on the existing data, whether those who dug for the construction of the latrine encountered a solid ruin or a more complex situation – this question arises from the fact that towards the north, the broken masonry is mostly stone, while towards the south, it is stone and brick, resembling the masonry of the Baroque period. An answer will emerge when the area can be thoroughly investigated. However, it seems quite likely that at this exact location, the eastern curtain wall was connected with

the Gothic tower, and this southeastern corner of the mediaeval castle was maintained later in the Baroque period, albeit in a different form. (Fig. 5)

Summing up these data, it appears that inside the Baroque tower lies the ruin of the Gothic tower, a massive ma-



■ ***Fig. 10.*** *Detaliu cu fundația turnului gotic © Daniela MARCU-ISTRATE*
■ ***Fig. 10.*** *Detail of the foundation of the Gothic tower © Daniela MARCU-ISTRATE*



■ ***Fig. 11.*** *Vedere generală cu latrina amenajată în exteriorul turnului baroc, în colțul de nord-est © Daniela MARCU-ISTRATE*
■ ***Fig. 11.*** *General view of the latrine built outside the Baroque tower, in the northeast corner © Daniela MARCU-ISTRATE*

lemn şi a stratului de arsură descrise mai sus, înglobând parţial unul dintre piloni. Zidăria uniformă a fost făcută din piatră, în sistem emplecton, adică exteriorul din pietre mai mari, unele cu încercări de cioplire, iar interiorul din pietre mici înecate într-un mortar gri albicios, cu granule de var nestins vizibile în compoziţia nisipoasă, dar cu o consistenţă dură. Rare fragmente mici de cărămidă au fost de asemenea observate către marginile şanţului de fundare. (Fig. 10)

Zidăria păstrată apare pe ambele feţe înecată în mortar grosier, şi pare să fi aparţinut în întregime fundaţiei medievale; nivelul său de construire şi utilizare a fost deci situat aproximativ la nivelul la care se păstrează ruina actuală sau puţin mai sus. Am observat de asemenea că în perioada construirii acestui turn, probabil înainte, suprafaţa a fost nivelată cu un strat de lut care acoperă depunerile cu arsură şi structurile mai vechi din lemn descrise mai sus. Stratul de lut (stratul 41) urcă până la nivelul ruinei actuale şi este suprapus direct de molozul provenit din demolarea turnului: aceasta înseamnă că nu am putut identifica nicio informaţie din perioada în care acest turn a funcţionat, dar este de presupus că un nivel de călcare a fost amenajat la partea superioară a stratului de lut.

Dacă urmărim planul general al zidăriilor existente şi descoperite arheologic, observăm că turnul gotic formează un segment de cerc cu un diametru estimat la cca 7 m. Încercarea de a găsi cealaltă jumătate, dinspre curte, nu a dat rezultate, fiindcă în cercetările din exterior nu au fost identificate alte urme ale acestei structuri. În consecinţă, a trebuit să admitem că turnul gotic a fost construit de la început cu o deschidere largă de cca 4-5 m către curte, forma sa iniţială fiind deci asemănătoare unei bucle mai degrabă elipsoidale, care a unit laturile de sud şi de est ale zidului de incintă. Această ipoteză a fost confirmată ulterior de observaţiile făcute asupra zidurilor de incintă, ale căror fundaţii fuseseră construite iniţial deodată cu fundaţia turnului.

Zona de intersecţie dintre turnul actual şi corpul estic al castelului a fost observată în timpul supravegherii arheologice din 2011, când a fost necesară sistematizarea terenului dar şi cosmetizarea soclului turnului baroc. De fapt, atunci când s-a lucrat pentru uniformizarea soclului, a fost necesară degajarea unui strat de moloz, de sub care au apărut ruinele unor ziduri din cărămidă – moment în care au fost chemaţi arheologii. Săpătura foarte limitată s-a suprapus peste ruinele unei latrine de secol XVIII, construită din cărămidă refolosită peste o fundaţie majoritar din piatră. Latrina s-a format de fapt printr-un singur zid, care a unit turnul baroc cu zidul de incintă, închizând colţul dintre ele. Cu această ocazie zidul de incintă, poate şi peretele turnului, au fost placate cu cărămidă. Analizând configuraţia acestor ruine, s-a constatat că, atunci când a fost construită latrina, toată suprafaţa respectivă era ocupată de o zidărie din piatră şi cărămidă, care a fost spartă în adâncime până la o cotă pe care nu am putut-o determina. (Fig. 11) Este de asemenea imposibil de precizat, în baza datelor existente, dacă cei care au săpat pentru construirea latrinei au văzut o ruină compactă sau o situaţie mai complexă – o întrebare care derivă din faptul că spre nord zidăria spartă este majoritar din piatră, în vreme ce spre sud este din piatră şi cărămidă, semănând astfel mai mult cu zidăriile perioadei baroce. Un răspuns mai clar va rezulta atunci când zona respectivă va putea fi cercetată amănunţit. Pare însă destul de probabil că exact în acel loc fundaţia zidului de incintă estic s-a intersectat cu turnul gotic, formând practic colţul de sud-est al cetăţii medievale – o relaţie care s-a menţinut şi ulterior în etapa barocă, doar că sub altă formă. (Fig. 5)

Însumând aceste date, rezultă că în interiorul turnului baroc se află ruina turnului gotic, o zidărie masivă groasă de 2-2,40 m, demolată la nivelul ei de utilizare sau puţin mai jos decât acesta. Turnul a fost demolat neregulat, după care suprafaţa a fost nivelată cu moloz amestecat cu multă piatră şi bulgări din mortarul gri cu granule de var. Pe baza materialului ceramic, aceste operaţiuni au fost realizate în secolul al XVIII-lea.



■ ***Fig. 12.*** *Cercetarea zonei intrării în turn: fundația din piatră, zona de naștere a elevației din cărămidă și nivelul pragului © Daniela MARCU-ISTRATE*

■ ***Fig. 12.*** *Research of the entrance area to the tower: the stone foundation, the area where the brick elevation begins, and the threshold level © Daniela MARCU-ISTRATE*

Etapele formării turnului actual baroc

■ În interior, după evacuarea unui strat imens de moloz, s-a constatat că turnul circular este aşezat peste ruina turnului medieval, care a rămas aproximativ în mijloc, astfel că rămăşiţele lui au fost integrate în fundaţia nouă atât spre nord, cât şi spre sud. Deşi turnul baroc pare o construcţie unitară, configuraţia părţilor îngropate diferă pe jumătatea vestică (cea aflată în interiorul incintei medievale) faţă de cea estică (aflată în exteriorul incintei medievale, către marginea unui şanţ de apărare), situaţie care va fi analizată mai jos. (Fig. 5, 8)

Jumătatea dinspre vest (curte) a turnului, cercetată atât din exterior cât şi din interior, are o fundaţie din piatră, cu partea superioară la -0,10-0,20 m, coborând în adâncime mai jos decât -2,40 m. Profilul fundaţiei este însă mai puţin regulat, posibil şi din cauza straturilor de umplutură în care zidăria a fost adâncită, secvenţial fiind înregistrate decroşări neregulate. Peste această fundaţie (Z.39) se aşază o zidărie mixtă, dar predominant din cărămidă, uşor ieşită în consolă, cu un decroş la cota 0,00, deasupra căruia continuă un perete regulat. Fundaţia din piatră (Z.39) şi elevaţia din cărămidă (Z.40) provin din două etape distincte, dar nu putem aprecia dacă între ele a fost o distanţă relevantă. (Fig. 8, 12)

Pe jumătatea dinspre est, paramentul regulat din cărămidă merge mult mai jos, fundaţia din piatră fiind identificată abia la cca -2,40 m, cu o înclinaţie dinspre nord spre sud, adâncită în straturile de lut. (Fig. 13) Baza fundaţiei a fost văzută doar din exterior (în S.9), la -4,05 m în solul viu. (Fig. 14) Peste această fundaţie construită aproape exclusiv din piatră, cu nesemnificative fragmente de cărămidă amestecate în mortar, se aşază soclul din piatră şi cărămidă al turnului, având partea inferioară neregulată şi uşor ieşită în consolă. Pentru construirea soclului a fost folosită multă piatră, majoritar blocuri de dimensiuni medii (0,30x0,40 m), cioplite sumar, evident refolosite din demolarea cetăţii din piatră. Aşa cum am arătat mai sus, zonele de intersecţie dintre soclu şi corpurile de sud şi est ale castelului nu au fost cercetate şi nu cunoaştem deci succesiunea etapelor.

sonry structure with a thickness of 2-2.40 m, demolished down to its level of use or slightly below it. The tower was irregularly demolished, after which the area was levelled with rubble mixed with a lot of stone and lumps of grey mortar with lime granules. Based on the ceramic material, these operations were carried out in the 18th century.

Building stages of the current Baroque tower

■ After the removal of a massive layer of rubble, it was found that the current tower stands over the ruins of the mediaeval tower, which remained roughly in the middle. Consequently, some mediaeval parts were incorporated into the new foundation both to the north and to the south. Although the Baroque tower appears as a very uniform construction, the buried parts differ on the western half (inside the mediaeval enclosure) compared to the eastern half (outside the mediaeval enclosure, near the edge of a defensive ditch), a situation that will be analysed further below. (Fig. 5, 8)

The western half of the tower (on the courtyard side), investigated from both sides, features a stone foundation, with the upper part at -0.10 to -0.20 m, descending deeper than -2.40 m. However, the profile of the foundation is less regular, with irregular offsets recorded sequentially, possibly due to the filling into which the masonry was set. Over this foundation (Z.39) stands a mixed masonry, predominantly brick, slightly projecting outwards at the 0.00 level, above which there is a regular wall. The stone foundation (Z.39) and the brick elevation (Z.40) come from two distinct phases, but it is not possible to determine whether there was a significant gap between them or not. (Fig. 8, 12)

On the eastern half, the regular brick facing extends much deeper, with the stone foundation identified only at approximately -2.40 m, sloping from north to south and set into clay layers. (Fig. 13) The base of the foundation was seen only from the outside (in S.9), at -4.05 m in the virgin soil. (Fig. 14) Above this foundation, which is almost entirely built of stone with insignificant brick fragments mixed into the mortar, rests the stone and brick base of the tower, with an irregular and slightly projecting lower part. For the construction of the base, a large amount of stone was used, predominantly medium-sized carved stone (0.30x0.40 m), roughly hewn and evidently reused from the demolition of the stone castle. As mentioned above, the connections of the tower base to the curtain wall were not investigated, so the sequence of phases is unknown. However, it seems quite likely that the flared base was built from the beginning, having the same depth as the proper tower.

This foundation structure suggests that the Baroque tower was built in two

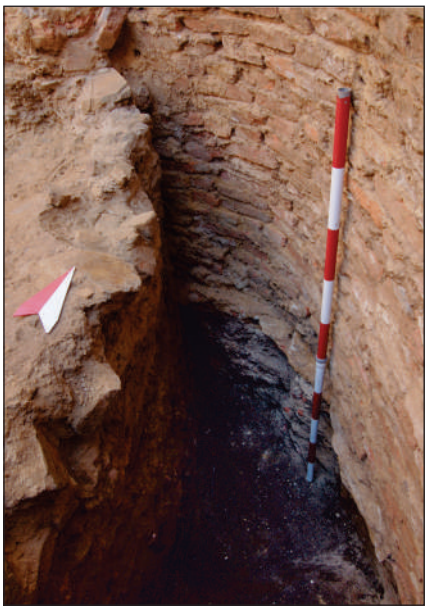
distinct phases: first, the section facing the courtyard was meant to close the mediaeval tower, but it is difficult to establish the general shape and its purpose, more precisely if there was an intermediate phase that functioned independently or not. Several elements are relevant in this context: a remnant of brick masonry standing on the ruins of the Gothic tower, a layer of wood charcoal (a first flooring?), and a fragment of a collapsed vault – all these could have been the remnants of such a phase, attempting to repurpose the structures still standing in the 18th century. (Fig. 15)

However, the mediaeval tower was eventually demolished, and the outer (eastern) half of the Baroque tower was constructed, which produced only a very small extension of the inner useful area. The resulting tower thus consists, at foundation level, of four different segments: two older ones (the Gothic ruins) and two newer ones (18th-century foundations) – each with different depths and masonry. It is not surprising, therefore, that the tower's structure experienced issues over time, as evidenced by a repair that attempted to connect the older segments with the newer ones. (Fig. 16)

This development also explains why in this case a cellar was not made, the tower resulting in a ground floor, possibly slightly deepened compared to the courtyard level. Making a basement would have involved demolishing the medieval building, but the intention seems to have been to reuse it and partially integrate it into the new structure.

Returning to the characteristics of the Baroque tower, a few additional details should be noted. The entrance was from the southern wing of the castle, through an opening that was slightly trapezoidal in shape, with a maximum width of 1.30 m, widening towards the interior of the tower, and with a threshold at +0.30 m (the walking level close to the tower being at the beginning of the excavation at about +1.70 m to the south). The threshold was above the offset of the foundation, made of brick and mortar, and was likely later remade, as at the time of discovery it was covered by a mortar screed; the interior sides of the door retained fragments of plaster. (Fig. 17)

The tower had a latrine on its northern corner, which is also shown on historical drawings. The ruins of this latrine were uncovered during the archaeological works, irregularly demolished and buried under a massive fill of rubble and earth, as previously mentioned. After the rubble was removed, a complex situation emerged, as the entire area beneath the latrine was covered with stone ruins. Excavation for the latrine quickly encountered these walls, which had to be broken through. A thin brick wall was then placed on the presumably mediaeval stone foundation, closing off the angle between the tower and the enclosure wall. The curtain wall, which became the



■ ***Fig. 13.*** *Fundația părții de est a turnului baroc văzută din interior © Daniela MARCU-ISTRATE*
■ ***Fig. 13.*** *Foundation of the eastern part of the Baroque tower viewed from the inside © Daniela MARCU-ISTRATE*



■ ***Fig. 14.*** *Fundația părții de est a turnului baroc văzută din exterior © Daniela MARCU-ISTRATE*
■ ***Fig. 14.*** *Foundation of the eastern part of the Baroque tower viewed from the outside © Daniela MARCU-ISTRATE*

Pare însă destul de probabil ca soclul evazat să fi fost realizat în aceeaşi etapă cu turnul, având practic aceeaşi adâncime de fundare.

Această configuraţie a fundaţiilor sugerează faptul că turnul baroc s-a format în două etape distincte: prima dată a fost construită partea dinspre curte, în completarea turnului medieval, dar este greu de spus care au fost formele vizibile ale acestei etape şi dacă a funcţionat independent o etapă intermediară. Câteva elemente sunt relevante în acest sens: un rest de zidărie din cărămidă ce stă pe ruina turnului gotic, un strat cu cărbune de lemn – ce ar putea fi rămăşiţa unei prime pardoseli, şi un fragment de boltă prăbuşită ar putea fi rămăşiţele unei astfel de etape, în care s-a încercat o re-funcţionalizare a formelor existente. (Fig. 15)



■ ***Fig. 15.*** *Ruina fundației turnului gotic, cu urmele unei zidării din cărămidă și un fragment de boltă prăbușită, datând probabil din perioada barocă © Daniela MARCU-ISTRATE*
■ ***Fig. 15.*** *Ruin of the foundation of the Gothic tower, with traces of brick masonry and a fragment of a collapsed vault, probably dating from the Baroque period © Daniela MARCU-ISTRATE*

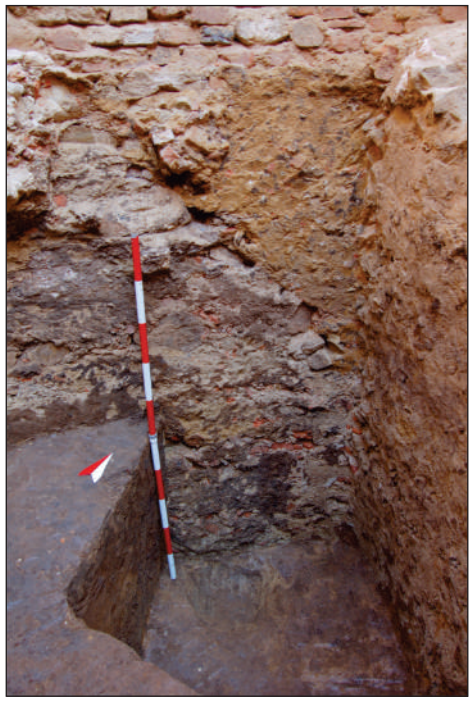
Din motive pe care astăzi nu le mai putem identifica, în cele din urmă turnul medieval a fost demolat şi s-a construit jumătatea dinspre exterior (est) a turnului baroc, a cărui suprafaţă interioară a fost lărgită aproape nesemnificativ. Turnul rezultat se compune astfel la nivelul fundaţiilor din patru segmente diferite, două mai vechi (ruinele gotice), şi două mai noi (fundaţiile din secolul al XVIII-lea) – fiecare cu adâncimi şi structură diferită a zidăriei: nu este deci de mirare că structura turnului a avut probleme de-a lungul timpului, după cum rezultă dintr-o reparaţie care a încercat să lege segmentele mai vechi cu cele mai noi. (Fig. 16)

Această evoluţie a turnului explică de altfel şi de ce a rămas o construcţie la nivel de parter, posibil uşor adâncit faţă de nivelul de călcare din curte. Amenajarea unui subsol ar fi presupus demolarea turnului medieval, dar de fapt intenţia pare să fi fost mai degrabă aceea de a-l refolosi şi integra parţial în noua structură.

Revenind la caracteristicile turnului baroc, trebuie să menţionăm alte câteva detalii. Intrarea se făcea din corpul de clădiri de pe latura de sud a castelului printr-o deschidere de formă uşor trapezoidală lată de maxim 1,30 m, lărgindu-se către interiorul turnului, şi pragul la + 0,30 m (nivelul de călcare lângă turn la începutul săpăturii fiind la ca + 1,70 m spre sud). Pragul a fost făcut deasupra decroşului fundaţiei, din cărămidă legată cu mortar, ulterior probabil refăcut deoarece în momentul descoperirii era acoperit cu o şapă de mortar; laturile interioare ale uşii păstrau fragmente de tencuială. (Fig. 17)

Pe colţul dinspre nord turnul a avut o latrină, pe care de altfel o vedem şi în planurile istorice. Ruina acesteia a fost dezvelită în timpul supravegherii arheologice, demolată neregulat şi îngropată sub o umplutură enormă de moloz şi pământ – după cum am menţionat deja. După îndepărtarea molozului s-a văzut o situaţie complicată, întrucât toată suprafaţa de sub latrină era de fapt acoperită cu ruine din piatră. Săpătura pentru construirea latrinei a dat repede peste aceste ziduri care au trebuit sparte, apoi un perete subţire din cărămidă a fost aşezat pe fundaţia din piatră probabil medievală, închizând unghiul format între turn şi zidul de incintă. Zidul de incintă, devenit latura vestică a latrinei, a fost placat cu piatră, forma păstrată în acel moment fiind foarte probabil medievală. Forma din acel moment a turnului este dificil de reconstituit, totuşi putem presupune că forma barocă cu soclul exterior şi latrina au fost contemporane. (Fig. 18)

După demolarea latrinei, peretele turnului a fost „renovat", soclul fiind completat cu o zidărie din cărămidă care a ieşit mult în consolă faţă de



■ ***Fig. 16.*** *Fundația turnului baroc (stânga) și încercare de țesere a zidăriei cu fundația turnului gotic demolat (dreapta) © Daniela MARCU-ISTRATE*
■ ***Fig. 16.*** *Foundation of the Baroque tower (left) and an attempt to weave the masonry with the foundation of the demolished Gothic tower (right) © Daniela MARCU-ISTRATE*



■ ***Fig. 17.*** *Pragul intrării în turnul baroc © Daniela MARCU-ISTRATE*
■ ***Fig. 17.*** *Threshold of the entrance to the Baroque tower © Daniela MARCU-ISTRATE*

western side of the latrine, was faced with stone, and its form at that time was very likely mediaeval. The shape of the tower at that time is difficult to reconstruct, but it can be assumed that the Baroque form with the exterior base and the latrine were contemporaneous. (Fig. 18)

After the demolition of the latrine, the tower's wall was "renovated", with the base being completed with a brickwork that projected way beyond the original masonry of the tower. Based on the shape and dimensions of the bricks, this repair is likely associated with recent efforts to stabilize the masonry. (Fig. 19)

Returning to the interior of the current tower, a partially preserved brick floor, with the upper part approximately at the 0.00 level, represents the most recent walking surface. (Fig. 20, 21) The floor was made of bricks measuring 30x15x6 cm, laid on a layer of yellowish-white mortar (0.04 m thick), which, in turn, rests on a levelling layer of clay that evened out the rubble resulting from the demolition of the previous structure, whatever that may have been (either the Gothic tower or the Gothic tower with a Baroque addition towards the courtyard). A compact brownish clay layer (37) lies beneath this floor, roughly corresponding to the upper part of the tower's stone foundation, confirming that the tower's ground floor level remained practically unchanged throughout its entire period of use. Based on the archaeological material (white mortar pigments, very fragmented bricks, pottery



■ ***Fig. 18.*** *Detaliu cu zidul de incintă medieval placat cu cărămidă și integrat în structura latrinei baroce © Daniela MARCU-ISTRATE*
■ ***Fig. 18.*** *Detail of the medieval curtain wall faced with brick and integrated into the structure of the Baroque latrine © Daniela MARCU-ISTRATE*



■ ***Fig. 19.*** *Imagine de ansamblu cu latrina barocă: se observă zidăria din piatră a turnului și repararea acesteia după demolarea latrinei © Daniela MARCU-ISTRATE*
■ ***Fig. 19.*** *Overview of the Baroque latrine: with the visible stone masonry of the tower and its repair after the demolition of the latrine © Daniela MARCU-ISTRATE*

and bones), the levelling belongs to the same 18th century, most likely related to the cleaning of the ruins before the building of the Baroque castle.

At the time of the excavations, the floor was covered with a layer of burnt material that contained various 20th-century artefacts (glass fragments, porcelain, and coins from the second half of the 20th century), with a thickness of about 0.20 m. This layer was also present outside the tower and was catalogued as a complex – Cx.16. This accumulation occurred over time, between the abandonment of the tower and the collapse of the ground floor vault, followed by the collapse of the entire upper part. (Fig. 22)

Conclusions

■ The archaeological research that preceded the conservation of the southern part of Ardud castle in 2010 (excavations) and 2011 (monitoring) provided the technical data for drafting the conservation project. Additionally, it brought many new insights into the construction of the Baroque castle, especially the stages prior to the 18th century. A construction phase primarily made of wood was uncovered beneath the southeast tower, and the ruins of a stone castle were revealed along the entire southern side. These ruins were partially reused (the gate tower, the curtain wall) and partially demolished (the corner towers). The oldest mediaeval archaeological

zidăria/fundaţia (?) – originară a turnului. După forma şi dimensiunile cărămizii, această reparaţie trebuie să fie legată de intervenţii recente de punere în siguranţă a zidăriei. (Fig. 19)

Revenind la interiorul turnului actual, o podea din cărămidă păstrată fragmentar cu partea superioară aproximativ la cota 0,00 reprezintă cel mai recent nivel de călcare amenajat. (Fig. 20, 21) Podeaua a fost realizată din cărămidă cu dimensiunile 30x15x6 cm aşezată pe o şapă de mortar alb-gălbui (gr. 0,04 m), care la rândul ei stă pe o nivelare cu lut ce a uniformizat molozul rezultat din demolarea structurii anterioare, oricare va fi fost aceasta (turnul gotic medieval sau turnul gotic cu o completare barocă spre curte). Un strat de lut maroniu compact (37) se află sub această podea, corespunzând în linii mari cu partea superioară a fundaţiei din piatră a turnului, certificând faptul că nivelul de călcare de la parterul turnului a rămas practic neschimbat pe toată durata funcţionării acestuia. Pe baza materialului arheologic (pigmenţi de mortar alb, cărămidă foarte fragmentară, materiale ceramice şi osteologice) nivelarea aparţine aceluiaşi secol XVIII, fiind cel mai probabil legată de lucrările de curăţare a ruinelor înainte de amenajarea formei baroce a castelului.

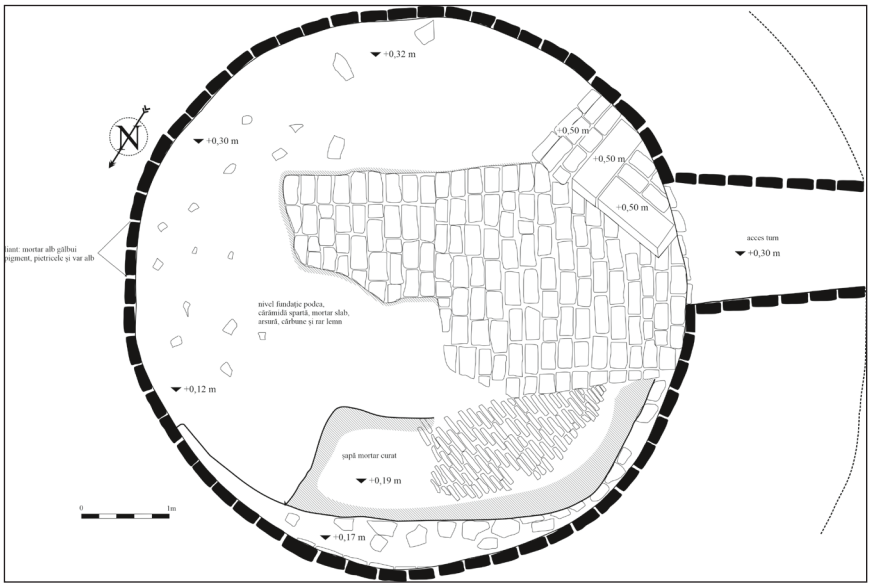
În momentul cercetării, podeaua era acoperită cu un strat de arsură ce conţinea diferite artefacte de secol XX (fragmente de sticlă, porţelan şi monede din a doua jumătate a secolului XX), cu o grosime de cca 0,20 m, care se păstra de altfel şi în exteriorul turnului, fiind inventariată ca un complex – Cx.16. Aceasta a fost o acumulare de durată, între abandonarea utilizării turnului şi prăbuşirea bolţii parterului, urmate de prăbuşirea întregii părţi superioare. (Fig. 22)

Concluzii

■ Cercetarea arheologică care a precedat restaurarea părţii sudice a castelului de la Ardud în anii 2010 (cercetare) şi 2011 (supraveghere) a asigurat proiectanţilor datele tehnice necesare întocmirii documentaţiilor de



■ ***Fig. 20.*** *Cercetarea interiorului turnului baroc, cu pardoseala din cărămidă © Daniela MARCU-ISTRATE*
■ ***Fig. 20.*** *Research of the interior of the Baroque tower, with the brick floor © Daniela MARCU-ISTRATE*



■ ***Fig. 21.*** *Detaliu de plan cu pardoseala din cărămidă și intrarea în turnul baroc © Daniela MARCU-ISTRATE*
■ ***Fig. 21.*** *Detail of the plan showing the brick flooring and the entrance to the Baroque tower © Daniela MARCU-ISTRATE*

specialitate, dar pe de altă parte a adus multe date noi privind construirea castelului baroc şi mai ales etapele anterioare secolului al XVIII-lea. O etapă construită în principal din lemn a fost evidenţiată sub turnul sud-estic. Pe toată latura sudică au apărut ruinele unei cetăţi din piatră, parţial refolosită (turnul de poartă, zidul de incintă), parţial demolată (turnurile de colţ). Cele mai vechi materiale arheologice medievale datează din secolul al XIII-lea, dar sunt apariţii izolate pe care deocamdată nu le putem pune în relaţie cu o locuire materializată prin anumite amenajări. Un lot semnificativ de artefacte aparţine secolului al XV-lea – fără să fie foarte numeroase, din cauza faptului că lucrările din secolul al XVIII-lea au fost precedate de o „igienizare" a locului şi îndepărtare a rămăşiţelor mai vechi. Alte materiale, nici ele foarte numeroase, aparţin secolului al XVIII-lea, dar şi perioadei de până la începutul secolului XX.

Pentru a interpreta aceste rezultate, este necesar să aruncăm o privire către informaţiile documentare referitoare la situl castelului. Istoria aces-

materials date from the 13th century, but they are isolated finds that, for now, cannot be associated with any specific settlement or construction activities. A significant batch of artefacts belongs to the 15th century, though they are not very numerous due to a "renovation" of the site during the 18th century, which involved the removal of older remains. Other materials, also not very numerous, date to the 18th century and up to the early 20th century.

To interpret these results, it is necessary to take a look at the documentary information related to the site. Its history of the (TERDIK&KÁROLYI 2006-2007; SZŐCS 2015; EKE 2011) appears quite simple: its still standing remains originate in the early 18th century, having been built by Count Sándor KÁROLYI, who became the sole owner of the estate in 1711. However, as the construction documentation shows, it was not a new building but rather the rehabilitation and reconstruction of ruined and non-functional structures, with origins dating back to the second half or the last decades of the 15th century at the earliest. Ardud is mentioned in documents as early as the 13th century, but a more precise reference comes from 1385, when the estate was donated by Queen Elizabeth to the Dragoş family, descendants of Voivode Dragoş, who later became Hungarianized and known as the DRÁGFY family. However, we can only begin to speak of a residence around the mid-15th century, when Nicolae of Ardud and Beltiug was granted the right to build a wooden fortification. This information is somewhat reiterated in 1456, when Nicolae DRÁGFY and Mihai, son of Sandrinus, obtained the right to build a fortification in this location, either from wood or stone, complete with walls, towers, and moats. According to the family's history, however, construction work only began in 1487 under the supervision of Bartolomeu DRÁGFY, who had become the head of the family. Bartolomeu held significant positions in the Kingdom of Hungary, being close to King Matthias CORVINUS and serving as Voivode of Transylvania. The castle, most often referred to as *castellum*, was functional for only a short period, as it was set on fire and likely abandoned by the mid-16th century. This occurred in a context where the ownership of the estate frequently changed hands, and none of the subsequent owners seemed to have had the economic strength to restore and maintain the site.

What was constructed during these stages, what happened to the castle after the mid-16th century fire, what condition it was in at the beginning of the 18th century, and how the new construction evolved are just a few of the main questions regarding the history of this ensemble. Until the rather unlikely discovery of new documents, archaeological works should fill in this picture, but much larger excavations are needed for this goal to be reached.

At this stage of the research, we can describe the site as extremely complex, with numerous phases involving the reuse

of older parts (most likely foundations in many cases), as well as the demolition and replacement of others – such as the two towers on the southern side. The analysis of the uncovered situations indicates the following sequences of habitation:

(A) A wooden structure, from which the imprints of three wooden posts arranged in an L-shape with the opening facing the outside of the nowadays castle have been preserved, was investigated inside the southeastern tower. This structure may have belonged to an early fortification or residence from the 13th-14th centuries, but it is of course difficult to date it more precisely or even to associate it directly with the Dragoş family's possession of the estate. The discovery of ceramic fragments datable to the 13th century could support an earlier dating, but since these were not directly connected to it, they merely suggest an earlier phase of habitation. Nonetheless, the most plausible date appears to be the mid-15th century, corresponding with the first permissions granting the right to build a castle. It is possible that this structure, overlain by the southeastern towers, represents remnants from that stage, and we can only hope that further research, especially outside the eastern building wing, will provide new evidence for dating and reconstruction. In any case, this phase ended in a fire, as indicated by the associated layers of charcoal and ash, which were all cut through when the stone tower was constructed.

(B) A stone fortification, with the same dimensions as the later Baroque castle, was subsequently built, having an irregular quadrilateral shape with corner towers and an entrance on the southern side through a gate tower. Although this fortress was frequently mentioned during the early 18th-century works, its actual form was only identified through the 2010-2011 excavations, when the ruins of the southern towers were discovered, and the general dimensions of the entire ensemble were established. The archaeological materials, consisting mainly of ceramics, do not allow us to date this phase more precisely than the written records suggest, specifically to the second half of the 15th century – although it is difficult to determine whether construction began immediately after 1456 or after 1487. It is likely, though, that the general form of the fortress was shaped in the final decades of the 15th century. A stove from that moment was identified as a modest replica of the well-known knights' stove from the royal palace in Buda. Fragments from nearly all components of the latter were noticed at Ardud, with particularly noteworthy pieces including clay figurines representing saints, placed in niches. Based on the context and analogies, the production of these tiles has been dated to around 1500, likely being a gift from King Matthias CORVINUS to Bartolomeu DRÁGFY (MARCU ISTRATE 2016). (Fig. 23)



■ ***Fig. 22.*** *Evacuarea molozului din interiorul turnului și fragmente din bolta parterului prăbușite în moloz © Daniela MARCU-ISTRATE*

■ ***Fig. 22.*** *Removal of debris from inside the tower and fragments of the ground floor vault collapsed into the debris © Daniela MARCU-ISTRATE*

tuia (TERDIK&KÁROLYI 2006-2007; SZŐCS 2015; EKE 2011) este aparent simplă: forma vizibilă îşi are originile la începutul secolului al XVIII-lea, fiind construită de contele Sándor KÁROLYI, care în 1711 a devenit unic proprietar al domeniului. Aşa cum rezultă din documentaţia şantierului, nu a fost însă o construcţie nouă, ci o reabilitare şi reconstruire a unor clădiri ruinate şi nefuncţionale, ale căror origini coboară cel mai devreme în jumătatea a doua sau ultimele decenii ale secolului al XV-lea. Ardudul este menţionat documentar în secolul al XIII-lea, dar o informaţie mai precisă provine abia din 1385, când domeniul a fost donat de regina Elisabeta familiei Drăgoşeştilor, urmaşi ai voievodului Dragoş, ulterior maghiarizaţi şi devenind DRÁGFY. Despre o reşedinţă putem vorbi însă abia către mijlocul secolului al XV-lea, când Nicolae de Ardud şi Beltiug primeşte dreptul să construiască o fortificaţie din lemn. Informaţia este oarecum reluată în 1456, când Nicolae DRÁGFY şi Mihai, fiul lui Sandrinus, au obţinut dreptul de a ridica în acest loc o cetate din lemn sau din piatră, cu ziduri, turnuri şi şanţuri. Istoricul familiei a consemnat însă faptul că lucrările de construcţie au început abia în 1487, sub coordonarea lui Bartolomeu DRÁGFY, devenit capul familiei, care a deţinut demnităţi importante în regatul Ungariei, fiind de altfel şi un apropiat al regelui Matia CORVIN şi voievod al Transilvaniei. Cetatea, menţionată cel mai des ca şi *castellum*, a fost funcţională doar o perioadă scurtă, la mijlocul secolului al XVI-lea, fiind incendiată şi apoi probabil abandonată – în contextul în care proprietarii s-au tot schimbat şi în orice caz niciunul nu pare să mai fi avut forţa economică de a reabilita şi întreţine acest loc.

Ce a fost construit în aceste etape, ce s-a întâmplat cu cetatea după incendiul de la mijlocul secolului al XVI-lea, în ce stare se afla la începutul secolului al XVIII-lea şi cum a evoluat concret construcţia nouă sunt doar câteva dintre întrebările principale privind istoria acestui ansamblu – şi până la descoperirea destul de puţin probabilă a unor noi documente, cercetările arheologice ar trebui să completeze acest tablou, în condiţiile în care vor fi extinse corespunzător.

Deocamdată, în acest stadiu al cercetărilor, putem vorbi despre un sit extrem de complicat, cu numeroase etape care au presupus preluarea unor părţi

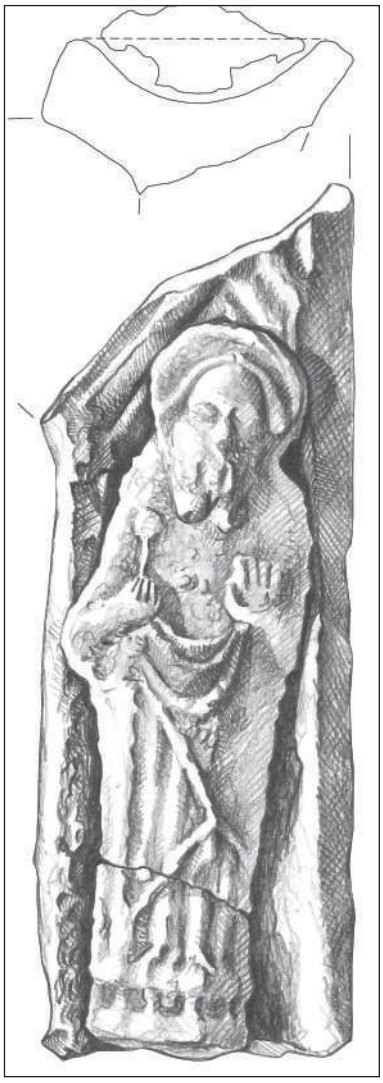
mai vechi (probabil însă că de cele mai multe ori fundaţii), dar şi demolarea şi înlocuirea altora – aşa cum a fost cazul cu cele două turnuri de pe latura de sud. Analiza situaţiilor apărute arată următoarea succesiune de locuire:

(A) O structură din lemn, din care s-au păstrat amprentele a trei stâlpi din lemn dispuşi în formă de „L" cu deschiderea spre exteriorul castelului, într-un şanţ cu umplutură pigmentată cu mortar, a fost cercetată în interiorul turnului sud-estic. Putem presupune că aceasta a aparţinut unei fortificaţii sau reşedinţe timpuriii, din secolele XIII-XIV, dar este desigur dificil să le datăm mai precis şi chiar să le legăm de punerea în posesie a familiei Dragoş. Descoperirea unor fragmente ceramice databile în secolul al XIII-lea ar putea susţine o datare mai timpurie pentru construcţia respectivă, dar nu a fost în directă conexiune cu aceasta – până la urmă sugerând doar o etapă de locuire. Totuşi, cel mai plauzibil pare să fie mijlocul secolului al XV-lea, corespunzând cu primele permisiuni care acordă dreptul de a ridica o cetate. Posibil ca această structură suprapusă de turnurile de sud-est să fie rămăşiţe din acea etapă, şi nu putem decât să sperăm că extinderea cercetărilor, mai ales în exteriorul corpului estic de clădiri, va furniza noi argumente pentru datare şi reconstituire planimetrică. Oricum, această etapă a sfârşit într-un incendiu, după cum arată straturile de cărbune şi cenuşă asociate – toate secţionate atunci când s-a construit turnul din piatră.

(B) O cetate din piatră, de aceleaşi dimensiuni cu castelul baroc a fost ridicată ulterior, având o formă patrulateră neregulată, cu turnuri de colţ şi intrarea de pe latura de sud printr-un turn de poartă. Deşi menţionată frecvent pe parcursul lucrărilor de la începutul secolului al XVIII-lea, forma reală a acestei cetăţi a fost identificată abia prin cercetările din 2010-2011, când au fost descoperite ruinele turnurilor sudice, şi au fost stabilite dimensiunile generale ale întregului ansamblu. Materialele arheologice, constând majoritar din ceramică, nu ne ajută să datăm această etapă cu mai mare precizie decât ne permit informaţiile scrise, respectiv în a doua jumătate a secolului al XV-lea – deşi este greu de spus dacă lucrările au început imediat după 1456 sau după 1487. Probabil însă că forma generală era conturată în ultimele decenii ale secolului al XV-lea. Acestei perioade i-a aparţinut o sobă din cahle identificată drept o replică modestă a bine-cunoscutei sobe a cavalerilor din palatul regal de la Buda. La Ardud pot fi documentate fragmente din aproape toate componentele acestei sobe, dintre care în mod excepţional trebuie amintite figurinele din lut reprezentând sfinţi, aşezate în nişe. Pe baza contextului şi a analogiilor, producerea cahlelor a fost datată în jurul anului 1500, fiind probabil un cadou al regelui Matia CORVIN pentru Bartolomeu DRÁGFY (MARCU ISTRATE 2016). (Fig. 23)

Pe de altă parte, materialul litic recuperat din dărâmăturile acestei cetăţi a conţinut şi elemente renascentiste, fiind astfel cert că unele lucrări au continuat şi în prima parte a secolului al XVI-lea, aşa cum de altfel s-a întâmplat cu majoritatea reşedinţelor nobiliare. Abandonată în urma unui asediu prelungit din vara anului 1565, cetatea s-a degradat continuu fiind într-o stare destul de proastă în jurul anului 1700, când a fost preluată de noii proprietari.

(C) Istoria castelului Károlyi începe în primele decenii ale secolului al XVIII-lea, dar informaţiile existente din perioada de construcţie nu sunt mereu utile pentru reconstituirea unei realităţi materiale. Pe aceste surse, s-a crezut multă vreme că reşedinţa barocă a rezultat dintr-o reconstrucţie a cetăţii medievale târzii a familiei DRÁGFY, scoasă definitiv din funcţiune cel mai probabil la mijlocul secolului al XVI-lea şi rămasă pentru multă vreme abandonată. Abia cercetările arheologice din 2010 au arătat pentru prima dată că de fapt a fost în multe privinţe o construcţie cu totul nouă, care nu a respectat planul cetăţii medievale – cel puţin pe latura sudică a acesteia. Deşi turnul de poartă a fost păstrat, turnurile de colţ au fost demolate şi reconstruite pe un alt amplasament. Deciziile în acest sens trebuie să fi fost determinate în principal de starea clădirilor – deoarece mutarea tur-



■ ***Fig. 23.*** *Fragment dintr-o cahlă de sobă cu statuetă din lut reprezentându-l pe Sfântul Petru, cca 1500*
© Daniela MARCU-ISTRATE
■ ***Fig. 23.*** *Fragment of a stove tile with clay statuette of Saint Peter, c. 1500*
© Daniela MARCU-ISTRATE

On the other hand, the stone material recovered from the ruins of this castle also included Renaissance elements, confirming that some work continued into the early 16th century, as was the case with most noble residences. After being abandoned in the aftermath of a prolonged siege in the summer of 1565, the castle continued to deteriorate and was in quite poor condition around 1700, when it was acquired by new owners.

(C) The history of the Károlyi castle begins in the early decades of the 18th century, but the information available from the construction period is not always useful for reconstructing the material reality. Based on these sources, it was long believed that the Baroque residence resulted from a reconstruction of the late medieval castle of the DRÁGFY family, which was most likely taken out of use by the mid-16th century and remained abandoned for a long time. It was only through the 2010 archaeological

research that it was revealed for the first time that, in many respects, the construction was entirely new and did not follow the mediaeval layout – at least on the southern side. Although the gate tower was preserved, the corner towers were demolished and rebuilt on a slightly different spot. Decisions in this regard were likely influenced primarily by the condition of the buildings; however, relocating the towers did not result in significant progress concerning the dimensions of the castle. Why did this happen, though?

The analysis of the southeastern tower, which lacked a basement and thus preserved the mediaeval structures in place, provides some insights into this matter. Initially, the foundation was constructed on the interior side of the enclosure, somewhat completing the loop of the mediaeval tower. It is presumed that this intervention aimed to reconfigure the fortification by integrating the old (possibly ruined) tower and transforming the open tower facing the courtyard into a closed tower. This work was likely part of a series of activities initiated between 1724 and 1727, involving the clearing of ruins and the recovery of materials that could be reused.

Only later did the tower acquire its current form through the construction of its eastern half and the demolition of the mediaeval walls. This resulted in a tower primarily built of brick, with a ground floor vaulted in the same material. The original shape of the new tower seems to have included an outward-flaring base at the first level, which encircled the tower from the south and east curtain walls, reaching a maximum thickness of 4 m along the west-east axis. In the masonry of this base, numerous reused stone blocks from the old medieval castle were still visible, although traces of the old castle had been entirely erased by the mid-18th century.

We will address the other components of the southern side and how they were formed, incorporating or removing older parts, on another occasion. In any case, the story of the Ardud ensemble, with all its phases, is far from complete, and we can only hope that future investigations and conservations will continue to fill in the existing gaps.

Acknowledgements

■ I am deeply grateful to Professor Bálint SZABÓ for the way our paths crossed and for the extensive collaboration we shared, and for all the things I learned from him. Together, in the 1990s, we reinvented and rediscovered a long-lost profession. My gratitude, which unfortunately is now posthumous, includes the numerous research opportunities he provided, including the one at Ardud. However, above all, I wish to thank him for his immense understanding and humanity, and for the unparalleled example he set for all of us who were his disciples. The pages above represent a modest tribute to his memory.

nurilor nu a adus aproape niciun progres în ceea ce priveşte dimensiunile cetăţii. De ce totuşi s-a întâmplat acest lucru?

Analiza turnului de sud-est, care nu a avut pivniţă şi deci a păstrat structurile medievale pe loc, ne oferă câteva sugestii în acest sens. Prima dată a fost realizată fundaţia părţii dinspre interiorul incintei, completând oarecum bucla turnului medieval; presupunem că prin această intervenţie s-a încercat o reconfigurare a fortificaţiei prin integrarea vechiului turn (ruinat?) şi transformarea turnului deschis către curte într-un turn închis, pornind de la nivelul de călcare medieval. Aceasta trebuie să fi fost parte din seria de lucrări iniţiate între 1724-1727, de curăţare a ruinelor şi recuperare a materialelor care puteau fi reutilizate.

Abia ulterior turnul a căpătat forma actuală, prin construirea jumătăţii sale de est şi demolarea pereţilor medievali. A rezultat astfel un turn construit majoritar din cărămidă, cu parterul acoperit cu boltă din acelaşi material. Forma originală a turnului pare să fi inclus soclul exterior evazat al primului nivel, care înconjoară turnul pornind de la zidul de incintă de pe laturile de sud şi est, pentru a atinge grosimea maximă de 4 m pe axa vest-est. În zidăria acestui soclu încă se puteau vedea numeroase blocuri de piatră refolosite din vechea cetate medievală, ale cărei urme au fost cu totul şterse până spre mijlocul secolului al XVIII-lea.

Despre celelalte componente ale laturii sudice şi modul în care s-au format acestea, preluând sau eliminând părţile mai vechi, ne vom ocupa cu altă ocazie. Oricum, povestea ansamblului de la Ardud, cu toate etapele sale, este departe de a fi completă, şi nu putem decât să sperăm că investigaţiile şi restaurările viitoare vor continua să acopere lacunele existente.

Mulţumiri

■ Nu pot să fiu destul de recunoscătoare prof. Bálint SZABÓ, pentru faptul că ne-am intersectat şi am lucrat atât de mult împreună, şi pentru toate lucrurile pe care le-am învăţat de la el, inventând şi descoperind împreună, în anii 1990, o meserie demult pierdută. Mulţumirile mele, care din păcate sunt acum postume, includ numeroasele oportunităţi de cercetare pe care mi le-a oferit, între care şi cea de la Ardud, dar cred că în primul rând aş fi vrut să îi mulţumesc pentru imensa lui înţelegere şi umanitate, şi pentru modelul inegalabil pe care ni l-a oferit tuturor celor ce i-am fost învăţăcei. Paginile de mai sus sunt un modest omagiu pe care îl aduc memoriei sale.

Bibliografie/ Bibliography

■ BUDA, Zsuzsanna. 2011. Beavatkozások az erdődi Károlyi-kastélynál. *Transsylvania Nostra* 3: 38-43.
■ EKE, Zsuzsanna. 2011. Studiul istoric al cetăţii Ardud. Manuscris, Cluj-Napoca: Utilitas CCPDRPC Srl.
■ MARCU-ISTRATE, Daniela. 2011. Contribuţii arheologice la cunoaşterea cetăţii Ardud. *Transsyilvania Nostra* 3: 33-37.
■ MARCU-ISTRATE, Daniela, ed. 2015. *Cetatea Ardud. Restituiri istorice şi arheologice*. Cluj-Napoca: Editura Mega.
■ MARCU-ISTRATE, Daniela. 2016. Ceramica de sobă din cetatea medievală a Ardudului: un cadou regal pentru Bartolomeu Drágfy? *SCIVA* 67/3-4: 269-302.
■ SZŐCS, Péter Levente. 2015. Date istorice. In *Cetatea Ardud. Restituiri istorice şi arheologice*, ed. Daniela MARCU-ISTRATE, 15-33. Cluj-Napoca: Editura Mega.
■ TERDIK, Szilveszter & Sándor KÁROLYI. 2006-2007. Építkezései az erdődi várban. *Satu Mare. Studii şi Comunicări. Seria Arheologie* XXIII–XXIV/1: 239-288.

■ Kázmér KOVÁCS[1]

Betonul armat şi clădirile istorice. Note pe marginea unei dezbateri neîncheiate

Reinforced Concrete and Historic Buildings. Marginal notes on an unfinished debate

■ **Rezumat:** *Zidurile de incintă ale oraşului Norcia au stat în picioare vreme de două milenii. Centrul istoric, cu toate că a suferit nenumărate modificări, îşi păstrează în mare măsură textura urbană constituită de-a lungul timpului. În urma cutremurelor din 2016 porţiuni ale zidului de incintă s-au prăbuşit. Tot atunci s-au prăbuşit bisericile din oraşul vechi, care fuseseră toate consolidate cu centuri de beton armat. Ca şi în cazul bisericii Santa Maria della Neve de la Cascia, prăbuşită la cutremurul din 1979, utilizarea betonului armat în asociere cu zidăriile istorice a produs rezultate opuse celor scontate şi impune opţiunea pentru alte tehnici de intervenţie.*

■ **Cuvinte cheie:** beton armat, structuri istorice, cutremur, reconstruire, conservare.

■ Betonul armat este fără îndoială una dintre invenţiile care nu doar au revoluţionat tehnicile de construcţie, dar se află la originea mediului construit aşa cum arată în zilele noastre. El continuă să fie şi azi unul dintre principalele materiale de construcţie şi poate fi întrebuinţat într-o diversitate de moduri datorită bine-cunoscutelor sale calităţi. Şi-a găsit locul fireşte şi în intervenţiile asupra monumentelor istorice, însă aici proprietăţile mecanice care îl fac de neînlocuit în alte situaţii se dovedesc adeseori neadecvate scopului urmărit. Dezbaterea pe marginea acestui subiect este departe de a fi încheiată. Prezentarea aici a cîtorva stări de fapt îşi propune să contribuie la discuţie prin furnizarea unor date de pe teren documentate *in situ*, aşadar nu cu reflecţii teoretice bazate pe cercetare bibliografică exhaustivă, ori cu rezultatele unor calcule inginereşti.

Cazurile discutate sumar în cele ce urmează sînt sunt alese din regiunile italiene Abruzzo şi Umbria, deoarece aceste ţinuturi, bogate în patrimoniu arhitectural, sînt sunt afectate periodic de evenimente seismice de amploare considerabilă. Acestea au cauzat în ultimul sfert de secol daune importante ce au impus evaluarea cauzelor, analizarea eficienţei intervenţiilor anterioare de conservare care au utilizat betonul armat, precum şi elaborarea proiectelor de restaurare şi a unor strategii de lungă durată care să facă posibilă conservarea optimă a patrimoniului construit periclitat.

Norcia

■ În cadrul seriei de ateliere italo-române, organizate de Şcoala de arhitectură a Universităţii Chieti-Pescara împreună Şcoala de arhitectură de la Bucureşti, una dintre întîlniri a fost dedicată chestiunii reconstruc-

■ **Abstract:** *The city walls of Norcia have been erected for two millennia. Despite countless changes, the old town keeps to a large extent its urban fabric constituted over time. In the aftermath of the 2016 earthquakes significant parts of the city walls collapsed. During the same earthquake every church of the old town collapsed, having been previously provided with reinforced concrete ring beams to improve their resistance. Like in the case of the Santa Maria della Neve church in Cascia, collapsed in 1979, the use of reinforced concrete in association with historical masonry brought about results opposite to what was expected and imposes the choice of alternative techniques.*

■ **Keywords:** reinforced concrete, historic building structures, earthquake, reconstruction, conservation.

■ Reinforced concrete is undoubtedly one of the inventions that not only revolutionized construction techniques but also lies at the origin of the built environment as it appears today. It continues to be one of the main construction materials and can be used in a wide variety of ways due to its well-known qualities. Naturally, it has also found its place in interventions on historic buildings, but in these cases, the mechanical properties that make it indispensable in other situations often prove to be inadequate for the intended purpose. The debate on this subject is far from over. The presentation of several real-life cases here aims to contribute to the discussion by providing in situ documented field data, rather than theoretical reflections based on exhaustive bibliographical research or the results of engineering calculations.

The cases outlined below are selected from the Italian regions of Abruzzo and Umbria, as these areas, rich in architectural heritage, are periodically affected by significant seismic events. Over the past quarter-century, these

1 Arhitect, profesor, Universitatea Sapientia din Cluj-Napoca, România.

1 Architect, professor, Sapientia University of Cluj-Napoca, Romania.



■ ***Fig. 1.*** *Zidul de incintă al orașului Norcia, cu prăbușiri în dreptul bisericii mănăstirii Sant' Antonio. Ruina este stabilizată, iar pietrele căzute din zidărie sînt adunate și conservate* in situ. *© Kázmér KOVÁCS*

■ ***Fig. 1.*** *The city wall of Norcia, with collapses near the church of the Sant' Antonio monastery. The ruins are stabilised, the stones that have fallen from the masonry are gathered and preserved* in situ. *© Kázmér KOVÁCS*

events have caused substantial damage, necessitating the evaluation of the causes, the analysis of the effectiveness of previous conservation interventions that used reinforced concrete, as well as the development of restoration projects and long-term strategies to enable the optimal preservation of the endangered built heritage.

Norcia

■ Within the series of Italian-Romanian workshops, organized by the School of Architecture at the University of Chieti-Pescara together with the School of Architecture in Bucharest, one of the meetings was dedicated to the issue of reconstructing sections of the city walls of Norcia, which collapsed following the 2016 earthquakes. The debates covered a wide range of dilemmas regarding the conservation of built heritage. The issue of intervention techniques could not be absent, the most recurring one being, probably, the use of reinforced concrete in interventions on historic structures.

Located in Umbria, the small settlement is renowned for being the birthplace of Saint Benedict, the founder of the monastic order that bears his name. The city walls surrounding the historic centre of Norcia follow the same path as they did during the Roman antiquity – when the town was called Nursia – and have stood for two millennia. Although the fortifications and the structures attached to them have undergone continuous modifications, the historic centre is a rare example of a fortified city that has largely preserved its urban fabric, developed over time. The last significant

ţiei unor porţiuni din zidurile de incintă ale oraşului Norcia, prăbuşite în urma cutremurelor din 2016. Dezbaterile au acoperit un spectru larg al dilemelor conservării patrimoniului construit. Problema tehnicilor de intervenţie nu putea lipsi, iar cea mai recurentă dintre ele este, probabil, folosirea betonului armat în intervenţii asupra structurilor istorice.

Situată în Umbria, mica aşezare e vestită pentru a fi fost locul de naştere al sfîntului Benedict, întemeietorul ordinului călugăresc ce-i poartă numele. Zidurile de incintă care înconjoară centrul istoric al oraşului Norcia urmează azi acelaşi traseu ca în perioada Antichităţii romane – cînd se numea Nursia – şi au stat în picioare vreme de două milenii. Cu toate că fortificaţiile şi construcţiile adosate lor au suferit neîncetat modificări, centrul istoric e un rarisim exemplu de oraş fortificat care îşi păstrează într-o foarte mare măsură textura urbană constituită de-a lungul timpului. Ultima modificare semnificativă a survenit în a doua jumătate a secolului al XIX-lea, odată cu tăierea străzii drepte, Corso Sertorio, care leagă piaţa San Benedetto de Porta Romana.

Pînă acum mai puţin de un deceniu zidurile de incintă au fost întregi, aşadar oamenii îşi amintesc de ele aşa cum fuseseră; iar memoria lor vie este susţinută cu asupra de măsură de cea istorică prin existenţa unor relevee precise, realizate cu tehnici de ultimă oră; pietrele prăbuşite din zidărie se află adunate pe locul unde au căzut şi sînt conservate *in situ*. (Fig. 1) Din toate aceste motive, reconstruirea şi consolidarea zidurilor de incintă ale oraşului Norcia ţin de o problematică tehnică şi nu de una doctrinară, legitimitatea reconstrucţiei *ad integrum* echivalînd în acest caz de excepţie cu firescul unei ample reparaţii capitale efectuată pe un monument istoric, astfel autenticitatea rezultatului intervenţiei nu poate fi pusă la îndoială.[2] (Fig. 2.a, 2.b)

O comparaţie cu cazul autohton ale cetăţii Capidava, situată pe malul dobrogean al Dunării, este utilă aici deoarece poate susţine, prin contrast, afirmaţia de mai sus. Aşezare părăsită de ultimii ei locuitori acum în jur de un mileniu, cetatea a cunoscut de-a lungul istoriei sale mai multe faze

2 Cf. pentru chestiunea copiilor autentice; Françoise CHOAY, *Alegoria patrimoniului* (Bucureşti: Simetria, 1998); Kázmér KOVÁCS, „Terenuri minate. Problema autenticităţii," *Transsylvvania nostra* nr. 2 (2015).



■ ***Fig. 2.a*** *Norcia, Umbria. Releveu al segmentului de incintă fortificată cuprinzînd turnul clopotniță al bisericii mănăstirii Sant' Antonio, înainte cutremurele din 2016. © Stefano D'AVINO*

■ ***Fig. 2.a*** *Norcia, Umbria. Survey of the fortified enclosure segment including the bell tower of the Sant' Antonio monastery church, prior to the earthquakes of 2016. © Stefano D'AVINO*



■ ***Fig. 2.b*** *Norcia. Releveu al segmentului de incintă fortificată cuprinzînd turnul clopotniță al bisericii mănăstirii Sant' Antonio, după cutremurele din 2016. © Stefano D'AVINO*

■ ***Fig. 2.b*** *Norcia. Survey of the fortified enclosure segment including the bell tower of the Sant' Antonio monastery church, after the earthquakes of 2016. © Stefano D'AVINO*

de înflorire, materializate în fragmente de construcţie executate cu tehnici diferite – cea mai tîrzie supraînălţare a zidurilor e reprezentată de o rară rămăşiţă de fortificaţie de pămînt din perioada Evului mediu timpuriu. Incinta fortificată fost reconstruită în deceniul din urmă după un proiect cu totul arbitrar, în absenţa oricăror relevee, inventare sau descrieri care să ofere o imagine de minimă acurateţe asupra monumentului integru. Mai mult decît atît: tehnica folosită pentru reconstrucţie – placaj din piatră debitată mecanic cu miez din beton armat – este invazivă, ireversibilă, şi îngroapă sub structura nouă substanţa originară a ruinelor cetăţii.[3] (Fig.

cant change occurred in the second half of the 19th century, with the cutting of the straight street, Corso Sertorio, which connects San Benedetto Square to Porta Romana.

Less than a decade ago, the city walls were intact, so people remember them as they once were; their vivid memory is more than supported by historical records, through the existence of precise surveys created with cutting-edge techniques. The stones from the collapsed masonry are gathered on the spot where they fell and preserved *in situ*. (Fig. 1) For all these reasons, the reconstruction and reinforcement of Norcia's city

3 Ar fi de remarcat diferenţa de abordare faţă de cazul reconstituirii monumentului de la Adamclisi, *Tropaeum Trajani*. Acolo, reconstituirea ipotetică a volumului construit lasă liber accesul la emplectonul roman. Cf. Kázmér KOVÁCS, „Conservarea ruinei," *Caietele ICOMOS* nr. 3 (2012).

walls are a technical issue rather than a doctrinal one. In this exceptional case, the legitimacy of the *ad integrum* reconstruction is equivalent to the naturalness of a major repair carried out on a historic building, thus the authenticity of the intervention's result cannot be questioned.[2] (Fig. 2.a, 2.b)

A comparison with the Romanian case of the Capidava fortress, located on the bank of the Danube in Dobrogea, is useful here because it can, by contrast,

2 For the issue of authentic copies, see Françoise CHOAY, *Alegoria patrimoniului* (Bucureşti: Simetria, 1998). Kázmér KOVÁCS, „Terenuri minate. Problema autenticităţii," *Transsylvvania nostra* nr. 2 (2015).

3.a, 3.b, 3.c, 3.d) Edificiul actual nu mai poate fi considerat un monument istoric autentic.[4]

Betonul armat a fost însă folosit şi la Norcia în a doua jumătate a secolului trecut; aceasta a produs efecte opuse celor urmărite şi a permis unele observaţii şi concluzii în urma stricăciunilor produse de cutremurele din 2016. Iată, în acest sens, relatarea lui Stefano D'AVINO, implicat în procesul de evaluare a daunelor şi în elaborarea proiectelor de restaurare: „Înaintea recentului seism au mai fost două cutremure majore: unul în 1979 şi unul în 1997. După cutremurul din 1979 încă s-a mai intervenit cu introducerea unor centuri grele din beton armat (biserica octogonală

4 Pentru o discuţie detaliată asupra subiectului a se vedea: Stefano D'AVINO, „Restoration in Romania: considerations about some recent projects", în *Restoration in Romania* (Pescara: Carsa Edizioni, 2020), 72-73.



■ ***Fig. 3.a*** *Șantierul de reconstrucție Capidava (2015). Urmele fortificației de pământ medievale timpurii sînt parțial acoperite de placajul nou de piatră. © Kázmér KOVÁCS*

■ ***Fig. 3.a*** *The Capidava reconstruction site (2015). The traces of the early medieval earthen fortification are partially covered by the new stone cladding. © Kázmér KOVÁCS*



■ ***Fig. 3.b*** *Șantierul de reconstrucție Capidava. Înălțimea zidăriei reconstruite este arbitrară, ruina incintei istorice dispare sub structura nouă. © Kázmér KOVÁCS*

■ ***Fig. 3.b*** *The Capidava reconstruction site (2015). The height of the reconstructed masonry is arbitrary, the ruins of the historical enclosure disappear beneath the new structure. © Kázmér KOVÁCS*



■ ***Fig. 3.c*** *Șantierul de reconstrucție Capidava (2015). Miezul masiv din beton armat, placat în interior și exterior cu piatră naturală prelucrată mecanic. © Kázmér KOVÁCS*

■ ***Fig. 3.c*** *The Capidava reconstruction site (2015). The massive reinforced concrete core is clad on the inside and outside with mechanically processed natural stone. © Kázmér KOVÁCS*



■ ***Fig. 3.d*** *Șantierul de reconstrucție Capidava (2015). Mormînt din secolul al XI-lea, parte a necropolei descărcate arheologic pentru a face loc noului centru de primire a vizitatorilor. © Kázmér KOVÁCS*

■ ***Fig. 3.d*** *The Capidava reconstruction site (2015). An 11th-century tomb, part of the archaeological necropolis excavated to make way for the new visitor centre. © Kázmér KOVÁCS*



■ ***Fig. 4.a*** *Norcia. Biserica San Francesco. Materia care acoperă ruina este o spumă de poliuretan care protejează zidăria și este ușor de îndepărtat cînd se inițiază lucrările de restaurare. © Kázmér KOVÁCS*
■ ***Fig. 4.a*** *Norcia. Church of San Francesco. The material covering the ruin is a polyurethane foam that protects the masonry and can be easily removed when restoration work begins. © Kázmér KOVÁCS*



■ ***Fig. 4.b*** *Norcia. Biserica Santa Maria Argentea, sprijinită cu un eșafodaj din țevi de oțel. Zidăria de piatră a încremenit pe un traseu sinuos în urma cutremurelor din 2016, constituind un fel de monument al undei de șoc seismic. © Kázmér KOVÁCS*
■ ***Fig. 4.b*** *Norcia. The Church of Santa Maria Argentea supported by a steel tube scaffolding. The stone masonry has settled along a winding path following the earthquakes of 2016, forming a sort of monument to the seismic shockwave. © Kázmér KOVÁCS*

Santa Maria della Neve de la Cascia s-a prăbuşit în 1979 pentru că în 1977 i se inserase o centură pentru a-i îmbunătăţi rezistenţa) [...] După cutremurul din 1997 unele restaurări s-au făcut cu mai multă atenţie (consolidare cu mortar de var şi nu de ciment; folosirea unor tiranţi din oţel...); în alte cazuri, s-a continuat utilizarea betonului armat. Monumentele care s-au deteriorat cu această ocazie sînt tocmai cele care fuseseră consolidate după 1997 folosindu-se betonul armat şi injectările cu mortar de ciment."[5]

A fost şi cazul tuturor bisericilor din oraşul istoric Norcia. Toate, fără excepţie, s-au prăbuşit la cutremurul din 2016. Inserţiile grele şi rigide din beton armat au strivit zidăria istorică, au pulverizat sculpturi din marmură, au nimicit tencuieli acoperite cu fresce.[6]

În luna mai a anului 2018, ruinele bisericilor de la Norcia, curăţate de spărturi, erau sprijinite cu complexe eşafodaje din tuburi de oţel soli-

5 Corespondenţă personală cu autorul din 25 mai 2018:
„Prima del recente sisma ci sono stati recentemente due grandi terremoti: uno nel 1979 ed uno nel 1997. Dopo il terremoto del 1979 si interveniva ancora mettendo grossi e pesanti cordoli in calcestruzzo armato (la chiesa ottagonale di S. Maria della Neve è crollata nel 1979 perché nel 1977 era stato inserito un cordolo per migliorarne la resistenza).";"Dopo il terremoto del 1997 alcuni restauri sono stati fatti con maggiore attenzione (consolidamento con molte di calce e non cemento; uso di catene in acciaio...); in altri casi si è continuato ad utilizzare il calcestruzzo armato. I monumenti che si sono danneggiati questa volta sono stati proprio quelli che nel 1997 sono stati consolidati con l'uso del calcestruzzo armato o con iniezioni di malta di cemento.".

6 A dispărut irecuperabil, între altele, fresca lui Michelangelo Carducci din biserica San Benedetto, înfăţişînd „Învierea lui Lazăr".

support the above statement. Abandoned by its last inhabitants around a millennium ago, the fortress experienced several phases of prosperity throughout its history, reflected in construction fragments created using different techniques – the most recent elevation of the walls being a rare remnant of earth fortifications from the early Middle Ages. The fortified enclosure was reconstructed in the past decade based on a completely arbitrary project, in the absence of any surveys, inventories, or descriptions that could provide a minimally accurate image of the intact monument. Furthermore, the technique used for reconstruction – mechanically cut stone veneer, with a reinforced concrete core – is invasive, irreversible, and buries the original substance of the fortress's ruins beneath the new structure.[3] (Fig. 3.a, 3.b, 3.c, 3.d) The current building can no longer be considered an authentic historic building.[4]

Reinforced concrete was also used in Norcia during the second half of the last century, but this led to results opposite to those intended, revealing important observations and conclusions after the damage caused by the 2016 earthquakes. In this regard, Stefano D'AVINO, involved in the damage assessment and the development of conservation projects, provides the following account: "Before the recent earthquake, there were two other major ones: one in 1979 and one in 1997. After the 1979 earthquake, heavy reinforced concrete ring beams were still being introduced (the octagonal church of Santa Maria della Neve in Cascia collapsed in 1979 because a ring beam had been inserted in 1977 to improve its resistance) […] After the 1997 earthquake, some conservations were carried out with more care (reinforcement with lime mortar instead of cement mortar; use of steel tie-rods...); in other cases, the use of reinforced concrete continued. The historic buildings that deteriorated on this occasion were precisely those that had been consolidated after 1997 using reinforced concrete and cement mortar injections." [5]

3 It is worth noting the difference in approach compared to the case of the reconstruction of the monument at Adamclisi, *Tropaeum Trajani*. There, the hypothetical reconstruction of the built volume allows free access to the Roman empliecton. See Kázmér KOVÁCS, „Conservarea ruinei," *Caietele ICOMOS* nr. 3 (2012).

4 For a detailed discussion on the subject, see Stefano D'AVINO, „Restoration in Romania: considerations about some recent projects", in *Restoration in Romania* (Pescara: Carsa Edizioni, 2020), 72-73.

5 Personal correspondence with the author from May 25, 2018:
„Prima del recente sisma ci sono stati recentemente due grandi terremoti: uno nel 1979 ed uno nel 1997. Dopo il terremoto del 1979 si interveniva ancora mettendo grossi e pesanti cordoli in calcestruzzo armato (la chiesa ottagonale di S. Maria della Neve è crollata nel 1979 perché nel 1977 era stato inserito un cordolo per migliorarne la resistenza)."
"Dopo il terremoto del 1997 alcuni restauri sono stati fatti con maggiore attenzione (consolidamento con molte di calce e non cemento; uso di catene in acciaio...); in altri casi si

This was also the case with all the churches in the historic city of Norcia. Without exception, they all collapsed in the 2016 earthquake. The heavy and rigid reinforced concrete insertions crushed the historic masonry, pulverized marble sculptures, and destroyed plaster covered with frescoes.[6]

In May 2018, the ruins of the churches in Norcia, cleared of debris, were shored by complex scaffolding made of steel tubes bolted together, and the extradoses of the masonry were temporarily fixed with layers of polyurethane foam to prevent further collapses. (Fig. 4.a, 4.b) The same was true for the collapsed sections of the city walls. It is expected that the conservation projects currently being developed and implemented will avoid repeating the mistakes of the past. However carefully they may be executed, they will not be able to restore the original sculpted frames and works of art crushed under the rubble. Perhaps the most painful loss is the collapse of the San Benedetto church in the central, eponymous square of the old town. (Fig. 5)

Cascia

■ The road to the hell of failed conservation interventions is often paved with good intentions, materialized through techniques that inappropriately use reinforced concrete and plexiglass.

The case of the Santa Maria della Neve church in Cascia is exemplary in this regard. Attributed to Bramante's school, the small late Renaissance octagonal building (1565) was preserved in a ruined state after the lantern, the vault, and a significant portion of the walls collapsed in the 1979 earthquake. (Fig. 6) The reinforced concrete ring beams introduced for consolidation after the 1962 earthquake, placed at the level of the lantern's impost, also proved inadequate here[7]. Similarly, the protective concrete layers applied over the remaining masonry extradoses did not work well either: the sculpted stones of the facing continued to fall during the minor or major seismic events that occurred over the more than four decades since the building's destruc-

darizate cu buloane, iar extradosurile zidăriilor erau fixate provizoriu cu straturi din spumă de poliuretan pentru împiedicarea prăbuşirilor ulterioare. (Fig. 4.a, 4.b) Aceeaşi era starea porţiunilor prăbuşite ale zidului de incintă. Este de aşteptat ca proiectele de restaurare în curs de elaborare şi execuţie să nu mai repete greşelile din trecut. Oricît vor fi însă lucrate de îngrijit, ele nu vor putea restitui în original ancadramentele sculptate şi operele de artă strivite sub dărîmături. Poate că cea mai dureroasă pierdere o reprezintă prăbuşirea bisericii San Benedetto din piaţa centrală, omonimă, a oraşului vechi. (Fig. 5)



■ ***Fig. 5.*** *Norcia. Biserica San Benedetto (2018). Se disting urme ale consolidării din beton armat şi partea inferioară a mulurilor gotice rămase din portalul de marmură de pe faţada sudică. © Kázmér KOVÁCS*

■ ***Fig. 5.*** *Norcia. The Church of San Benedetto (2018). Traces of reinforced concrete consolidation are visible, along with the lower part of the Gothic mouldings remaining from the marble portal on the southern elevation. © Kázmér KOVÁCS*

Cascia

■ Drumul spre infernul intervenţiilor de conservare şi restaurare ratate este adeseori pavat cu bune intenţii materializate cu tehnici utilizînd neadecvat betonul armat şi *plexiglas*-ul.

Cazul bisericii Santa Maria della Neve de la Cascia este în acest sens exemplar. Atribuit şcolii lui Bramante, micul edificiu octogonal de Renaştere tîrzie (1565) a fost conservat în stare de ruină, după ce lanternoul, bolta şi o bună parte a zidurilor se prăbuşiseră la cutremurul din 1979. (Fig. 6) Nici aici nu s-au arătat adecvate centurile de beton armat ce fu-



■ ***Fig. 6.*** *Cascia, Umbria. Biserica Santa Maria della Neve (2020). Sînt evidente straturile de beton care acoperă extradosul de zidărie rămas în picioare şi vitrinele din plexiglas construite pentru protecţia frescelor de secol XVI. © Kázmér KOVÁCS*

■ ***Fig. 6.*** *Cascia, Umbria. Church of Santa Maria della Neve (2020). The layers of concrete covering the standing masonry extrados and the plexiglass display cases built to protect the 16th-century frescoes are clearly visible. © Kázmér KOVÁCS*

è continuato ad utilizzare il calcestruzzo armato. I monumenti che si sono danneggiati questa volta sono stati proprio quelli che nel 1997 sono stati consolidati con l'uso del calcestruzzo armato o con iniezioni di malta di cemento."

6 Among others, the fresco by Michelangelo Carducci depicting "The Resurrection of Lazarus" has disappeared irretrievably from the church of San Benedetto.

7 For an analysis of the history and current state of the building, as well as for discussions regarding its potential reconstruction, see: Stefano D'AVINO, „«I monumenti sono abitati dall'anima della memoria». Sul restauro dei ruderi della chiesa della Madonna della Neve a Cascia", în *Realtà dell'architettura fra materia e immagine. Per Giovanni Carbonara: studi e ricerche*, eds. Daniela ESPOSITO şi Valeria MONTANARI (Roma: L'ERMA di Bretschneider, 2021), vol. II, especially p. 55 and following.

seseră introduse pentru consolidare, după seismul din 1962, la nivelul impostei lanternoului.[7] Tot aşa, nu au funcţionat bine nici straturile de protecţie din beton suprapuse apoi extradosurilor de zidărie rămasă în picioare: pietrele sculptate ale paramentului au continuat să cadă la seismele mai mici sau mai mari survenite de-a lungul celor mai bine de patru decenii trecute de la distrugerea edificiului. Vitrinele din plexiglas montate în tîmplărie metalică, menite să protejeze frescele din nişe, expuse la intemperii după colapsul bolţilor, au produs un rezultat contrar: efectul de seră combinat cu condensul au favorizat dezvoltarea microorganismelor, ceea ce a dus la deteriorarea rapidă şi ireversibilă a picturilor. (Fig. 7.a, 7.b)

La iniţiativa comunităţii locale, care n-a încetat să ducă flori pe altarul de acum pustiit, pe 25 ianuarie 2020 a avut loc la Cascia un colocviu pentru discutarea posibilităţii – deocamdată teoretice – a reîntregirii şi redării în folosinţă a bisericii ruinate. Dezastrul fiind relativ recent, memoria vie încă mai păstrează amintirea edificiului intact. Subzistă un număr de fotografii dinaintea cutremurului (Fig. 8), dar lipsesc relevee precise care să documenteze curbura exactă a bolţilor sau înălţimea lanternoului. Pietrele de parament căzute au fost catalogate şi se păstrează de asemenea *in situ*.

Singular, cazul bisericii Santa Maria della Neve este mai apropiat de cel al zidurilor de incintă ale oraşului Norcia decît de cazul cetăţii Capidava. Tentativa de conservare în stare de ruină s-a dovedit un eşec. În consecinţă, poate fi luată în considerare o reconstituire corectă, hibridă a edificiului, cu refolosirea pietrelor originare şi reconstituirea identică, prin analogie, a paramentului interior şi exterior, dar propunînd o arhitectură contem-



■ ***Fig. 7.a*** *Cascia. Fresca înfățișînd Naşterea Domnului (Camillo Angelucci di Mevale), 1573, în vitrina protectoare, 2020. © Kázmér KOVÁCS*
■ ***Fig. 7.a*** *Cascia. Fresco depicting the Nativity (by Camillo Angelucci di Mevale), 1573, in the protective display case, 2020. © Kázmér KOVÁCS*

7 Pentru analiza istoriei şi stării actuale a edificiului, precum şi pentru discutarea eventualei sale reconstruiri:
Stefano D'AVINO, „«I monumenti sono abitati dall'anima della memoria». Sul restauro dei ruderi della chiesa della Madonna della Neve a Cascia", în *Realtà dell'architettura fra materia e immagine. Per Giovanni Carbonara: studi e ricerche*, eds. Daniela ESPOSITO şi Valeria MONTANARI (Roma: L'ERMA di Bretschneider, 2021), vol. II, mai ales p. 55 şi urm.



■ ***Fig. 8.*** *Cascia. Biserica Santa Maria della Neve înainte de prăbuşire. Cf. Stefano D'AVINO, „I monumenti...", 2021,* op. cit., *p. 55. © Kázmér KOVÁCS*
■ ***Fig. 8.*** *Cascia. Church of Santa Maria della Neve before the collapse. See Stefano D'AVINO, „I monumenti...", 2021,* op. cit., *p. 55. © Kázmér KOVÁCS*



■ ***Fig. 7.b*** *Cascia. Fresca înfățișînd Naşterea Domnului, 2019. © Kázmér KOVÁCS*
■ ***Fig. 7.b*** *Cascia. The fresco depicting the Nativity, 2019. © Kázmér KOVÁCS*

tion. The plexiglass display cases mounted in metal frames, intended to protect the frescoes in niches exposed to the elements after the vaults' collapse, produced the opposite result: the greenhouse effect combined with condensation encouraged the growth of microorganisms, leading to the rapid and irreversible deterioration of the paintings. (Fig. 7.a, 7.b)

At the initiative of the local community, which has continued to bring flowers to the now desolate altar, a colloquium was held in Cascia on January 25, 2020, to discuss the possibility – for now theoretical – of fully restoring and putting the ruined church back into use. Since the disaster is relatively recent, living memory still retains the recollection of the intact building. A number of photographs from before the earthquake exist (Fig. 8), but there are no precise surveys to document the precise curvature of the vaults or the height of the lantern. The fallen facing stones have been catalogued and are also preserved *in situ*.

Singularly, the case of the Santa Maria della Neve church is closer to that of Norcia's city walls than to the case of the Capidava fortress. The attempt to preserve it in a state of ruin proved to be a failure. Consequently, a correct, hybrid reconstruction of the building can be considered, reusing the original stones and identically reconstructing the interior and exterior facing through analogy, while proposing contemporary architecture for the missing and undocumented elements of the building above the first cornice. Given the sufficiently nuanced restoration doctrines, as well as the diversity of techniques and materials available for interventions on historic buildings, the reconstruction of the ruined building appears to be an alternative legitimate in terms of authenticity, especially since the local community needs the old-new church, which they will attend and maintain. (Fig. 9)



■ ***Fig. 9.*** *Cascia. Biserica Santa Maria della Neve, cu pietrele de parament adunate în vecinătatea ruinei. © Kázmér KOVÁCS*
■ ***Fig. 9.*** *Cascia. Church of Santa Maria della Neve, with the facing stones gathered near the ruins. © Kázmér KOVÁCS*

porană pentru elementele dispărute şi nedocumentate ale părţii de clădire deasupra primei cornişe. Date fiind doctrinele de restaurare suficient de nuanţate, pe de o parte, pe de altă parte diversitatea tehnicilor şi materialelor aflate la dispoziţie pentru intervenţiile pe monumente istorice, reconstruirea monumentului ruinat apare o alternativă legitimă din punct de vedere al autenticităţii, în condiţiile în care comunitatea locală are nevoie de biserica veche-nouă, pe care o va frecventa şi întreţine. (Fig. 9)

L'Aquila

■ Tot un cutremur a făcut să cadă în 2009 un număr considerabil de clădiri şi a produs daune majore la aproape toate construcţiile din centrul istoric al oraşului L'Aquila. (Fig. 10.a, 10.b) Pentru mai mulţi ani, locuitorii oraşului istoric au fost evacuaţi, iar accesul persoanelor era interzis pe străzile sale. Amplitudinea şi direcţia de propagare a undelor seismice au fost doar unele dintre cauzele dezastrului. O altă cauză a fost tehnica originară de construcţie: zidărie din piatră naturală nefasonată (dar finisată foarte îngrijit), utilizată la bisericile şi palatele datînd mai ales din Renaşterea tîrzie şi Baroc. Nu în ultimul rînd, în ultimele decenii ale secolului al XX-lea au fost şi aici aplicate consolidări folosind beton armat.



■ ***Fig. 10.a*** *L'Aquila, Abruzzo. Biserica Santa Maria del Suffragio în şantier, 2013. © Kázmér KOVÁCS*
■ ***Fig. 10.a*** *L'Aquila, Abruzzo. Church of Santa Maria del Suffragio during interventions, 2013. © Kázmér KOVÁCS*



■ ***Fig. 10.b*** *L'Aquila. Casă de locuit consolidată provizoriu, 2013 © Kázmér KOVÁCS*
■ ***Fig. 10.b*** *L'Aquila. Temporarily consolidated residential building, 2013. © Kázmér KOVÁCS*

Post Scriptum – iunie 2024

■ 1. Lucrările de restaurare şi reconstrucţie de la Norcia prezintă deja rezultate spectaculoase. Primăria şi bazilica San Benedetto şi-au recăpătat integritatea fizică, lucru vădit cu toate că edificiile sînt încă parţial acoperite cu schele. Cîteva mici porţiuni din zidul de incintă au fost reconstruite. Lucrările de restaurare ale porţii Romana se apropie de sfîrşit: a fost deja remontat placajul din piatră al paramentului, după ce miezul de zidărie, grav avariat de cutremur, fusese consolidat şi îndreptat. (Fig. 11a, 11.b, 11.c)

2. Pentru Cascia, colectivul lui D'AVINO a elaborat proiectul tehnic pentru reconstruirea bisericii Santa Maria della Neve. Sunt aşteptate permisul de construire şi fondurile pentru începerea lucrărilor. (Fig. 12.a, 12.b, 12.c)

3. Străzile oraşului istoric L'Aquila sînt din nou populate. O bună parte a instalaţiilor de punere provizorie în siguranţă după cutremur au dispărut, faţadele palatelor şi-au recăpătat strălucirea. Magazinele s-au redeschis, au revenit turiştii. Bisericile principale şi-au regăsit integritatea şi



■ ***Fig. 11.a*** *Norcia. Piața San Benedetto cu Primăria și bazilica San Benedetto reconstruite, 2024. © Kázmér KOVÁCS*
■ ***Fig. 11.a*** *Norcia. San Benedetto Square with the reconstructed Town Hall and the Basilica of San Benedetto, 2024. © Kázmér KOVÁCS*



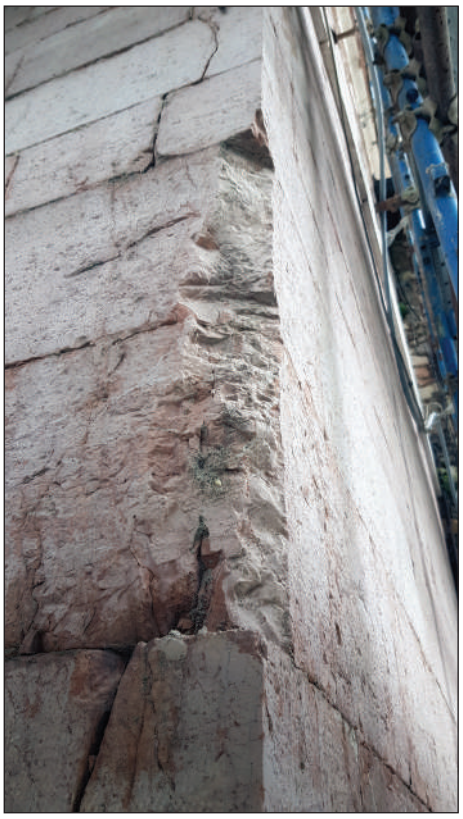
■ ***Fig. 11.c*** *Norcia. Vedere de pe Porta Romana de-a lungul lui Corso Sertorio spre piața San Benedetto. © Kázmér KOVÁCS*
■ ***Fig. 11.c*** *Norcia. View from Porta Romana along Corso Sertorio towards San Benedetto Square. © Kázmér KOVÁCS*

L'Aquila

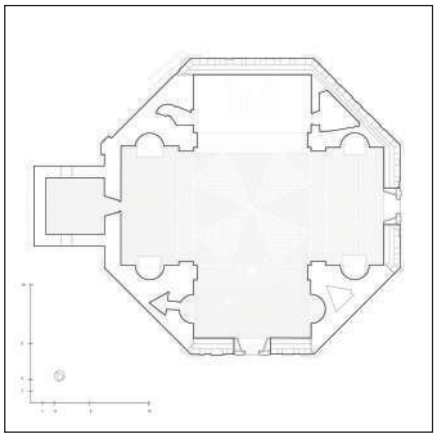
■ It was also an earthquake, in 2009, which caused a significant number of buildings to collapse and severely damaged nearly all the constructions in the historic centre of L'Aquila. (Fig. 10.a, 10.b) For several years, the residents of the historic city were evacuated, and access to its streets was prohibited. The magnitude and direction of the seismic waves were only some of the causes of the disaster. Another cause was the original construction technique: masonry made from unshaped natural stone (though very carefully finished), used in the churches and palaces dating mostly from the Late Renaissance and Baroque. Last but not least, consolidations made with reinforced concrete were also used here in the final decades of the 20th century.

Post Scriptum – June 2024

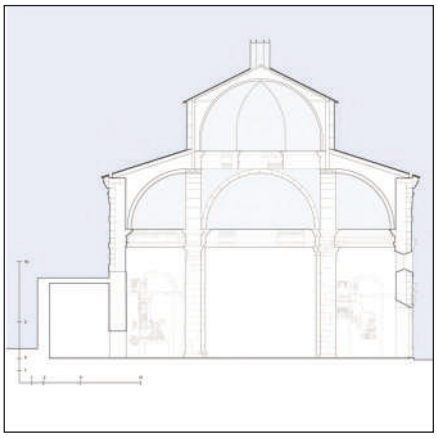
■ 1. The conservation and reconstruction works in Norcia are already showing spectacular results. The town hall and the Basilica of San Benedetto have regained their physical integrity, a clear fact even though the buildings are still partially covered with scaffolding. A few small sections of the city walls have been rebuilt. The restoration of the Porta Romana is nearing completion: the stone



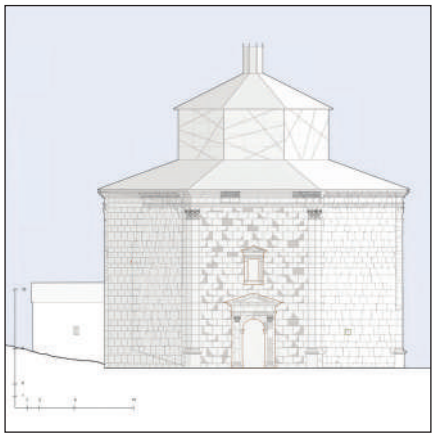
■ ***Fig. 11.b*** *Norcia. Porta Romana, detaliu de colț cu paramentul reinstalat. © Kázmér KOVÁCS*
■ ***Fig. 11.b*** *Norcia. Porta Romana, corner detail with the reinstated facing. © Kázmér KOVÁCS*



■ ***Fig. 12.a*** *Cascia. Biserica Santa Maria della Neve, plan, proiect de restaurare. © Stefano D'AVINO*
■ ***Fig. 12.a*** *Cascia. Church of Santa Maria della Neve, plan, restoration project. © Stefano D'AVINO*



■ ***Fig. 12.b*** *Cascia. Biserica Santa Maria della Neve, secțiune AA, proiect de restaurare. © Stefano D'AVINO*
■ ***Fig. 12.b*** *Cascia. Church of Santa Maria della Neve, section AA, conservation project. © Stefano D'AVINO*



■ ***Fig. 12.c*** *Cascia. Biserica Santa Maria della Neve, elevație NV, proiect de restaurare. © Stefano D'AVINO*
■ ***Fig. 12.c*** *Cascia. Church of Santa Maria della Neve, elevation NV, conservation project. © Stefano D'AVINO*



■ ***Fig. 13.a*** *L'Aquila. Biserica Santa Maria del Suffragio, vedere interioară a cupolei reconstruite, cu urma fragmentului originar marcată în tencuială, 2024. © Kázmér KOVÁCS*
■ ***Fig. 13.a*** *L'Aquila. Church of Santa Maria del Suffragio, interior view of the reconstructed dome, with the trace of the original fragment highlighted in the plaster, 2024. © Kázmér KOVÁCS*



■ ***Fig. 13.b*** *L'Aquila. Biserica Santa Maria Paganica, 2024. © Kázmér KOVÁCS*
■ ***Fig. 13.b*** *L'Aquila. Church of Santa Maria Paganica, 2024. © Kázmér KOVÁCS*

veneer of the facing has already been reassembled after the severely earthquake-damaged masonry core was consolidated and straightened. (Fig. 11.a, 11.b, 11.c)

2. For Cascia, D'Avino's team has developed the technical project for the reconstruction of the Santa Maria della Neve church. They are currently awaiting the building permit and the necessary funds to begin the work. (Fig. 12.a, 12.b, 12.c)

3. The streets of the historic city of L'Aquila are once again bustling. Many of the temporary safety installations built after the earthquake have been removed and the elevations of the palaces have regained their splendour. Shops have reopened and tourists have returned. The main churches have been restored to their former integrity and are fulfilling their sacred functions daily. Others, however, still remain in a state of preserved ruin. (Figures 13.a, 13.b)

The monastic complex of Beata Antonia is currently undergoing extensive conservation. In the 1970s, the roof

îşi îndeplinesc zilnic funcţiunea sacrală. Altele, în schimb, se află încă în aceeaşi stare de ruină conservată provizoriu. (Fig. 13.a, 13.b)

Ansamblul mănăstiresc Beata Antonia se află în plin şantier de restaurare. Acoperişul deasupra bolţilor renascentiste ale bisericii a fost înlocuit în anii 1970 cu o şarpantă din beton armat sprijinită pe o masivă centură din acelaşi material, care replica întocmai volumetria iniţială. Deşi a rămas în picioare, construcţia a suferit daune majore la cutremur. Una dintre operaţiile impuse de proiectul de restaurare presupune îndepărtarea în întregime a suprastructurii moderne din beton armat. Centura şi fermele sunt desfăcute şi sfărîmate cu un picamer de mici dimensiuni. Zidăria este reîntregită cu asize de cărămidă, peste care se aşază o şarpantă nouă din lemn şi se reface învelitoarea de olane. (Fig. 14.a, 14.b, 14.c, 14.d)

Încheiere

■ Concluzia plauzibilă a acestei serii de cazuri prezentate este că certele virtuţi statice şi expresive ale betonului armat pot şi trebuie să fie valorificate în realizările arhitecturii contemporane, inclusiv la restaurarea monumentelor istorice de factură modernă, unde betonul continuă să fie unul dintre principalele materiale de construcţie. În schimb, orice intervenţie de consolidare pe structuri istorice construite cu tehnici mai vechi trebuie întreprinsă cu maximă circumspecţie, iar folosirea elementelor de



■ ***Fig. 14.a*** *L'Aquila. Biserica mănăstirii Beata Antonia, 2024. Sînt desfăcute fermele din beton armat și centura care le susținuse. © Kázmér KOVÁCS*
■ ***Fig. 14.a*** *L'Aquila. Church of the Beata Antonia Monastery, 2024. The reinforced concrete trusses and the ring beam supporting them have been removed. © Kázmér KOVÁCS*



■ ***Fig. 14.b*** *L'Aquila. Biserica mănăstirii Beata Antonia, 2024. Coronamentul ziduri-lor este reconstituit cu zidărie de cărămidă. © Kázmér KOVÁCS*
■ ***Fig. 14.b*** *L'Aquila. Church of the Beata Antonia Monastery, 2024. The upper part of the wall is reconstructed with brick masonry. © Kázmér KOVÁCS*



■ ***Fig. 14.c*** *L'Aquila. Biserica mănăstirii Beata Antonia, 2024. Șarpanta nouă din lemn. © Kázmér KOVÁCS*
■ ***Fig. 14.c*** *L'Aquila. Church of the Beata Antonia Monastery, 2024. The new wooden roof structure. © Kázmér KOVÁCS*



■ ***Fig. 14.d*** *L'Aquila. Biserica mănăstirii Beata Antonia, 2024. Consolidarea flexibilă a extradosului bolților cu benzi din fibre de carbon. © Kázmér KOVÁCS*
■ ***Fig. 14.d*** *L'Aquila. Church of the Beata Antonia Monastery, 2024. Flexible reinforcement of the extrados of the vaults with carbon fibre strips. © Kázmér KOVÁCS*



■ ***Fig. 14.e*** *Moșna, județul Sibiu. Suprabetonarea nervurilor bolții bisericii-sală, realizată la începutul anilor 2010. © Kázmér KOVÁCS*
■ ***Fig. 14.e*** *Moșna, Sibiu County. Over-concreting of the vault ribs in the hall church, made in the early 2010s. © Kázmér KOVÁCS*

consolidare din beton armat în asociere cu zidării pre-moderne trebuie evitată, consecinţele sale nefaste fiind demonstrate cu asupra de măsură de cazurile evocate. Deoarece este posibil, mai ales în zonele cu risc seismic, trebuie să fie îndepărtate elementele de beton armat introduse cîndva cu intenţia de consolidare a structurilor constructive istorice.

above the Renaissance vaults of the church was replaced with a reinforced concrete structure supported by a massive ring beam of the same material, replicating the original volume exactly. Although it remained standing, the building suffered significant damage during the earthquake. One of the operations required by the conservation project involves the complete removal of the modern reinforced concrete superstructure. The ring beam and trusses are being dismantled and broken up with a

small jackhammer. The masonry is being restored with brick courses, upon which a new wooden frame is placed, and the roof is being covered with new clay tiles. (Fig. 14.a, 14.b, 14.c, 14.d)

Conclusion

■ The plausible conclusion of this series of case studies is that the clear structural and expressive virtues of reinforced concrete can and should be harnessed in contemporary architecture, including in the conservation of modern historic buildings, where concrete remains one of the primary construction materials. However, any consolidation intervention on historic structures built using older techniques must be undertaken with extreme caution. The use of reinforced concrete elements in conjunction with pre-modern masonry should be avoided, as its detrimental consequences have been clearly demonstrated by the cases mentioned. Especially in seismic risk areas, any reinforced concrete elements that were once introduced with the intent to strengthen historic structures should be removed whenever possible.

Of course, a limited number of exemplary cases, especially when chosen with a certain bias, cannot constitute the final word in the debate about the use of reinforced concrete in interventions on built heritage. Perhaps the only conclusion – long since a truism – that remains uncontested is that each case is unique. Therefore, even with an extensive body of theoretical, historical, and technical literature in the field, in-depth research remains indispensable for selecting the most appropriate methods of intervention on a particular historic building or site[8].

Acknowledgements

■ I extend my thanks to architect and professor Stefano D'AVINO for his guidance and assistance in familiarizing me with all the cases presented.

8 For the Romanian audience – and not just for the specialists – two more recent works are particularly interesting: Rodica CRIŞAN, *Reabilitarea patrimoniului construit. Teorie şi tehnică* (Bucureşti: Ozalid, 2023); Lucian-Cristian RATOIU, *Restaurarea monumentelor istorice* (Bucureşti: Editura ACS, 2021).

Desigur, un număr limitat de cazuri exemplare, mai cu seamă alese cu oarece părtinire, nu poate constitui ultimul cuvînt în dezbaterea despre întrebuinţarea betonului armat în intervenţiile asupra patrimoniului construit. Poate că singura constatare – devenită de mult un truism – cu valabilitate încă necontestată este că fiecare caz abordat este unic. De aceea, chiar avînd la îndemînă o masivă literatură teoretică, istorică şi tehnică în domeniu, cercetările aprofundate rămîn indispensabile pentru alegerea celor mai adecvate moduri de intervenţie pe un anume monument sau sit istoric.[8]

Mulţumiri

■ Pentru familiarizarea cu totalitatea cazurilor prezentate îi adresez mulţumiri arhitectului şi profesorului Stefano D'AVINO.

Bibliografie / Bibliography

■ CHOAY, Françoise. *Alegoria patrimoniului*. Bucureşti: Simetria, 1998.
■ CRIŞAN, Rodica. *Reabilitarea patrimoniului construit. Teorie şi tehnică*. Bucureşti: Ozalid, 2023.
■ D'AVINO, Stefano, „«I monumenti sono abitati dall'anima della memoria». Sul restauro dei ruderi della chiesa della Madonna della Neve a Cascia". În *Realtà dell'architettura fra materia e immagine. Per Giovanni Carbonara: studi e ricerche*, editat de Daniela ESPOSITO şi Valeria MONTANARI. Roma: L'ERMA di Bretschneider, vol II, 2021.
■ D'AVINO, Stefano. „Restoration in Romania: considerations about some recent projects". În *Restoration in Romania*. Pescara: Carsa Edizioni, 2020.
■ KOVÁCS, Kázmér. „Conservarea ruinei." *Caietele ICOMOS* nr. 3 (2012).
■ KOVÁCS, Kázmér. „Terenuri minate. Problema autenticităţii." *Transsylvvania nostra* nr. 2 (2015).
■ RATOIU, Lucian-Cristian. *Restaurarea monumentelor istorice*. Bucureşti: Editura ACS, 2021.

8 Pentru publicul românesc – şi nu doar cel specialist – prezintă interes mai cu seamă două lucrări mai recente: Rodica CRIŞAN, *Reabilitarea patrimoniului construit. Teorie şi tehnică* (Bucureşti: Ozalid, 2023); Lucian-Cristian RATOIU, *Restaurarea monumentelor istorice* (Bucureşti: Editura ACS, 2021).

■ MEZŐS Tamás[1]

A dolgozat megírásakor SZABÓ Bálint 80. születésnapjának megünneplésére készültünk. Nem sejtettem, hogy az írás végül emlékkötetbe kerül. Hiánya már ma is érezhető, emléke velünk marad. RIP

A tudatos műemlékvédelem kialakulása és előzményei

■ **Kivonat:** *A régiek építészeti alkotásainak védelme nem az újkori gondolkodás eredménye. Jelen tanulmány az európai műemlékvédelem kialakulásának előzményeit tekinti át, kezdve az antikvitástól egészen a 19. század közepéig. Minden e szempontból jelentős történeti kor esetében számba veszi a főbb irányelveket, uralkodó eszméket és ezek legfontosabb képviselőit, valamint értékeli a műemlékvédelmi jellegű törekvéseket. Tömörített formában nyújt áttekintést arról a több évezredes folyamatról, amely megalapozta a modern, tudatos műemlékvédelmet.*

■ **Kulcsszavak:** műemlékvédelem, Európa, ókor, reneszánsz, klasszicizmus, felvilágosodás, XIX. század

■ A történeti korok értelmisége mindig figyelemmel kísérte az elődök műveit. Legyen szó irodalomról, képzőművészetről vagy akár építészeti művekről. Pheidiasz nagyszerű alkotásait az esztétikai értékükön túl a történetiség megjelenítése miatt is tisztelték a maga korában.

Justinianus törvénykönyve 8. kötete, 2. bekezdése szerint: „Az isteni Vespasianus ediktuma és a szenátus rendelete egyaránt tiltja, hogy egy épületet lebontsanak és az annak részét képező márványt eladás céljából eltávolítsák, kivételt képez viszont, ha a márványt az egyik épületből egy másikba kívánják áthelyezni, mivel ez megtehető. A tulajdonosok azonban nem vihetik át az anyagokat oly módon, hogy az épületek lebontásakor a környék általános megjelenése kevésbé lesz vonzó."[2]

A régiek építészeti alkotásainak védelme nem az újkori gondolkodás eredménye. Minden korban gyűjtötték a múlt tárgyi emlékeit, de ezek eredeti környezetükből és funkciójukból kiszakítva dísztárgyakká, múzeumi tárgyakká alakultak. Fontosabbak, hitelesebbek azok az építészeti emlékek, amelyek eredeti helyükön, lehetőség szerint a hétköznapi élet szolgálatában maradtak fenn az évszázadok, esetleg évezredek folyamán.

Ismerünk egyiptomi és görög példákat is, amikor igazolhatóan – az építés koránál – későbbi kiegészítések maradtak fenn épületek részletein. Ilyen beavatkozás figyelhető meg az olümpiai Zeusz-templom egyik párkánytöredékén vagy a delphoi Apollón oszloptörzsén, ahol a sérülést stukkóval egészítették ki. Óvatosan kell kezelnünk ezeket a megfigyeléseket.

1 Építőmérnök, dr., egyetemi tanár, Budapesti Műszaki és Gazdaságtudományi Egyetem, Építészettörténeti és Műemléki Tanszék, Budapest, Magyarország.

2 Közzétéve a január kalendája előtti tizenegyedik napon, Alexander konzulátusa idején, 225-ben. [szabad fordítás] Forrás: Codex Iustininaus VIII (LASSARD&KOPTEV).

When writing this paper, we were preparing to celebrate Bálint SZABÓ's 80th birthday. I had no idea that the article would end up in a volume commemorating Bálint. He is already missed; his memory shall stay with us. RIP

The Development and Background of Mindful Historic Building Conservation

■ **Abstract:** *The protection of the ancient architecture is not the result of modern thinking. This paper reviews the background that led to the development of historic building conservation in Europe from antiquity to the mid-19th century. It focuses on the main guidelines, dominant ideas and their most important representatives for each of the historical periods of relevance, and assesses the efforts made in the field of historic building conservation. It provides a concise overview of the millennia-long process that has laid the basis for modern, mindful heritage conservation.*

■ **Keywords:** historic building conservation, Europe, Antiquity, Renaissance, Classicism, Enlightenment, 19th century

■ The intellectuals in different ages have always regarded the works of their predecessors: be it literature, fine arts or even architecture. The great works of Pheidias were respected in their time not only for their aesthetic value, but also for their historical representation.

According to Volume 8, paragraph 2 of the Code of Justinian: "It is forbidden both by an Edict of the Divine Vespasian and a Decree of the Senate to demolish a building and remove the marble composing it for the purpose of selling the same, but an exception is made where the marble is to be transferred from one building to another, as this can be done. Owners, however, are not permitted to transfer the materials in such a way that, when the buildings are demolished, the general appearance of the neighborhood will be rendered less attractive."[2]

The protection of ancient architecture is not the result of modern thinking. All eras excelled in the collection of material relics of the past, but they were taken out of their original context and function and were degraded into decorative objects or museum artefacts. There are relics that have survived in their original place, possibly in the service of everyday life,

1 Civil engineer, Professor, PhD, university professor, Budapest University of Technology and Economics, Department of History of Architecture and Monuments, Budapest, Hungary.

2 Published on the eleventh of the Kalends of January, during the Consulate of Alexander, 225. Source: Codex Iustininaus VIII (LASSARD&KOPTEV).

over the centuries, or even millennia and they are more important, more authentic.

There are also Egyptian and Greek examples where additions to parts of buildings can be shown to have been added later than the time of construction. Such interventions can be seen on a fragment of a cornice in the Temple of Zeus at Olympia or on the column of Apollonion at Delphi, where the damaged part was mended with stucco. These observations should be treated with caution. It is hazardous to consider these interventions as early manifestations of historic buildin conservation. In the latter example in particular, it seems clear that the repairs to the 4th century BC building were not carried out for conservation purposes, but rather for aesthetic reasons.

Our assumptions are clearly confirmed by the various Roman legal texts. The Theodosian Codex expressly states that it is forbidden and punishable to damage the decoration of a building, thereby distorting it. The offender was to be punished by having his hand cut off. Earlier, as early as Septimius SEVERUS (193-211), there was a regulation for the restoration of neglected buildings. Clearly, the legislator may have been guided by safety considerations in addition to aesthetic ones. There is no indication in Roman law that the restoration of certain buildings was required because of their "age", apart from certain references. The first specific reference appears in a decree of Emperor ANTHEMIUS in 469: "... the greatest praise will be given to those who care for and restore the old".

The situation is different with regard to the protection of the townscape. VESPASIAN (69-79) states that "... the demolition of an entire building is a threat to the townscape". In 389, THEODOSIUS THE GREAT clearly states that "the construction of new town houses must take account of the environment". In his decree of 330, Constantine ordered the registration of old buildings, thus setting an example of the first inventory of historic buildings.

Most of the regulations dating back to the Middle Ages did not consider necessary the conservation of the historic building because of their age or their historical value. Rather, the goal was to preserve utility and aesthetic value. The Synod of Tarragona from 516 considered it was the bishop's "old duty" to check regularly the condition of his churches. And the Council of Trent stated that "the bishops should see to it that in all their churches everything that is in need of renewal is restored."

The work of Renaissance theorists and architects

■ It is a stereotype in the history of architecture that Italian masters of the late Middle Ages and early Renaissance already paid great attention to the architectural monuments of the antiquity. This attention was, however, limited to the architectural documentation of the ruins, and any restoration or maintenance work to ensure the utility of the architectural work was rare, or rather absent. Typical and well-known examples include the Temple of Apollo in Syracuse, which was converted into a Christian church in the Middle Ages and decorated with a Baroque façade.

Kockázatos a beavatkozást a műemlékvédelem korai megnyilvánulásaként értékelni. Különösen az utóbbi példa esetében egyértelműnek tűnik, hogy a Kr. e. IV. századból származó épületen végzett javítás nem műemlékvédelmi, hanem esztétikai megfontolásokból történt.

Egyértelműen igazolják feltételezéseinket a különböző római jogi szövegek. A Theodosianus-kódexben expressis verbis kimondatik, hogy tilos és büntetendő az épületek díszítését megrongálni, ezzel az épületet elcsúfítani. A rongálót kezének levágásával büntetik. Korábban, már Septimius SEVERUSNÁL (193–211) megjelenik az elhanyagolt épületek helyreállításának előírása. Nyilván az esztétikai szempontokon túl biztonsági megfontolások is vezethették a törvényalkotót. Arra vonatkozó adatot a római törvényekből, hogy egyes épületek helyreállítását azok „régiségértéke" miatt szorgalmaznának – egyes áttételes utalásokon kívül –, nem ismerünk. Az első konkrét utalás ANTHEMIUS császár 469. évi rendeletében jelent meg: „… a legnagyobb dicséretet az fogja aratni, aki régit ápol és helyreállít".

Más a helyzet a városkép védelmével kapcsolatos előírásokkal. VESPASIANUSNÁL (69–79) egyértelműen megjelenik, hogy „… egy egész épület lebontása veszélyezteti a városképet". NAGY THEODOSIUS 389-ben egyértelműen kimondja: „Az új polgárházak építésénél tekintettel kell lenni a környezetre". A régi épületek lajstromba vételéről rendelkezik CONSTANTINUS a 330-ban hozott rendeletében, s ezzel az első műemléki inventarizáció példáját alkotja meg.

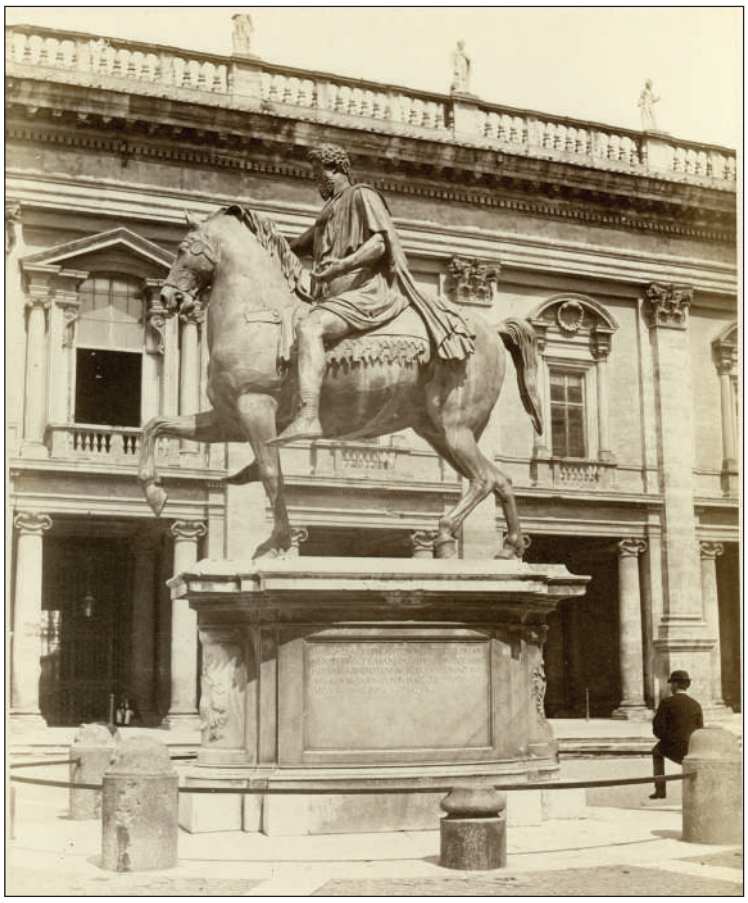
A középkorból származó rendeletek többsége nem a műemlék védelmét, az emlék régiségéből vagy történeti értékéből fakadó megóvását tartja szükségesnek. Sokkal inkább a használhatóság és az esztétikai érték megtartása a cél. Az 516. évi tarragonai zsinat a püspök „régi kötelességének" tartja, hogy rendszeresen ellenőrizze templomai állapotát. A tridenti zsinat pedig kimondja: „a püspökök minden templomukban gondoskodjanak arról, hogy helyreállíttassék minden, ami éppen megújítást kíván".

A reneszánsz teoretikusok és építészek működése

■ Építészettörténeti közhely, hogy már a késő középkor és a korai reneszánsz itáliai mesterei is kitüntető figyelemben részesítették az antikvitás építészeti emlékeit. Ez a figyelem azonban csak a romok építészeti dokumentálására korlátozódott, és nem vagy csak kivételes esetként fordult elő, hogy az építészeti alkotás használhatósága érdekében helyreállítási, karbantartási munkákat végeztek volna. Tipikus és mindenki által ismert példák között említhető a szirakúzai Apolló-templom, amelyet keresztény templommá alakítottak a középkorban, és barokk homlokzattal díszítettek. Hasonló példa a Michelangelo által tervezett Santa Maria degli Angeli-templom, amely DIOCLETIANUS 298–306 között épült fürdőjének *Cella media* terét használja föl. Új épületeken is felhasználták a klasszikus múlt alkotásait. Ilyen a riminibeli Tempio Malatestiano, amelynek kapuzatához ALBERTI Leon Battista a városban álló Augustus-diadalív motívumait használta föl. ALBERTINEK a pápa szolgálatában számos alkalma volt Róma városi emlékeinek tanulmányozására. Firenze nagy szülötte, BRUNELLESCHI Messer a saját elhatározásából, a saját költségén utazott az örök városba, hogy tanulmányozhassa a régiek alkotásait. VIGNOLA kanonizálta az antik formák arányait oszloprendjeinek kidolgozásával. PALLADIO képzeletbeli görög házát használta saját újításainak indokául. Természetesen maga is folytatott felméréseket, és *Négy könyv az építészetről* című művében hivatkozik is stúdiumaira.

Antik emlékek pusztulása a „modern” épületek emelése ürügyén

■ Az elméleti földolgozás és dokumentálás mellett a gyakorlatban a reneszánsz is, és az ezt követő időszakok is „kőbányának” használták az antik emlékeket. BRAMANTE Donatot „Il Maestro Rovinante” – a Romboló Mester – névvel illették nem csupán azért, mert lebontotta a régi Szent Péter-templomot, hanem azért is, mert az új székesegyház felépítéséhez – többek között – a Colosseum köveit is felhasználta. Például a San Pietro márvány falburkolatai és építészeti tagozatai, a legapróbb részletekig, nem bányászott anyagból, hanem az antik épületekről lebontott burkolatokból származnak. Számítások szerint V. Márton (1417–1431) és VII. Pius (1800–1823) pápák uralkodása között több ókori emlék lett az új építkezések áldozata, mint amennyit a megelőző ezer év során a barbárok elpusztítottak. A Barberini családból származó VIII. Orbánról (1623–1644) mondta a köznép a Pantheon aranyozott bronzdíszeinek eltávolíttatása miatt, hogy amit nem tettek a barbárok, megtették a Barberiniek *(Quod non fecerunt barbari, fecerunt Barberini)*. A korábban említett Michelangelo nevéhez kötődik a capitoliumi Castor és Pollux-templom kőtalapzatának „újrahasznosítása” a Marcus Aurelius lovas szobor talapzatának elkészítésekor. (1. ábra) Sorolhatnánk az ismert antik emlékekről származó kőanyagok ismételt felhasználásának példáit. A romboló mesterek pedig ugyanazok, akik vázlatkönyveikkel járták az Örök Várost és környékét, rajzolták és mérték a római kor emlékeit. Az említetteken kívül PERUZZI Baldasarre, DA SANGALLO Antonio, BERNINI Gian Lorenzo és még sokak nevét említhetnénk.



■ ***1. ábra.*** *Marcus Aurelius lovas szobra a Capitolium téren, Róma, Olaszország. © Magyar Nemzeti Múzeum Közgyűjteményi Központ, Országos Széchényi Könyvtár, Történeti Fénykép- és Interjútár, a Roma 1870 album 24. képe, digitális azonosító: hu_b1_ftd00335_r*

■ ***Fig. 1.*** *Statue of Marcus Aurelius on horseback in Capitoline Square, Rome, Italy. © Hungarian National Museum Public Collection Centre, National Széchényi Library, Historical Photo and Interview Gallery, 24th photo of Rome 1870 album, digital identifier: hu_b1_ftd00335_r*

A similar example is the Sta. Maria degli Angeli church by Michelangelo, which used the space of the *Cella media* of DIOCLETIAN's baths, built between 298–306. New buildings have also used some parts of the works from the classical past. Such example is the Tempio Malatestiano in Rimini, where Leon Battista ALBERTI used for the doorway motifs from the Arch of Augustus in the city. ALBERTI had many opportunities to study the urban monuments of Rome while in the service of the Pope. A famous son of Florence, Messer BRUNELLESCHI travelled to the eternal city on his own initiative, at his own expense, to study the works of the ancient. VIGNOLA canonised the proportions of ancient forms by developing his own column orders. He used PALLADIO's imaginary Greek house as a justification for his innovations. He himself, of course, carried out surveys and refers to his studies in his work titled *Four Books of Architecture*.

The destruction of ancient historic buildings on the pretext of erecting "modern" buildings

■ In addition to theoretical processing and documentation, in practice the Renaissance and subsequent periods also used ancient buildings as "quarries". Donato BRAMANTE was nicknamed "Il Maestro Rovinante" – the Master Demolisher – not only because he had the old St. Peter's church demolished but also because he used, among other things, stones from the Colosseum to build the new cathedral. For example, the marble wall cladding and architectural elements of San Pietro, down to the smallest detail, were not made of quarried material but from the cladding of demolished ancient buildings. It is assumed that between the reigns of Popes Martin V (1417-1431) and Pius VII (1800-1823), more ancient buildings were destroyed to provide materials for new constructions, than were destroyed by the barbarians in the previous 1000 years. People said about Pope Urbanus VIII (1623-1644) coming from the Barberini family, because he removed the gilded bronzes of the Pantheon, that "What the barbarians failed to do, the Barberinis managed." (*Quod non fecerunt barbari, fecerunt Barberini*). We already mentioned Michelangelo, who is credited with the "recycling" of the stone base of the Castor and Pollux churches in Capitoline for the pedestal of the equestrian statue of Marcus Aurelius. (Fig. 1) The line of the reused stone materials from well-known ancient monuments is endless. And the destructive masters were the same ones who had been touring the Eternal City and its surroundings with their sketchbooks, drawing and measuring the monuments of the Roman era. In addition to the above, the names of Baldasarre PERUZZI, Antonio DA SANGALLO, Gian Lorenzo BERNINI and many others could be mentioned.

However, it would be unfair not to mention that the Renaissance and post-Renaissance periods were also full of examples of the restoration of antiquities. Clement XII (1730-1740), for example, had the triumphal arch of Constantine restored – although the marble

used came from the Temple of Neptune near the Pantheon. Alexander VII (1655-1667) reconstructed the colonnade of the Pantheon with columns from the Baths of Severus.

Restoring the former glory of the City

■ Francesco DI PETRACCO was crowned Poet laureate in 1341 on the Capitoline Hill. On this occasion he called on the Pope of Avignon[3] to return to Rome and make it once again the capital of the world, as it was in the time of the *Historiae Antiquae*. Gregory XI moved back to Rome in September 1376 from his "captivity in Avignon". In 1425, the Papal States issued the first papal brief (BIANCA, 2008) on the preservation of ancient buildings. The encyclical of Martin V, *Etsi in Cunctarum*, was a milestone in the preservation of heritage. Over the next four centuries, 30 papal briefs confirmed or broadened the principles set out by Martin V. On 28 April 1462, Pius II issued the first law on the protection of monuments, the bull *Cum almam nostram urbem*, which aimed to preserve the splendour and magnificence of the gracious city. It listed among the historic buildings to be protected ancient ruins and remains, basilicas, churches, which should be treated as great monuments of the Catholic Church. He prohibited their demolition and the reuse of the materials for other purposes. In 1474, Sixtus IV[4] essentially repeated his predecessor's ideas. In 1515, Leo X appointed Raphael as *Praefectus marmorum et lapidum omnium*.[5] [6] In 1562 the Pope divided this office into *Antiquitatem Praefecti* and *Conservatories*. The discovery of the remains of Herculaneum and then Pompeii, the two cities destroyed at the outbreak of Vesuvius, brought about a major change in public thinking and a growing interest in Antiquity.

The Discovery of Pompeii and Herculaneum, the Growing of Interest in the Artefacts of Antiquity

■ One of the defining features of the classicist ideal is the growing interest in the memories and history of antiquity. The discovery of classical monuments in Italy dates from the first decades of the 18th century. Although it was mainly young members of the English aristocracy who considered travelling to Italy an important source of education, it was only in the 17th and 18th centuries that the "grand tour" became trendy. The discovery of Herculaneum, then Pompeii, and the discovery of Greek and Roman statues, tools and architectural re-

3 In 1305, the Frenchman Bertrand DE GROT was elected pope, having moved the papal court to Avignon because of the deterioration of public safety in Rome. At the time of PETRARCH's call, the pope was Benedict XII.
4 The *Cum Provida* encyclic.
5 Translation: The governor of all marble and stone.
6 Nor can the intention to preserve ancient historic buildings be overlooked, since the popes also required the collection of Latin inscriptions in order to encourage the correction of the "corrupt" language used during the Renaissance.

Igazságtalanok lennénk azonban, ha nem emlékeznénk meg arról, hogy a reneszánszban és a reneszánszt követő korokban bőven akad példa antik emlékek restaurálására is. XII. Kelemen (1730–1740) például Constantinus diadalívét javíttatta ki – igaz, a felhasznált márvány a Pantheon közeléből, a Neptun-templomról származott. VII. Sándor (1655–1667) pedig a Pantheon oszlopcsarnokát rekonstruálta a Severus fürdőjéből származó oszlopokkal.

A Város régi fényének helyreállítása

■ DI PETRACCO Francescót 1341-ben koronázták költőfejedelemmé a Capitoliumon. Ez alkalomból felhívta az Avignonban székelő pápa[3] figyelmét, hogy térjen vissza Rómába, és tegye ismét a világ fővárosává, amint az a *historiae antiquae* idejében volt. XI. Gergely 1376 szeptemberében költözött vissza Rómába az „avignoni fogságból". A pápai állam 1425-ben adta ki az első brevét (BIANCA, 2008), amely az antik emlékek megőrzéséről rendelkezett. V. Márton „*Etsi in Cunctarum*" kezdetű enciklikája mérföldkövet jelentett az örökség megőrzése terén. Az elkövetkező négy évszázadban 30 breve erősítette vagy bővítette az V. Márton által megfogalmazott elveket. II. Pius 1462. április 28-án kiadta az első műemlékvédelmi törvényt, a *Cum almam nostram urbem* kezdetű bullát, amelynek célja a kegyes város fényének és nagyszerűségének megőrzése volt. A védendő emlékek között felsorolta az antik romokat és maradványokat, bazilikákat, templomokat, amelyeket a katolikus egyház nagyszerű emlékeiként kell kezelni. Megtiltotta ezek lerombolását, anyagaik más célú hasznosítását. 1474-ben IV. Sixtus[4] lényegében megismételte elődje kinyilatkoztatásait. 1515-ben X. Leó kinevezte Raffaellót *Praefectus marmorum et lapidum omnium*má[5].[6] 1562-ben a pápa elosztotta ezt a tisztséget *Antiquitatem Praefecti* és *Conservatories* feladatokká. Jelentős változást hozott a közgondolkodásban és az antikvitás iránti érdeklődés kiteljesedésében a Vezúv kitörésekor elpusztult két város, Herculaneum, majd Pompeji maradványainak a fölfedezése.

Pompeji és Herculaneum felfedezése, az antikvitás tárgyi emlékei iránti érdeklődés kezdete

■ A klasszicizmus eszmevilágának egyik meghatározó vonása az antikvitás emlékei és történelme iránti érdeklődés felerősödése. Az itáliai klaszszikus emlékek felfedezése a XVIII. század első évtizedeire esik. Bár elsősorban az angol arisztokrácia fiatal tagjai tekintették az itáliai utazást műveltségük fontos forrásának, divattá csak a XVII–XVIII. században vált a „grand tour" bejárása. Herculaneum, majd Pompeji felfedezése, az előkerült görög és római szobrok, használati edények és épülettöredékek turisták sokaságát vonzották Itália déli tájaira.

A Kr. u. 79. augusztus 24-én elpusztult Herculaneumot csak 1684-ben fedezték fel helyi lakosok, parasztok kútásás közben. A kút közelében D'ELBOEUF herceg villát építtetett, és maga is hozatott fel a mélyből márványtöredékeket a palota mozaikjai elkészítéséhez. 1738-tól a nápolyi királyi pár meg-

3 1305-ben választották pápává a francia Bertrand DE GROT-t, aki a római közbiztonság romlása miatt Avignonba költöztette a pápai udvart. PETRARCA felhívása idején XII. Benedek pontificatusa volt.
4 A Cum Provida kezdetű enciklika.
5 Magyar fordításban: Minden márvány és kő kormányzója.
6 Nem hagyható figyelmen kívül az a szándék sem az antik emlékek megőrzése területén, hogy a pápák előírták a latin feliratok gyűjtését is annak érdekében, hogy a reneszánszban használt „rontott" nyelv kijavítását ösztönözhessék.



■ ***2. ábra.*** *WOOD, Robert és DAWKINS, James:* The Ruins of Palmyra, otherwise Tedmor, in the Desart*, 1753,* ***a.*** *címlap* ***b.*** *a monumentális ív. © Közkincs*
■ ***Fig. 2.*** *Robert WOOD and James DAWKINS:* The Ruins of Palmyra, otherwise Tedmor, in the Desart, *1753,* ***a.*** *cover* ***b.*** *the monumental arch. © Public domain*

bízásából DE ALCUBIERRE Rocque Joaquín spanyol hadmérnök kezdett ásatásokat. Sok érték került napvilágra, de amint WINCKELMANN Johann Joachim megjegyezte: „tapasztalatlansága miatt sok kárt okozott, és sok szép holmi vesztét". Pompeji feltárása csak néhány évtizeddel később kezdődött el, amikor a herculaneumi tapasztalatok birtokában kevesebb kárt okoztak a szakszerűtlen ásatások, mint korábban.

Az európai méretű érdeklődés hatására társaságok alakulnak a régészeti emlékek megismerésére, megismertetésére és megőrzésére. Angliában 1751-ben alakul meg a Society of Antiquaries, egy évvel később a Society of Dilettanti. Itálián kívüli emlékek feldolgozására elsők között az angol WOOD Robert Palmyra (WOOD, 1753)[7] és Baalbek (WOOD, 1757) emlékeinek meglátogatása során vállalkozott. A publikációk rajzolt anyagának elkészítésében a kor neves építésze, ADAM Robert volt az utazók segítségére. (2. a, b ábra) Az első francia, aki rajzokat publikált Athénról, LE ROY Julien-David volt (LE ROY, 1758). (3. a, b ábra) Publikációja segítette a Királyi Akadémia döntését, amelynek eredményeként fiatal építészek királyi ösztöndíjban részesültek Róma antik emlékeinek tanulmányozására. Az angolok közül előbb Athén, majd a Közel-Kelet emlékeit kereste föl HAMILTON Gavin, REVETT Nicholas és STUART James. Közös munkájuk eredménye végül 1762-ben jelent meg, nagy sikert aratva (STUART–REVETT 1762). (4. a, b ábra)

A legnagyobb hatást PIRANESI metszetei tették Európa-szerte. Amennyire meghatározó jelentőségű volt WINCKELMANN munkássága a görög művészet emlékeinek feldolgozása és propagálása terén, annyira fontosak PIRANESI rajzai, metszetei, amelyek a Római Birodalom építészetével ismertették meg a művelt közönséget. PIRANESI Velencében tanult építészetet, és 1744-ben telepedett le Rómában. A város romjai ebben az időben az elmúlt dicsőség illusztrálására szolgáltak csupán. PIRANESI ismerte föl, hogy a romok továbbra is erőt és nagyságot sugárzó maradványok, amelyek értéket jelenthetnek a szemlélőnek. A metszeteket ismerő GOETHE az *Itáliai utazások*ban szomorúan jegyzi meg, hogy a római romok kisebmains attracted a large number of tourists to southern Italy.

Destroyed on 24th of August 79 AD, Herculaneum was only discovered in 1684 by the locals, some peasants who were digging a well. The Duke of D'ELBOEUF had a villa built near the well and brought up fragments of marble from the depths to make the mosaics for the palace. From 1738, the Spanish military engineer Rocque Joaquín DE ALCUBIERRE began excavations on behalf of the royal couple of Naples. Many valuables were unearthed, but as Johann Joachim WINCKELMANN noted: "his lack of experience caused much damage and the loss of many fine objects". The excavation of Pompeii did not begin until a few decades later, when the experience accumulated during the excavation of Herculaneum had led to less damage than before.

The major interest proven Europewide led to the establishment of societies for the study, knowledge and preservation of archaeological monuments. In England, the *Society of Antiquaries* was founded in 1751, followed a year later by the *Society of Dilettanti*. One of the first works on monuments outside Italy was undertaken by the Englishman Robert WOOD, on the occasion of his visits to Palmyra (WOOD, 1753)[7] and Baalbek (WOOD, 1757). Robert ADAM, a renowned architect of the time, helped the travellers draw the drawings for the publications. (Fig 2. a, b) The first Frenchman to publish drawings of Athens was Julien-David LE ROY (LE ROY, 1758). (Fig. 3. a, b) His publication was instrumental in the Royal Academy's decision to award

7 WOOD James DAWKINS társaságában 1749–51 között kereste fel Szíria és a Levante antik emlékeit. WOOD könyvében először közöl felmérési rajzokat épületek részleteiről. Munkája metodológiai ösztönzésül szolgált a XVIII. századi angol és francia építészek és antikváriusok számára a görög és római kori emlékek tanulmányozásához.

7 WOOD visited the ancient remains of Syria and the Levant together with James DAWKINS between 1749-51. WOOD's book is the first that includes survey drawings of building details. His work provided a methodological stimulus for 18th-century English and French architects and antiquarians to study Greek and Roman monuments.



■ ***3. ábra.*** *LE ROY, Julien-David:* Les ruines des plus beaux monuments de la Grece*, 1758,* ***a.*** *címlap* ***b.*** *az athéni Minerva-templom látképe. © Közkincs*
■ ***Fig. 3.*** *Julien-David LE ROY:* Les ruines des plus beaux monuments de la Grece*, 1758,* ***a.*** *cover* ***b.*** *view of the temple of Minerva in Athens. © Public domain*

young architects a royal fellowship to study the ancient monuments of Rome. Among the Englishmen, Gavin HAMILTON, Nicholas REVETT and James STUART first explored the monuments of Athens and then the Middle East. The result of their joint work was finally published in 1762 to great acclaim. (Fig. 4. a, b)

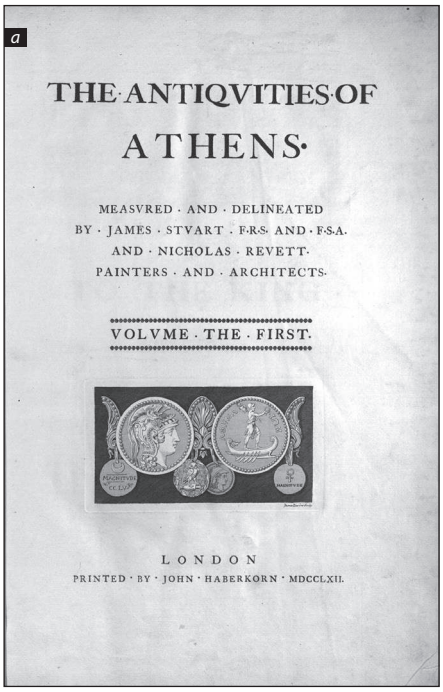
PIRANESI's engravings have made the biggest impact across Europe. As important as WINCKELMANN's work was in the study and propagation of Greek art, PIRANESI's drawings and engravings were equally important in introducing the educated public to the architecture of the Roman Empire. PIRANESI studied architecture in Venice and settled in Rome in 1744. The ruins of the city at this time served merely as an illustration of its past glory. PIRANESI recognised that the ruins were still a remnant of strength and grandeur that could be of value to the observer. GOETHE, who was familiar with the engravings, notes with sadness in his *Italian Journey* that the Roman ruins are smaller than he imagined them to be based on PIRANESI's sketches. Robert ADAM writes about the engravings: "I have never seen such stupendous and ingenious imaginings as he has produced in the various engravings of churches, baths and palaces; they are the greatest treasure trove imaginable, from which every lover of architecture may draw inspiration." PIRANESI's engravings showed space and volume shapes that had never been seen before. (Fig. 5) He dismissed the fine surface decorations, expressing the Roman dignity and wealth with the volumes. Concurring with Goethe, he said that "the artist does not need precise, measurable proportions from antiquity; he needs what cannot be measured". This idea may be PIRANESI's most important contribution to the classicist architecture of his time.

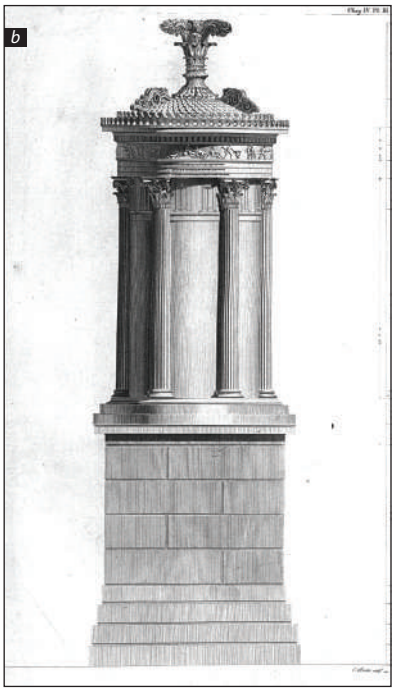
Artistic value as a measure of creation has entered the common knowledge through

bek, mint ahogy PIRANESI alapján elképzelte ezeket. Robert ADAM írja a metszetekről: „sose láttam még olyan bámulatos és leleményes fantáziaképeket, amilyeneket ő a templomok, fürdők és paloták különféle metszeteiben létrehozott; ez az elképzelhető legnagyobb kincsesbánya, ahonnan az építészet minden szerelmese ihletet és invenciót meríthet". PIRANESI metszeteiben eddig még nem ismert tér- és tömegformákat mutatott be. (5. ábra) Száműzte a finom felületdíszítést, a római méltóságot és gazdagságot a méretekkel fejezte ki. Nem törődött az oszloprendek részleteivel. Goethével egyetértve vallotta, hogy „a művésznek nem pontosan mérhető arányokra van szüksége az antikvitásból; neki az kell, ami nem mérhető". Ez a gondolat lehet PIRANESI legfontosabb hozzájárulása a korában kialakuló klasszicista építészethez.

A művészi érték mint az alkotás fokmérője WINCKELMANN munkásságán keresztül vonult be az értelmiségi köztudatba. A tudós könyvtáros korszakalkotó munkája 1764-ben jelent meg Drezdában, *Geschichte der Kunst des Altertums*[8] címen. A műalkotások értékelésének alapjául az „ideális szép" fogalmát vezette be. A szépség legmagasabb fokát Istenben találta meg. A földön ennek megjelenési formája a természet és a görögség alkotásaiban érhető tetten (WINCKELMANN, 1934, 139). A művészetek tanulmányozása során ismerte föl, „... hogy vajon a művet, amelyet szemlélsz, maga gondolta-e el, vagy csak utánozta a mester; vajon ismerte-e a művészet legnemesebb szándékát, a szépséget, vagy csupán a számára megszokott formák szerint alkotott..." (WINCKELMANN, 1978, 62). Az építészetről írott munkái ennek a gondolatnak a mentén születtek. A *Megjegyzések a régiek építészetéről* című két tanulmánya elsőként elemzi és értelmezi az általa megismert, elsősorban paestumi görög templomokat. Az „ideális szép" megjelenését az emlékek egyes méreteinek egymáshoz viszonyított méretében – az arányokban – fedezte föl. Megfigyelte az emlékek közötti különbözőségeket és ezek hatását az összképre. Építészeti képzettség nélkül is igyekezett megfejteni az anyaghasználat és az alkalmazott szerkezetek közötti összefüggéseket (WINCKELMANN, 1978, 119; 175).[9]

8 A műnek a Phaidon Kiadó által 1934-ben kiadott, az 1764-es drezdai eredeti kiadás változatlan utánnyomásából dolgoztam.
9 Tanulmányai *Megjegyzések a régiek építészetéről* címmel 1760-ban jelentek meg Rómában.





■ ***4. ábra.*** *STUART, James és REVETT, Nicholas:* The antiquities of Athens*, 1762,* ***a.*** *a könyv első kötetének címlapja* ***b.*** *Lüszikratész-emlékmű. © Közkincs*

■ ***Fig. 4.*** *James STUART and Nicholas REVETT:* The antiquities of Athens*, 1762,* ***a.*** *cover of the first volume of the book* ***b.*** *Choragic Monument of Lysicrates. © Public domain*

WINCKELMANN jelentőségét abban látom, hogy a mű építészeti értékeinek leírásakor nem a forma jelentőségét hangsúlyozta, hanem – csakúgy, mint tanulmányaiban a szobrászatról és a festészetről – az arányoknak, az építészeti alkotás lényegi elemeinek a vizsgálatát valósította meg. Módszere hozzájárult az építészet racionális értelmezésének megalapozásához.

A középkor után is tovább élő – a Biblia betű szerinti értelmezésén és a klasszikus, antik hagyományon alapuló – skolasztikus gondolkodás határait a racionális kritikai módszer megjelenése mutatta meg világosan. Elsősorban DESCARTES működésének volt köszönhető, hogy a módszer – ha korlátozottan is, de – ismertté vált Európa jelentős tudományos műhelyeiben. Felvilágosodásról mint az európai szellem fejlődésének egy új szakaszáról attól számítva beszélhetünk, amikortól a racionális bírálat – mint módszer – már nem korlátozódik csupán a tudomány (ezen belül is elsősorban a természettudományok, a matematika és a fizika) területére. Kitágítva felhasználásának határait, alkalmazni kezdik a társadalom, a politika vagy akár a hitvilág problémáira is. Általános értelemben a legnagyobb és legszélesebb területen érvényesülő hatást NEWTON „égi mechanikájának" megjelenése[10] fejtette ki. NEWTON fogalmazta meg először, hogy a világegyetem nem kiismerhetetlen, rejtélyes dolgok halmaza, hanem racionálisan – matematikai eszközökkel – is leírható valóság. Európa-szerte a newtoni gondolat megjelenése és elfogadása volt a 17–18. század fordulójától az a jelzés, amely egyértelműen kimutatta, hogy a világnézeti fordulat feltételei kialakultak-e egy adott területen vagy országban. Angliában már a 17. század első évtizedeiben a társadalmi törekvések nem a vallásos hitben, hanem az emberi értelemben keresték a válságból kivezető utat. Az irodalomban ennek hatására a neoklasszikus iskola szinte hivatalos stílussá emelkedett. JONSON Ben az Erzsébet-kori líra túlburjánzó színei és formái ellen lázadva, Horatius racionális ars poeticájához nyúlt vissza. Az építészetben JONES Inigo itáliai reneszánsz mintákat

10 NEWTON, Isaac *Philosophiae Naturalis Principia Mathematica* első kiadása 1687-ben jelent meg.

WINCKELMANN's work. The scholarly librarian's breakthrough work, *Geschichte der Kunst des Altertums*[8] was published in Dresden in 1764. He introduced the concept of "ideal beauty" as the basis for the evaluation of works of art. He found the highest degree of beauty in God. On earth, its manifestation can be found in the works of nature and of Greek art. (WINCKELMANN, 1934, 139.) It was in the study of art that he discovered "... whether the work you are contemplating was conceived by the master himself or merely imitated; whether he knew the noblest intention of art, beauty, or whether he merely designed according to the forms he was accustomed to..." (WINCKELMANN, 1978, 62) His works on architecture were written with this idea in mind. His two essays, *Remarks on the Architecture of the Ancients*, were the first to analyse and assess the Greek temples he encountered, mainly in Paestum. He discovered the appearance of the "ideal beauty" in the proportions of the individual dimensions of the monuments in relation to each other. He observed the differences between the monuments and their effect on the overall appearance. Even without architectural training, he sought to understand the relationship between the use of materials and the structures used. (WINCKELMANN, 1978, 119; 175)[9] I see WINCKELMANN's importance in the fact that, in describing the architectural values of the artwork, he did not emphasise the importance of form, but – just as in his studies of sculpture and painting – he examined the proportions, the essential elements of the architectural work. His method helped establish a rational interpretation of architecture.

The limits of scholasticism, continuing after the Middle Ages, based on the literal interpretation of the Bible and the classical, ancient tradition, were clearly shown by the emergence of the rational critical method. It was primarily thanks to the work of DESCARTES that the method became known, albeit in a limited way, in the major academic workshops of Europe. We can speak of the Enlightenment as a new stage in the development of the European spirit from the time when rational criticism as a method was no longer confined to the sciences (and in particular the natural sciences, mathematics and physics). By extending the boundaries of its application, it is also being applied to social, political or even religious issues. In general terms, the greatest and most widespread impact was the emergence of NEWTON's "celestial mechanics"[10]. NEWTON was the first to state the idea that the universe is not an impenetrable, mysterious set of things, but a reality that can be described rationally, by mathematical means. Throughout Europe, the emergence and acceptance of NEWTON's thought from the turn of the 17th and 18th centuries onwards was the signal that clearly showed whether the con-

8 I have worked from an unchanged reprint of the original 1764 Dresden edition, published by Phaidon Publisher in 1934.

9 The essays were published in Rome in 1760 under the title *Remarks on the Architecture of the Ancients*.

10 NEWTON, Isaac; *Philosophiae Naturalis Principia Mathematica,* the first edition was published in 1687.

ditions for a change of worldview had been established in a particular area or country. In England, already in the first decades of the 17th century, social aspirations were looking for a way out of the crisis not through faith but through human reason. In literature, the neoclassical school became almost the official style. Ben JONSON, in rebellion against the exuberant colours and forms of Elizabethan lyricism, returned to the rational poetics of Horace. In architecture, Inigo JONES' reinterpretation of Italian Renaissance patterns was followed by the early neoclassicism of Roger PRAT.[11] The classicist Christopher WREN, who further "stiffened" the forms, defined the classical orientation of English architecture for a long time as the founder of Palladianism, although the freshness and originality of his predecessors' work was missing from WREN's architecture. After the Fire of London (1666), he designed numerous churches in the classical style, although after this, the Baroque influence becomes dominant in St. Paul's Cathedral and his following works. In a highly bourgeois England, however, there was no room for this ostentatious style. In the 18th century, architecture that harked back to the early works of WREN, rigidly applying classical lines and thinking in terms of enclosed masses, became dominant.

The shift in French thinking was first marked by the publication of Pierre BAYLE's *Dictionnaire historique et critique* (BAYLE, 1697).[12] In England, LOCKE had formulated his principles of constitutionalism and personal liberty based on natural law before the civil revolution (LOCKE, 1690).[13] He was also the one who recognized – contrary to DESCARTES' views – that man has no innate ideas, but only those acquired through perception, experience and education.

The spread of Enlightenment ideas in Europe was characterised by the similarity of historical development in the regions. The process was different in time, but it was determined by the gradual transformation of a privilege-based social order into a bourgeois-liberal one. The differences arose precisely because the European countries on different stages of their development reacted differently to the new trend of development. The fact that there were controversial debates and conflicting views even within a single society, such as the French society at the end

11 The so-called *Clarendon House* is his most influential work. We should also mention the work of Robert ADAM, who, as an illustrator and draughtsman of Stuart's large-scale works, became familiar with the forms of ancient architecture and applied them to his own work.

12 In his first edition, he attempted to summarise the knowledge of the late 17th century in two volumes. Its many editions have been commissioned by almost all educational institutions and ecclesiastical organisations and used in the training of the younger generation. In England, a few decades later, Ephraim CHAMBERS undertook a similar task. *A Cyclopaedia, or a Universal Dictionary of Arts and Sciences* was first published in 1728. The Encyclopaedia, considered a forerunner of the Enlightenment and edited by DIDEROT and D'ALAMBERT, was aimed at translating this English work.

13 His treatises were published in 1690: *Treatise on Civil Government. Essay Concerning Human Understanding.*



■ ***5. ábra.*** *Történelmi látkép Cecilia Metella sírjáról az ókori Via Appia mentén, metszet, PIRANESI Giovanni Battista, 1762 körül. © Közkincs*

■ ***Fig. 5.*** *Historical view of the tomb of Cecilia Metella along the ancient via Appia, print, Giovanni Battista PIRANESI, circa 1762. © Public domain*

átértelmező építészetét PRAT Roger korai neoklasszicizmusa követte.[11] A formákat tovább „merevítő", klasszicizáló WREN Christopher a palladianizmus megalapítójaként hosszú időre meghatározta Anglia építészetének klasszikus orientációját, bár az a frissesség és eredetiség, amely elődjei munkáján megfigyelhető, már hiányzik WREN építészetéből. A londoni tűzvész után (1666) számtalan klasszikus stílusú templomot tervezett, bár ezek után a Szent Pál-székesegyházon és az ezt követő munkáin a barokk hatás válik uralkodóvá. Az erősen polgáriasodó Angliában azonban nincs talaja ennek a hivalkodó stílusnak. A XVIII. században a WREN korai munkáihoz visszanyúló, a klasszikus vonalakat ridegen alkalmazó, zárt tömegekben gondolkodó építészet válik meghatározóvá.

A francia gondolkodás változását elsőként Pierre BAYLE *Dictionnaire historique et critique* (BAYLE, 1697)[12] című munkájának megjelenése jelezte 1697-ben. Angliában LOCKE még a polgári forradalom előtt megfogalmazta az alkotmányosságról és a természeti jogon alapuló személyes szabadságról szóló elveit (LOCKE, 1690).[13] Ugyanő ismerte fel – éppen DESCARTES nézeteivel szemben – azt, hogy az embernek nincsenek veleszületett eszméi, hanem csak olyanok, amelyeket érzékelés, tapasztalatok, nevelés útján szerez.

A felvilágosodás eszmevilágának elterjedését Európában a történeti fejlődés regionális hasonlósága jellemzi. Időben a folyamat ugyan eltérő volt, de a folyamatot magát az határozta meg, hogy a kiváltságokra épülő társadalmi berendezkedés miképpen alakul át fokozatosan egy polgári-liberális típusú berendezkedés irányába. A különbözőségek éppen abból adódtak, hogy Eu-

11 Az ún. *Clarendon*-ház a legnagyobb hatást kiváltó munkája. Nem feledkezhetünk meg Robert ADAM munkásságáról sem, aki STUART nagyszabású munkáinak illusztrátoraként, rajzolójaként ismerkedett meg az antik építészet formavilágával, és alkalmazta ezeket saját munkáiban is.

12 Első kiadásában kétkötetes munkakísérletet tett a XVII. század vége ismeretanyagának összefoglalására. Számos kiadását csaknem valamennyi oktatási intézmény és egyházi szervezet megrendelte és használta a fiatal nemzedék képzésében. Angliában néhány évtizeddel később Ephraim CHAMBERS vállalkozott hasonló feladat elvégzésére. A *Cyclopaedia, or an Universal Dictionary of Arts and Sciences* először 1728-ban jelent meg. A felvilágosodás előfutárának tekintett, DIDEROT és D'ALAMBERT által szerkesztett Enciklopédia terve ennek az angol munkának a fordítását célozta meg.

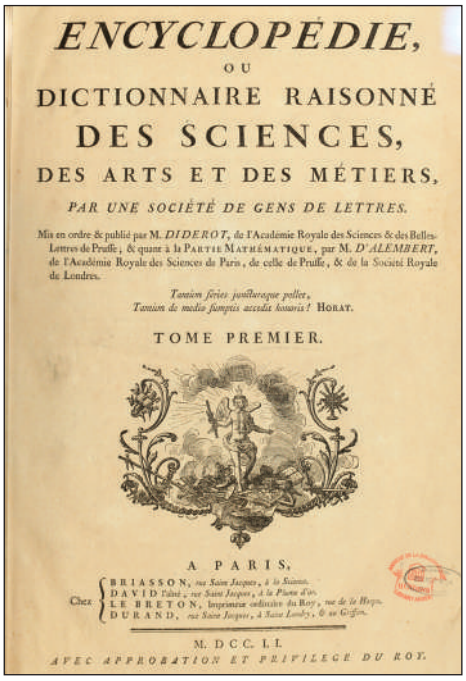
13 1690-ben jelentek meg értekezései: *Treatise on Civil Government. Essay Concerning Human Understanding.*

rópa országai a fejlődés különböző lépcsőfokairól eltérően reagáltak a fejlődés új vonulatára. A kérdés tárgyalását külön érdekessé teszi az, hogy még egyazon társadalmon belül – mint amilyen a francia volt a XVII. század végén – is ellentmondásos viták kerekedtek, ellentétes nézetek ütköztek egymásnak. Három fő periódus határozható meg. Korábban elsősorban a hagyományok elleni lázadás jelentett közös platformot, míg az 1700-as évek '50-es éveitől az *Encyclopédie* (1751–1772) 28 kötetének megjelenése (6. ábra) az emberi tudást, elméletet és technikát részletesen bemutató, DIDEROT Denis és LE RONDE D'ALAMBERT Jean szerkesztésében megjelenő sorozat jelentett szellemi kapcsolatot. Az Encyclopédie jelentősége azonban nem csak abban van, hogy az addigi tudást összegyűjtötte. Az enciklopédisták gondolkodásában kimutatható, tudatosan vállalt forradalmi cselekedet az volt, hogy az ismeretanyagot minél szélesebb kör számára akarták hozzáférhetővé tenni. Ennek a szándéknak pedig csak akkor lehetett kézzelfogható eredménye, ha a korábban elfogadott normák helyett nem bonyolult tematikával, allegorikus képekbe ágyazva közvetítik az ismereteket. A finomkodás helyett a természetesség, az allegóriák helyett a racionálisan megfogalmazott, könnyen követhető gondolatmenet vált egyedül alkalmazhatóvá. A harmadik fázisban, nagyjából a XVIII. század utolsó harmadától az eszmei áramlatok szétágaztak, ellentétes, ellentmondó gondolatok köré csoportosultak. Legfontosabb személyisége a korszaknak ROUSSEAU Jean-Jacques volt.

Európa más területei közül a német és az itáliai társadalmak mutattak önálló fejlődési irányt. A német anyanyelvű területeken csaknem 300 kisebb-nagyobb „állam" létezett. Ezek közel harmadát grófok, lovagok, 94-et apátok és hercegek irányították; 51 önigazgatású városállam, 40 hercegérsek, érsek vagy püspök és 8 elektorok irányítása alatt állt. A Szent Római Birodalom, az egységes Németország létrejötte – hosszabb fejlődés eredményeként – csak 1806-ra fejeződött be.

A németeknél LEIBNIZ eredményeit felhasználva WOLFF Christian dolgozta ki azt a racionális rendszert, amellyel a felvilágosodás eszmevilága elfogadhatóvá vált a felvilágosult abszolutizmus államrendszere számára és egyben – a franciánál szerényebb igényű és kompromisszumra kész – német polgárság körében is. A francia szellem, az irodalmi klasszicizmus és nyelv hegemóniája elleni fellépés és egyben a német irodalmi nyelv megteremtésének egyik fontos alakja LESSING volt. A francia forradalom és felvilágosodás ellen forduló német politika képviselői karakterisztikusan fogalmazták meg azt a nézetet, amely szerint a felvilágosodás valami száraz, szűk körű racionalizmusból áll. Ezzel szemben az egyensúlyt kívánták helyreállítani a francia földön is jelentkező új érzelmességgel (sentimentalisme) és érzékenységgel (sensibilité) szemben. A Sturm und Drangnak nevezett irányzat egyik jelentős képviselője volt GOTTLIEB VON HERDER Johann. Nézetei nemcsak a német nemzetállam létrejötte szempontjából voltak meghatározók, hanem a kelet-európai kis államok nemzeti öntudatra ébredésének is fontos eszmei hátteret adtak. Ő fogalmazta meg, hogy az egyén csak a nemzet organikusan, történetileg kialakult, nagyobb közösségén belül tudja igazán kibontakoztatni önmagát. Az irodalmi irányzat legjelentősebb német képviselője GOETHE Johann Wolfgang és SCHILLER Friedrich voltak. A filozófus KANT fogalmazta meg először a felvilágosodás lényegét. Szerinte a felvilágosodás nem más, mint „az ember kiemelkedése az önmaga okozta kiskorúságból" (KANT, 1784). Nem feledkezhetünk meg természetesen a művészetelméletet és a művészettörténetet tudományos igénnyel definiáló WINCKELMANNRÓL sem, akinek az antikvitás művészettörténete területén végzett munkásságáról már ejtettünk szót.

A reneszánsz ébredt rá először a régmúlt idők építészeti emlékeinek az értékeire, és felemás módon ugyan, de kísérletet tett ezek megóvására. Évszázadokkal később a francia forradalom tudatosan rombolta a hit és a vallás számára készített építészeti alkotásokat. 1789 után megszámlálhatatlan középkori, reneszánsz és barokk templom vagy kastély esett a pusztító düh


ENCYCLOPÉDIE,
OU
DICTIONNAIRE RAISONNÉ
DES SCIENCES,
DES ARTS ET DES MÉTIERS,
PAR UNE SOCIÉTÉ DE GENS DE LETTRES.
Mis en ordre & publié par M. DIDEROT, de l'Académie Royale des Sciences & des Belles-Lettres de Prusse, & quant à la PARTIE MATHÉMATIQUE, par M. D'ALEMBERT, de l'Académie Royale des Sciences de Paris, de celle de Prusse, & de la Société Royale de Londres.
Tantùm series juncturaque pollet,
Tantùm de medio sumptis accedit honoris! HORAT.
TOME PREMIER.
A PARIS,
Chez BRIASSON, rue Saint Jacques, à la Science.
DAVID l'aîné, rue Saint Jacques, à la Plume d'or.
LE BRETON, Imprimeur ordinaire du Roy, rue de la Harpe.
DURAND, rue Saint Jacques, à Saint Landry, & au Griffon.
M. DCC. LI.
AVEC APPROBATION ET PRIVILEGE DU ROY.

■ ***6. ábra.*** Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers*, szerkesztette DIDEROT, Denis és LE ROND D'ALEMBERT, Jean 1751–72 körül, címlapja. © Közkincs*

■ ***Fig. 6.*** Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers*, edited by Denis DIDEROT and Jean LE ROND D'ALEMBERT, cca. 1751–72, cover. © Public domain*

of the 17th century, makes the discussion of this issue even more interesting. We can identify three main periods. Previously, the common platform was primarily a rebellion against tradition, while from the mid-1700s, the publication of the 28 volumes of the *Encyclopédie* (1751-1772), a series detailing human knowledge (Fig. 6), theory and technique, edited by Denis DIDEROT and Jean LE RONDE D'ALAMBERT, provided an intellectual link. But the *Encyclopédie's* importance lies not only in the fact that it collected all the knowledge that had been accumulated up to that time. There was a conscious revolutionary act in the thinking of the encyclopaedists who wanted to make the knowledge available to the widest possible audience. The tangible result of this intention could only be achieved if the knowledge was conveyed in allegorical imagery rather than in complex themes and not in the previously accepted norms. Instead of subtlety, naturalism and allegory, the only option was a rational, easy-to-follow train of thought. In the third phase, from roughly the last third of the 18th century, the currents of thought split, grouping around opposing, contradictory ideas. The most important figure of the period was Jean-Jacques ROUSSEAU.

In other parts of Europe, German and Italian societies showed an independent direction of development. In the German-speaking areas, there were almost 300 smaller or larger "states". Almost a third of these were ruled by counts or knights, 94 by abbots or dukes; 51 were self-governing city-states, 40 by dukes, archbishops or bishops and 8 by electors. The establishment of the Holy Roman Empire, a

unified Germany, was not completed until 1806, as a result of a lengthy development.

In Germany, Christian WOLFF used LEIBNIZ's results to develop a rational system that made the Enlightenment acceptable to the enlightened absolutism state and also to the German bourgeoisie, which was more modest and ready to compromise than the French. LESSING was an important figure in the struggle against the French spirit, the hegemony of literary classicism and language, and in the creation of a German literary language. The German political representatives who opposed the French Revolution and the Enlightenment emphatically stated that the Enlightenment consisted of a dry, narrow rationalism. In contrast, they sought to redress the balance against the new sentimentalism and sensitivity (sensibilité) that was emerging in France as well. Johann Gottlieb VON HERDER was one of the most important representatives of the movement known as Sturm und Drang, whose views were not only decisive for the creation of the German nation-state, but also provided an important ideological background for the awakening of national awareness in the small states of Eastern Europe. He said that the individual can only truly develop within the organically and historically evolved larger community of the nation. The most important German representatives of this literary movement were Johann Wolfgang GOETHE and Friedrich SCHILLER. KANT, the philosopher was the first to word the essence of the Enlightenment. According to him, the Enlightenment is nothing less than "the emergence of man from his self-inflicted infancy". (KANT, 1784). Nor, of course, can we forget WINCKELMANN, who defined art theory and art history in scientific terms, and whose works in the field of the history of antiquity have already been mentioned.

It was the Renaissance that first awakened to the value of the old monuments, and made a half-hearted attempt to preserve them. Centuries later, the French revolution consciously destroyed the artworks built for faith and religion. After 1789, countless medieval, Renaissance and Baroque churches and castles fell victim to the destructive fury. The castles and buildings owned by the aristocracy, the privileged social class of the previous regime, were not spared either.

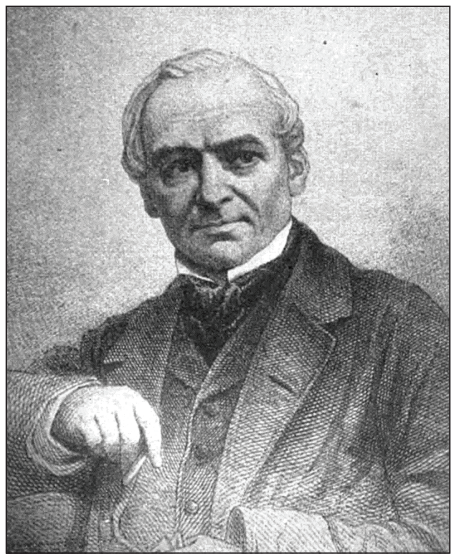
Less than a year after the victory of the Revolution, the Convention issued a decree on the registration of historical and artistic treasures. The *Commission des Monuments* was set up for this very task. As the revolutionaries' opinion aristocracy was born of the longevity and durability of commissions, the Commission des Monuments, which was considered obsolete, was abolished in 1795. The Revolution did not achieve any concrete results in the field of the inventory and preservation of historic buildings, but it undeniably contributed, along with several other organisations, to a revival of interest in the monuments of the national past. In 1791, the *Musée des Monuments Français*, the Parisian "sculpture park", was created on the initiative of Alexandre LENOIR. It was here that the statues of the royal tombs of the Abbey of Saint-Denis and other valuable artefacts were collected.

áldozatául. Nem kímélték az előző rendszer kivételezett társadalmi osztályának, az arisztokráciának a tulajdonában lévő kastélyokat, más épületeket sem.

Alig egy évvel a forradalom győzelme után a konvent rendeletet hozott a történeti és művészi értékek lajstromba vételéről. A feladat ellátásához megalakították a Commission des Monuments-ot, a Műemlékek Bizottmányát. Mivel a forradalom felfogása szerint az arisztokrácia a bizottságok tartósságából születik, a réginek ítélt Műemlékek Bizottmányát már 1795-ben megszüntették. Konkrét eredményeket a forradalom nem tudott felmutatni az emlékek összeírása és megőrzése terén, de tagadhatatlanul hozzájárult – több más szervezettel együtt – a nemzeti múlt emlékei iránti érdeklődés megélénküléséhez. 1791-ben létrejöhetett a párizsi „szoborpark", a Musée des Monuments Franciása, LENOIR Alexandre kezdeményezésére. Itt sikerült összegyűjteni többek között a Saint-Denis-apátság királysírjainak szoboralakjait és más értékes műtárgyakat.

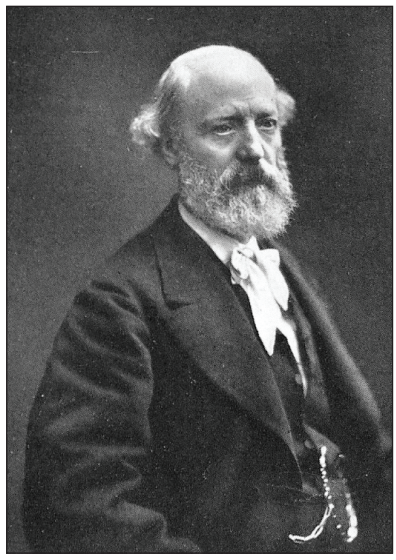
Napóleon császárrá koronázása után az egyház részben visszakapta addigi birtokait. CHATEAUBRIAND 1802-ben publikált, *A kereszténység szelleme* című munkájának hatására (CHATEAUBRIAND, 1802), a forradalom alatti pusztítás megismétlődését megelőzendő, Európa-szerte mozgalom indult a kulturális javak megőrzése érdekében. Franciaországban 1810-ben a belügyminiszter összeíratta a forradalom alatt elpusztult vagy megrongálódott kastélyokat. A rendelet megalkotója ugyanaz Alexandre DE LABORDE volt, aki 1816–36 között publikálta a *Franciaország műemlékei időrendben* című munkáját (DE LABORDE 1816–1836). Franciaországban azonban a két nagy romantikus, Victor HUGO és Charles Forbes MONTALEMBERT gróf vezérletével sikerült kivívni – a történész és politikus François GUIZOT miniszterségе idején – előbb a *d'inspecteur des Monuments Historique* (1830), majd a *Commission supérieure des Monuments Historique* (1837) létrehozását (BERCÉ 1992). A hivatal első irányítója 1830-ban a szintén történész VITET Ludovic lett, majd rövidesen követte őt MÉRIMÉE Prosper (1834) az inspektori székben. (7. ábra) A bizottság első feladatának a franciaországi emlékek lajstromba vételét tartotta. Már 1840-re elkészült a francia műemlékek lajstroma,[14] amely

14 Liste des monuments historique protégé en 1840. Prosper MÉRIMÉE, Rapport au ministre de l'interieur. Paris 1841.



■ ***7. ábra.*** *MÉRIMÉE, Prosper francia regényíró, művészettörténész, régész portréja, ábra a* The English illustrated magazine*-ból, 1913 körül. © Wikimedia Commons*

■ ***Fig. 7.*** *Portrait of the French novelist, art historian and archaeologist Prosper MÉRIMÉE, illustration from* The English illustrated magazine*, circa 1913. © Wikimedia Commons*



■ ***8. ábra.*** *VIOLLET-LE-DUC, Eugène francia építész portréja, 1876–84 körül, Nadar által készített fénykép. © Közkincs*

■ ***Fig. 8.*** *Portrait of the French architect Eugène VIOLLET-LE-DUC, cca. 1876–84, photograph by Nadar. © Public domain*

934 emléket tartalmazott. A lista alapján MÉRIMÉE megjegyezte, hogy az nagyon szegényes, bővítése kiemelten fontos feladat. Évről évre folytatódott az inventarizációs munka Franciaországban. Az *inspecteur général* második fontos döntése volt, hogy fiatal építészeket gyűjtött maga köré, akik vállalták a bizottság által kijelölt emlékek helyreállításának tervezését és a kivitelezés munkáinak az irányítását. 2015. január 1-én a francia műemlékek 43 600 tételt számláltak, amelyek közül 3,82% prehisztorikus, 1,65% antik, 32,67% középkori, 44,24% újkori és 17,62% napjaink épülete volt.

Prosper MÉRIMÉE 1841-ben nyerte meg a bizottság építészeinek vezetésére VIOLLETE-LE-DUC-öt (8. ábra), az európai műemlékvédelem egyik legkiemelkedőbb személyiségét. A Notre-Dame helyreállítását megelőző javaslatában írja: „Egy ilyen munkánál nem lehet elég óvatossággal és szerénységgel dolgozni, és magunk vagyunk az elsők, akik kimondjuk, hogy a restaurálás veszedelmesebb lehet egy műemlék számára, mint az évszázadok és a népharag pusztításai, mert az idő és a forradalom pusztítanak ugyan, de nem tesznek hozzá semmit. Ezzel szemben a restaurálás új formák hozzátételével maradványok tömegét tüntetheti el" (HEARN 1990, 279). Elméleti munkásságában lándzsát tört az épületek történetileg kialakult egységének védelme mellett. Nem helyeselte a stílusegység visszaállítását, mert „kevés épület van, különösen a középkorból, mely egyetlen ütemben épült volna fel, vagy ha igen, ne ment volna át jelentős változásokon, akár hozzáépítések, akár átalakítások vagy részleges módosítások útján". Bár elméleti szinten a helyes megoldást látta, gyakorlati munkáiban inkább az egységes és igaz stílus visszaállítása dominált. Ennek és a 19. század második felének műemlékvédelme azonban egy következő dolgozat tárgya lesz.

Bibliográfia / Bibliography

- BERCÉ, Françoise 1992: *Les premiers travaux de la Commission des Monuments Historique 1837-48.* Ed. Picard. Paris.
- BIANCA, Concetta 2008: *Martino V. papa – Dizionario Biografico degli Italiani*. Vol. 71.
- DE CHATEAUBRIAND, François-René 1802: *Le Génie du christianisme, ou Beauté de la religion chrétienne.* Paris.
- DE LABORDE, Alexandre 1816–1836: *Les monuments de la France, classés chronologiquement et considéré sous le rapport des faits historiques de l'étude des arts.* P. Didot l'ainé, Paris.
- HEARN, Millard Fillmore (szerk.) 1990: *The Architectural Theory of Viollet-le-Duc – Readings and Commentary.* MIT Press.
- KANT, Immanuel 1784: *Was ist Aufklärung?*
- LE ROY, Julien-David 1758: *Les ruines des plus beaux Monuments de la Grèce. Paris et Amsterdam.*
- LOCKE, John 1986: *Értekezés a polgári kormányzatról.* Gondolat Könyvkiadó, Budapest.
- STUART, James – REVETT, Nicholas 1762: *The Antiquities of Athens.* Printed by John Haberkorn. London.
- WINCKELMANN, Jochann Joachim 1934: *Geschichte der Kunst des Altertums. Phaidon Verlag. Wien.*
- WINCKELMANN, Johann Joachim 1978: Megjegyzések a görög műalkotások szemléléséről. In: *Művészeti írások.* Magyar Helikon. Budapest.
- WOOD, Robert 1753: *The Ruins of Palmyra, Otherwise Tedmore, in the Desart.* London.
- WOOD, Robert 1757: *The Ruins of Balbec Otherwise Heliopolis in Coelosyria.* London.

After Napoleon's coronation as emperor, the Church regained part of its possessions. CHATEAUBRIAND's work, *The Genius of Christianity*, published in 1802, (CHATEAUBRIAND, 1802) led to a movement across Europe to preserve cultural property in order to prevent a repeat of the destruction during the Revolution. In France, in 1810, the Minister of the Interior drew up a list of the castles destroyed or damaged during the Revolution. The author of the decree was the same Alexandre DE LABORDE who published his work *The monuments of France in chronological order* from 1816-36 (DE LABORDE 1816, 1836). In France, however, two great Romantics, Victor HUGO and Count Charles Forbes MONTALEMBERT, succeeded in creating, under the ministership of the historian and politician François GUIZOT, first the office of *Inspecteur des Monuments Historiques* (1830) and then the *Commission supérieure des Monuments Historiques* (1837) (BERCÉ, 1992). Ludovic VITET, also a historian, became the first head of the office in 1830, soon to be succeeded by Prosper MÉRIMÉE (1834) as inspector. The first task of the commission was to make an inventory of historic buildings in France. By 1840, the inventory of French historic buildings had been completed[14], (MÉRIMÉE, 1841) listing 934 artworks. MÉRIMÉE noted that the list is very shallow and that its expansion was a priority. Year after year, inventory work continued in France. A second important decision of the Inspecteur général was to gather around him young architects who undertook to design the restoration of the historic buildings designated by the commission and to manage the execution works. On 1 January 2015, there were 43,600 items on the French list, of which 3.82% were prehistoric, 1.65% ancient, 32.67% medieval, 44.24% modern and 17.62% contemporary.

In 1841, Prosper MÉRIMÉE won over VIOLLETE-LE-DUC (Fig. 8), one of the most prominent figures in European heritage conservation, to head the Commission of Architects. In his proposal for the restoration of Notre-Dame, he writes: "Such a work cannot be done with enough care and modesty and we are the first to say that restoration can be more dangerous to a monument than the ravages of centuries and public anger because time and revolution destroy but add nothing. Restoration, on the other hand, can remove a mass of remains by adding new forms" (HEARN, 1990, 279.). In his theoretical work, he believed in protecting the historic integrity of buildings. He does not advocate the restoration of stylistic unity because "there are few buildings, especially from the Middle Ages, which have been built in a single phase or, if they have, have not undergone significant changes, either by additions, alterations or partial modifications". Although he saw the right solution at a theoretical level, his practical work tended to be dominated by the restoration of a unified and true style. Nevertheless, this topic and the conservation of historic buildings in the second half of the 19th century will be the subject of a subsequent essay.

14 Listed es monuments historique protégé en 1840. Prosper MÉRIMÉE, Rapport au ministre de l'interieur. Paris 1841.

■ Ioana RUS-CACOVEAN[1]

O restaurare „necorespunzătoare" la sfârşitul secolului al XIX-lea a bisericii reformate din Dej corectată în anii 1970 de una „productivă"

An "inadequate" late 19th-century conservation of the Calvinist church in Dej corrected in the 1970s by a "productive" one

■ **Rezumat:** *Construită începând cu secolul al XV-lea şi transformată în repetate rânduri până în cel de-al XVIII-lea, biserica reformată din Dej a fost studiată de numeroşi istorici de artă, care au sintetizat principalele sale etape de edificare şi reconstrucţie, dar nu s-au ocupat de cercetarea restaurărilor prin care a trecut ansamblul de la sfârşitul secolului al XIX-lea şi până în 1977. Urmărind întregirea istoriei acestui monument cu prezentarea transformărilor suferite din anii 1880 şi analiza celor două restaurări în contextul vremii în care au fost realizate, textul nostru cuprinde informaţii extrase din documente inedite, ca releveele şi propunerea de reconstrucţie întocmite de Şcoala Regală Maghiară Industrială şi de Arhitectură din Budapesta în 1913 şi 1914 sau dosarele aflate în Arhiva Institutului Naţional al Patrimoniului referitoare la intervenţiile realizate în anii 1970, ilustrând astfel prin încă un studiu de caz istoria restaurării în Transilvania.*

■ **Cuvinte cheie:** Dej, biserica reformată, restaurare, secolul al XIX-lea, anii 1970.

Introducere

■ Construită începând cu secolul al XV-lea şi transformată în repetate rânduri până în cel de-al XVIII-lea, biserica reformată din Dej a fost studiată de numeroşi cercetători, începând cu József KÁDÁR, Géza ENTZ, Virgil VĂTĂŞIANU, Vasile DRĂGUŢ, Nicolae SABĂU şi Attila WEISZ, în timp ce amvonul istoric al bisericii a fost analizat de Katalin MURÁDIN, iar orga de către Dávid SIPOS. Publicaţiile sintetizează principalele etape istorice de edificare şi reconstrucţie ale bisericii, alături de analiza sa morfologică şi stilistică, dar niciuna dintre acestea nu s-a ocupat de cercetarea restaurărilor prin care a trecut ansamblul de la sfârşitul secolului al XIX-lea şi până în 1977. S-au mai făcut unele cercetări în anii 1990, ca cea a colectivului format din József LÁNGI, Ferenc MIHÁLY, Margit KIS, Imola KIRIZSÁN şi Bálint SZABÓ, care s-au ocupat mai ales de componentele artistice ale monumentului şi de transformările suferite de acestea şi care au fost publicate în 2002. Alte studii care au investigat paramentul interior şi exterior al bisericii, alături de componentele de piatră şi metal, au fost realizate în 2016 de către Loránd KISS şi Tiberiu KOLOZSI. În anul 2019,

1 Lect. univ. dr. la Universitatea de Artă şi Design din Cluj-Napoca, Departamentul de Discipline teoretice, România.

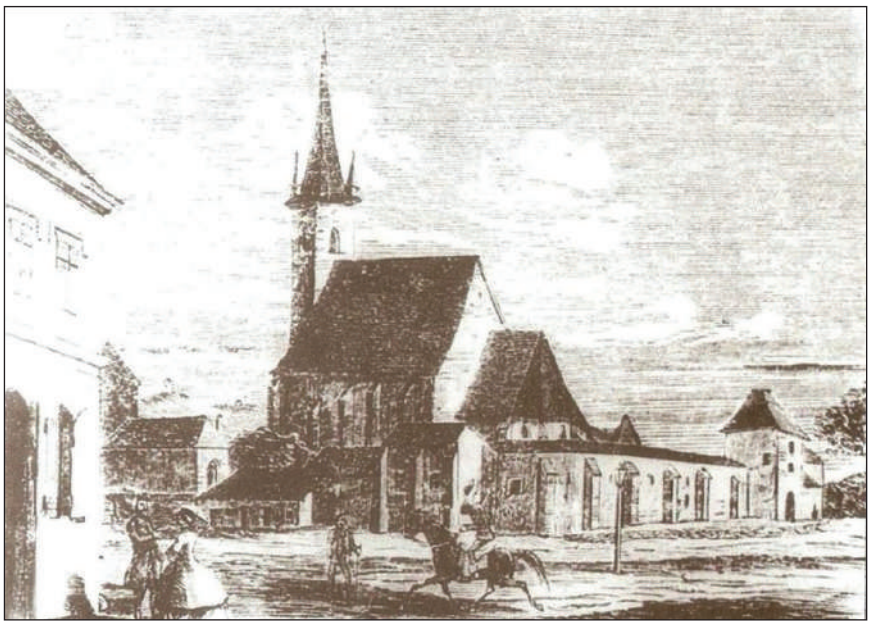
■ **Abstract:** *Built starting with the 15th century and repeatedly transformed until the 18th, the Calvinist church in Dej has been studied by many art historians, who have summarized its main stages of construction and reconstruction but have not researched the restorations that the ensemble underwent from the end of the 19th century until 1977. Our text aims to complete the history of this monument by presenting the transformations undergone since the 1880s and analysing the two restorations in the context of their time. It includes information extracted from unpublished documents, such as the surveys and the reconstruction proposal carried out by the Hungarian Royal Public Higher Architectural Industrial School of Budapest in 1913 and 1914 or the files in the National Heritage Institute Archives concerning the interventions implemented in the 1970s, thus illustrating through yet another case study the history of conservation in Transylvania.*

■ **Keywords:** Dej, Calvinist church, restoration, 19th century, 1970s

Introduction

■ Built starting with the 15th century and transformed several times until the 18th, the Calvinist church in Dej has been studied by many scholars, starting with József KÁDÁR, Géza ENTZ, Virgil VĂTĂŞIANU, Vasile DRĂGUŢ, Nicolae SABĂU, and Attila WEISZ, while the historical pulpit of the church was analysed by Katalin MURÁDIN, and the organ by Dávid SIPOS. The publications summarise the main historical stages of construction and reconstruction of the church, together with its morphological and stylistic analysis, but none of them has researched the restorations that the ensemble underwent from the end of the 19th century until 1977. Some research was carried out in the 1990s, such as the study conducted by the team made of József

1 University Lecturer, PhD at the University of Art and Design in Cluj-Napoca, Department of Theoretical Subjects, Romania.



■ ***Fig. 1.*** *Biserica văzută dinspre sud-est, capela Sfântului Duh și turnurile fortificației în secolul al XIX-lea. © http://dejulmeu.ro/wp-content/uploads/2016/10/dej-e1475386868954.jpg*

■ ***Fig. 1.*** *Church view from the southeast, the Holy Spirit chapel and the fortification towers in the 19th century. © http://dejulmeu.ro/wp-content/uploads/2016/10/dej-e1475386868954.jpg*

Boglárka TÓTH a făcut analize dendrocronologice asupra şarpantei, care au adus informaţii noi în legătură cu etapele de construcţie ale bisericii, nemenţionate anterior în istoriografia de specialitate. În aceeaşi perioadă şi noi am cercetat biserica din punct de vedere istoric, când a apărut nevoia documentării transformărilor prin care a trecut aceasta, în contextul ultimei sale restaurări complexe, finalizate în 2021 şi documentate prin notele sau dispoziţiile de şantier ale proiectantului. Datele istorice au fost completate şi de câteva descoperiri făcute pe parcursul execuţiei de către echipa de arheologi condusă de Zsolt CSÓK.

Urmărind o analiză a celor două restaurări istorice, studiul nostru cuprinde informaţii extrase din documente inedite, alături de rezultatele cercetărilor întreprinse pe teren în perioada 2016-2020. Printre sursele primare se numără schiţele şi releveele istorice realizate de către un colectiv de la Şcoala Regală Maghiară Industrială şi de Arhitectură din Budapesta, ce oferă date importante legate de starea în care se afla biserica în anul 1913, dar şi o propunere de reconstrucţie a bolţilor prăbuşite întocmită în 1914, în cele din urmă abandonată. Am consultat şi documentele aflate în Arhiva Institutului Naţional al Patrimoniului din Bucureşti (INP), care prezintă cercetările realizate, intervenţiile propuse şi cele desfăşurate în anii 1970 de către Serviciul Tehnic al Eparhiei Reformate Cluj, cu Kálmán KATONA ca şef al proiectului. Desenele şi fotografiile de epocă ce reprezintă ansamblul arhitectural de-a lungul vremii, în special cele din anul 1966 cuprinse în lucrarea lui Nicolae SABĂU, înfăţişează biserica înainte de restaurarea din 1970.

Scopul nostru este aşadar de a întregi istoria acestui monument cu prezentarea detaliată a transformărilor suferite de la sfârşitul secolului al XIX-lea încoace, dar şi de a plasa cele două restaurări în contextul vremii în care au fost realizate, ilustrând astfel prin încă un studiu de caz istoria restaurării în Transilvania, ca parte a cercetărilor noastre extinse pe acest subiect.[2]

2 Am menţionat la secţiunea referinţe câteva dintre lucrările pe care le-am publicat pe tema istoriei restaurării monumentelor în Transilvania (notă autor).

LÁNGI, Ferenc MIHÁLY, Margit KIS, Imola KIRIZSÁN, and Bálint SZABÓ, which focused on the artistic components of the historic building and the changes they underwent and was published in 2002. Other studies that investigated the interior and exterior walls of the church, along with its stone and metal components, were carried out in 2016 by Loránd KISS and Tiberiu KOLOZSI. In 2019, Boglárka TÓTH conducted dendrochronological analyses of the roof structure, which provided new information about the construction stages of the church, previously unmentioned in historiography. In the same period, I have also researched the church from a historical point of view when the need arose to document the transformations the church went through, in the context of its latest major restoration, completed in 2021 and documented in the designer's site notes or dispositions. The historical data was also supplemented by several discoveries made during the works by the team of archaeologists led by Zsolt CSÓK.

Aiming to analyse the two historical restorations, our study includes information extracted from previously unpublished documents, together with the results of field research carried out between 2016 and 2020. Primary sources include the historical sketches and surveys made by a team from the Hungarian Royal Public Higher Architectural Industrial School of Budapest, which provide important data on the condition of the church in 1913 and a reconstruction proposal for the collapsed vaults, drawn up in 1914 but ultimately abandoned. I have also consulted the documents in the archives of the National Heritage Institute in Bucharest (INP), which show the research carried out, the interventions proposed and implemented in the 1970s by the Technical Unit of the Cluj Calvinist Diocese, with Kálmán KATONA as project manager. The drawings and old photographs showing the architectural ensemble over the years, especially those from 1966 in Nicolae SABĂU's work, document the church before the 1970 restoration.

Our purpose is, therefore, to complete the history of this monument with a detailed presentation of the transformations it has undergone since the end of the 19th century, as well as to place the two restorations in the context of their time, thus illustrating through another case study the history of conservation in Transylvania, as part of our extensive research on this topic.[2]

The older history of the Calvinist church in Dej

■ In the Middle Ages, Dej was the seat of the Inner Solnoc county, located at the crossroads of the trade routes that followed the Someş Valley. Making use of the salt

2 We have specified under the reference section some of our published papers on the history of historic building conservation in Transylvania [AN].

deposits in its surroundings, Dej managed to become the most important economic centre in the region of the two Someş rivers confluence, recorded in 1214 and surrounded by a royal fortress probably built on the Rozelor Hill to defend the salt mines of Sic and Ocna Dej, preserved in documents under the name of *Deeswar* (SABĂU 1966, 3-4; RUSU 2005, 352).

The Old Citadel (*Óvár*), considered the core of Dej, was built at the foot of this hill, in the area northwest to the present Calvinist church (RUSU 2005, 549; WEISZ 2007, 284-287). Its inhabitants traded and transported on the Someş river salt extracted from Ocna Dej (SABĂU 1966, 3; WEISZ 2007, 284-287). The natural advantages of the settlement led to its continuous development, demographic growth, and the need for a worship building. However, the fact that Dej was located on one of the entry routes used by the Tatars in 1241 meant that even if there had been a church here before the invasion, it was destroyed along with the settlement (SABĂU 1966, 5). In the period immediately after the Tatar invasion, the *Óvár* area was rebuilt, together with a stone church dedicated to the Virgin Mary. This first parish church in Dej on which more reliable data is available was a Romanesque edifice with a nave continued to the east with a chancel, and a tower in the west façade (ENTZ 1942, 4).

In the 15th century, the church dedicated to Our Lady, which had probably become overcrowded, was transformed into a chapel, and around 1453, far from the nucleus of the old settlement, began the construction of a massive late-Gothic worship building, the new parish church dedicated to St. Stephen (SABĂU 1966, 5; WEISZ 2007, 284-287). We know that the chapel of the Holy Spirit was also there, to the south of the church, as mentioned in 1458 in the donation made by Magdalena, the widow of a certain János ZSOMBORI (KÁDÁR 1882, 29-30; ENTZ 1942, 9).

The parish church of St. Stephen supported by numerous buttresses has a traditional single-nave plan, with an elongated polygonal chancel, a high tower attached to the west façade, and a sacristy on the north side. The belfry has five floors, accessed by a spiral staircase placed in the small octagonal tower attached to its northeast corner. The west belfry also introduces an important innovation, its ground-floor room with three moulded pointed arches originally conveying the appearance of a portico. The triumphal arch between the chancel and the nave, the windows, the west and south portals also received pointed arches, while the side doors on the north façade and the sacristy have shouldered frames or intersecting baguettes. The mouldings of the windows have trefoil and flamboyant shapes, some of which are also found in the windows of the last phase of construction of St. Michael's Church in Cluj (VĂTĂŞIANU 1959, 548). The year of the bell cast, 1477, probably indicates the completion of the west tower works (WEISZ 2007, 284-287).

Istoria mai veche a bisericii reformate din Dej

■ În Evul Mediu, Dejul a fost reşedinţa comitatului Solnocul Interior, aşezat la intersecţia drumurilor comerciale ce urmăreau Valea Someşului. Folosindu-se de zăcămintele de sare din împrejurimi, Dejul a reuşit în această perioadă să devină centrul economic cel mai important din regiunea de confluenţă a celor două Someşuri, atestat la 1214 şi străjuit de un castru regal edificat probabil pe Dealul Rozelor pentru apărarea salinelor din Sic şi Ocna Dejului, păstrat în documente cu numele de *Deeswar* (SABĂU 1966, 3-4; RUSU 2005, 352).

Cetatea Veche (*Óvár*), considerată nucleul Dejului, a fost ridicată la poalele acestei coline, în zona aflată la nord-vest de actuala biserică reformată (RUSU 2005, 549; WEISZ 2007, 284-287), locuitorii săi ocupându-se cu comercializarea sării extrase din Ocna Dejului, transportate apoi pe Someş (SABĂU 1966, 3; WEISZ 2007, 284-287). Privilegiile cu care a fost înzestrată aşezarea au dus la dezvoltarea sa continuă, la creşterea demografică şi la apariţia necesităţii unui edificiu de cult. Însă faptul că Dejul s-a aflat pe unul din drumurile de pătrundere a tătarilor în 1241 a însemnat că şi dacă anterior invaziei a existat aici o biserică, ea a fost distrusă împreună cu aşezarea (SABĂU 1966, 5). În perioada imediat următoare năvălirii tătăreşti s-a refăcut zona Óvár, alături de o biserică din piatră, cu hramul Fecioarei Maria. Această primă biserică parohială a Dejului despre care se cunosc date mai sigure era un edificiu romanic, de tip sală, cu o navă continuată spre est cu absida corului şi un turn în faţada de vest (ENTZ 1942, 4).

În secolul al XV-lea, biserica închinată Fecioarei, devenită probabil neîncăpătoare, a fost transformată în capelă, în jurul anului 1453 începând departe de nucleul vechii aşezări construcţia unui masiv edificiu de cult în stil gotic târziu, noua biserică parohială închinată Sfântului Ştefan (SABĂU 1966, 5; WEISZ 2007, 284-287). La sud de biserică ştim că se afla şi capela Sfântului Duh, menţionată în 1458 în donaţia făcută acesteia de către Magdalena, văduva unui anume János ZSOMBORI (KÁDÁR 1882, 29-30; ENTZ 1942, 9).



■ ***Fig. 2.*** *Biserica văzută dinspre est şi fortificaţia în secolul al XIX-lea. © Vasárnapi Újság, 15 ianuarie 1871*

■ ***Fig. 2.*** *Church view from the east and the fortification in the 19th century. © Vasárnapi Újság, 15 January 1871*

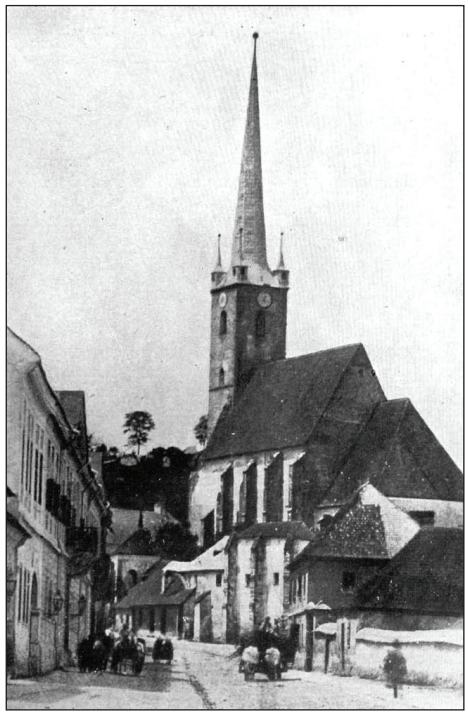
Biserica parohială Sfântul Ştefan păstrează planul de tip sală, cu o navă şi un cor poligonal alungit, un turn înalt adosat faţadei de vest şi o sacristie pe latura de nord, sprijinite de numeroase contraforturi în trepte. Clopotniţa de plan patrulater are cinci niveluri, la care se accede printr-o scară elicoidală aflată în micul turn octogonal adosat în colţul de nord-est al acesteia. Turnul vestic aduce şi o importantă inovaţie: încăperea de la parter este deschisă pe trei laturi prin arce frânte profilate, având iniţial aspectul unui portic. Arcul triumfal dintre cor şi navă, ferestrele, portalurile de vest şi sud vor primi ancadramente în arc frânt, în timp ce uşile secundare de pe faţada de nord şi de la sacristie vor primi deschideri cu umeri sau baghete încrucişate. Mulurile ferestrelor au forme polilobate şi flamboaiante, dintre care unele se întâlnesc şi la ferestrele din ultima fază de construcţie a Bisericii Sfântul Mihail din Cluj (VĂTĂŞIANU 1959, 548). Anul turnării clopotului, 1477, indică probabil încheierea lucrărilor la turnul de vest (WEISZ 2007, 284-287).

Consolele profilate existente în pereţii corului la interior sunt dovada faptului că acesta a fost de la bun început boltit. Numărul acestor console şi analogia cu bolta parterului sacristiei cu care absida este contemporană pot doar sugera forma bolţii corului, presupusă a fi una în cruce cu nervuri sau stelată, asemănătoare celei din corul bisericii reformate din Cluj (ENTZ 1942, 9).

Şi nava bisericii a fost iniţial boltită. Nervurile bolţii porneau de pe consolele alungite încastrate şi astăzi în pereţii de nord şi sud şi care se află în corespondenţa contraforturilor de la exterior. Consolele de forma unor colonete cu capitel circular sprijineau probabil cele patru travee ale bolţii nu foarte înalte. Nu se cunoaşte exact forma ei, însă se presupune că era una stelată. În traveea de vest, mai lată decât celelalte, se afla o tribună din piatră, sprijinită şi ea pe patru console încastrate în pereţii navei. Tribuna avea probabil la rândul său bolţi în cruce şi un parapet traforat din piatră, din care s-a păstrat o piesă astăzi încastrată în peretele de nord al navei, datată de ENTZ între anii 1480 şi 1490 (ENTZ 1942, 12). Şi parterul turnului de vest a fost iniţial acoperit cu o boltă stelată. Tot din această perioadă datează şi parterul sacristiei construite pe latura de nord a corului, acoperit cu bolţi în cruce cu nervuri sprijinite pe console (SABĂU 1966, 55).

Cu toate că istoriografia nu a lămurit încă momentul exact al acestui eveniment, cert este că la scurt timp au apărut probleme în legătură cu prima boltă a navei. Nu se ştie dacă aceasta s-a prăbuşit sau a fost desfăcută din cauza unor probleme tehnice (WEISZ 2007, 284-287), însă numeroasele donaţii făcute din 1489 şi până la începutul secolului următor de către regele Matia Corvin şi cetăţenii oraşului au fost puse în legătură cu stabilitatea sa structurală (KÁDÁR 1882, 29-30). Astfel, la începutul secolului al XVI-lea, bolta navei a necesitat o refacere majoră, după un nou tip şi la o înălţime mai mare faţă de cea anterioară. ENTZ leagă această etapă de reînălţare şi reboltire a bisericii din Dej cu şantierul actualei biserici reformate de pe Strada Kogălniceanu, pe baza analogiilor stilistice susţinând chiar prezenţa la Dej a pietrarilor conduşi de meşterul Johannes care au lucrat şi la biserica din Cluj.

Pentru ridicarea noii bolţi la Dej, s-au construit în interiorul navei trei perechi de pilaştri masivi cu colonete adosate în pereţii de nord şi sud, cu bazele ornamentate cu reliefuri gotice târzii. Din aceşti pilaştri patrulateri în partea superioară se desprind nervuri, fără console sau capiteluri. Pereţii navei nu au fost desfăcuţi complet şi reconstruiţi, fapt dovedit de păstrarea vechilor console ale primei bolţi, care au fost continuate la partea superioară cu pilaştri poligonali zvelţi. Însă contraforţii nu au jucat un rol de sprijin şi în a doua boltire, noii pilaştri nefiind ridicaţi în corespondenţa acestora, ci deplasaţi spre vest. Forma bolţii nu se ştie cu exactitate, ea putând fi una stelată sau în plasă (SABĂU 1966, 42-43).

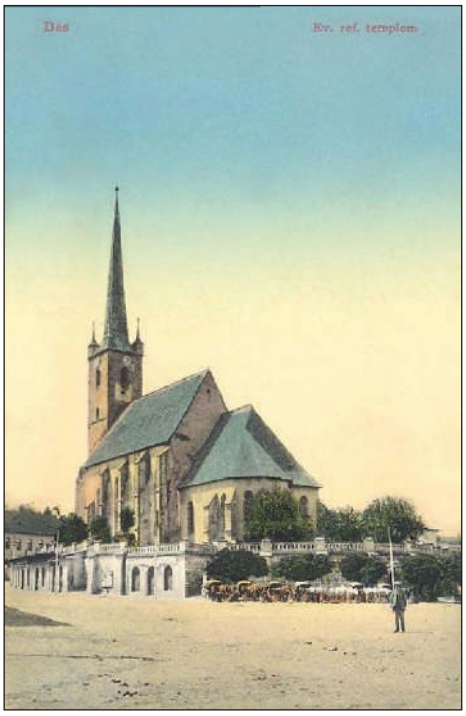


■ ***Fig. 3.*** *Biserica văzută dinspre sud-est.*
© Géza ENTZ 1942
■ ***Fig. 3.*** *Church view from the southeast.*
© Géza ENTZ 1942

The embossed corbels in the interior walls of the chancel prove that this was vaulted from the very beginning. The number of these corbels and the analogy with the ground floor vault of the sacristy, with which the apse is contemporary, may only suggest the shape of the chancel vault, presumably a rib or lierne one, like the one found in the apse of the Calvinist church in Cluj (ENTZ 1942, 9).

The nave was also originally vaulted. Its ribs rose from the elongated corbels which are still embedded in the north and south walls, in the correspondence of the outer buttresses. The round capitals of these colonnette-shaped corbels probably supported the four bays of the not very high vault. Its exact shape is unknown, but it presumably was a lierne one. In the western bay, wider than the others, there was a stone gallery supported on four embedded corbels. The gallery probably also had cross vaults and a fretted stone parapet, of which a piece has survived, now embedded in the north wall of the nave, dated by ENTZ between 1480 and 1490 (ENTZ 1942, 12). Originally, the west tower's ground floor too had a lierne vault. The ground floor of the sacristy built on the north side of the chancel and covered with ribbed cross vaults supported on corbels also dates to this period (SABĂU 1966, 55).

Although historiography has not yet clarified the exact timing of this event, we know that problems with the nave's first vault arose shortly afterward. It is uncertain whether it collapsed or was dismantled due to technical problems (WEISZ 2007, 284-287), but the numerous donations



■ ***Fig. 4.*** *Biserica văzută dinspre sud-est la începutul secolului XX, după demolarea fortificației. © cărți poștale colecția Csongor PETHŐ, https://kepeslapok.files.wordpress.com/2013/01/l_-34439597.jpg*

■ ***Fig. 4.*** *Church view from the southeast at the beginning of the 20th century, after the demolition of the fortification. © Postcards, Csongor PETHŐ's collection https://kepeslapok.files.wordpress.com/2013/01/l_-34439597.jpg*

made from 1489 until the beginning of the following century by King Matthias Corvinus and the inhabitants of the town were linked to its structural stability (KÁDÁR 1882, 29-30). Thus, at the beginning of the 16th century, the nave vault required major rebuilding, according to a new type and a greater height than before. ENTZ connects this stage of heightening and re-vaulting of the church in Dej with the works on the present Calvinist church on Kogălniceanu Street, based on stylistic analogies, even claiming the presence in Dej of craftsmen led by master stonemason Johannes, who also worked on the church in Cluj.

For the erection of the new vault in Dej, three pairs of massive pilasters with colonnettes leaning against the north and south walls were built inside the nave, their bases ornamented with late Gothic reliefs. From these square pilasters rise the ribs that lack corbels or capitals. The nave walls were not completely dismantled and rebuilt, as shown by the preservation of the old corbels of the first vault, which were continued at the top with slender polygonal pilasters. However, the buttresses did not play a supporting role in the second vault, as the new pilasters were not raised in correspondence with them but were moved to the west. The exact shape of the vault is unknown, as it may have been a lierne or net one (SABĂU 1966, 42-43).

Probabil tot atunci a avut loc şi o reconstrucţie a şarpantei, care a fost şi ea înălţată. Un detaliu în structura monumentului, care pledează în favoarea acestei ipoteze emise de ENTZ, este că coama acoperişului navei se ridică deasupra cornişei dintre nivelurile 4 şi 5 ale turnului, păstrată doar pe celelalte trei faţade ale sale.

Pe baza analizei stilistice a bolţii în plasă, istoriografia datează ridicarea etajului sacristiei la începutul secolului al XVI-lea (VĂTĂŞIANU 1959, 548), care a fost pus sub un acoperiş comun cu corul, fapt ce a generat lucrări la nivelul şarpantei şi în această zonă. Cu ocazia cercetării dendrocronologice din 2019, s-a găsit o bucată de schelă încă păstrată în zidul sacristiei, care a fost datată în laborator ca provenind dintr-un arbore tăiat în vara anului 1478 (TÓTH 2019, 1-2), putându-se astfel fixa cu certitudine perioada edificării acestei părţi a bisericii. Aşadar, prima etapă de construcţie a edificiului, ce a inclus şi schimbarea concepţiei iniţiale a bolţii navei, s-a încheiat către sfârşitul secolului al XV-lea şi începutul celui următor, când sunt menţionate şi altarele dedicate Sfântului Ştefan, Sfintei Cruci, Sfintei Treimi şi Sfintei Fecioare aflate în biserică, deşi sprijin pentru reparaţii mai este amintit şi în anii 1551-1553 (ENTZ 1945, 38).

În 1554, după moartea ultimului pleban catolic al bisericii, regele numeşte un urmaş al acestuia, dar care nu a apucat însă să îşi ocupe postul, din cauză că deja începuseră conflictele religioase, comunitatea din Dej adoptând Reforma Protestantă, astfel încât la 1558 biserica a devenit calvină, iar din 1568 unitariană (ENTZ 1942, 13; WEISZ 2007, 284-287).

Disputele religioase au produs numeroase stricăciuni nu doar bisericii parohiale, ci şi fostei biserici a Fecioarei Maria din Óvár, care a fost complet demolată. Fragmente din aceasta au fost însă recuperate şi încastrate într-un turn-monument ridicat în acelaşi loc în anul 1578 de către primarul Fabius, dar distrus ulterior în 1938. În 1556 capelele bisericii au fost demolate sau au fost transformate în magazii, printre care şi cea închinată Sfântului Duh, construită înainte de 1458 la sud de biserică (ENTZ 1942, 13). Câteva reparaţii urgente au fost realizate la biserică în anul 1588, după cum reiese din inscripţia aflată pe peretele vestic al acesteia. Însă incendiul din 1591, ce a mistuit aproape tot oraşul, şi, în 1602, trupele generalului Basta au produs alte stricăciuni edificiului, care a necesitat noi reparaţii (WEISZ 2007, 284-287). Datorită acestor dese pericole, în 1612, plebania a înconjurat biserica cu un zid de piatră punctat cu turnuri, incluzând în incintă şi capela Sfântului Duh, zece ani mai târziu, în 1622, principele Gabriel BETHLEN dând biserica „veche şi nefolosită" calvinilor (ENTZ 1945, 39).

La 25 iulie 1642 un trăsnet a lovit clopotniţa declanşând un nou incendiu, de data aceasta atât de puternic încât biserica şi-a pierdut bolţile din turn şi navă, care erau oricum instabile din cauză că contraforţii nu erau în continuarea pilaştrilor interiori (POP 2015, 137), clopotele s-au topit şi a ars tot ceea ce era din lemn (ENTZ 1942, 14).

Principele György RÁKÓCZI I este cel care sprijină renovarea bisericii, trimiţând numeroase donaţii, materiale şi meşteri pentru refacerea edificiului (ENTZ 1945, 39). Intervenţia desfăşurată între 1643 şi 1650, contemporană cu reparaţiile bisericilor reformate din Cluj şi Turda Veche, a fost una de mare anvergură, Dejul fiind vizitat şi de cei mai importanţi meşteri constructori ai principelui: Imre FUNDÁLÓ în 1643 şi italianul Agostino SERENA în 1647 şi 1648. Totuşi, nu au fost trimişi şi meşterii din Kurlanda care au lucrat la bolta bisericii reformate din Cluj, astfel încât la Dej bolţile prăbuşite ale navei şi turnului nu au mai fost reconstruite. În locul acestora, meşterul János ÁCS, responsabil cu părţile din lemn ale bisericii până în 1645, a realizat un tavan din lemn deasupra navei (ENTZ 1942, 14). Tavanul avea grinzi pictate, cu fundalul brun închis, peste care s-au aplicat trei rânduri de palmete alb-gălbui şi puncte. Sub grinzi, coronamentul zidului a fost decorat cu o friză pictată cu flori de crin stilizate



■ ***Fig. 5.*** *Interiorul bisericii la sfârșitul secolului al XIX-lea, cu cele două tribune pictate pe pereții de vest și nord. © LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998*

■ ***Fig. 5.*** *Church interior at the end of the 19th century, with the two painted galleries on the west and north walls. © LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998*

(LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998, 11; LÁNGI & MIHÁLY 2002, 22-23). Terminarea lucrărilor este atestată de o inscripţie amplasată pe peretele vestic şi de cronica lui János SZALÁRDI din 1657, care, după o descriere detaliată a reparaţiilor princiare ale bisericii din Cluj, notează că şi la Dej, biserica veche care a stat mult timp părăsită a primit o învelitoare din ţiglă (ENTZ 1942, 14).

O ipoteză inedită în legătură cu această etapă în istoria bisericii a fost lansată în 2019 de către autorii cercetării dendrocronologice efectuate asupra grinzilor pictate. În timpul inspecţiei acoperişului, s-a observat că nu numai corzile de deasupra navei, ci şi cele de la cor şi sacristie prezintă acelaşi decor cu palmete stilizate şi puncte. Analizele de laborator au arătat că grinzile navei au fost prelucrate din arbori tăiaţi după 1639, 1654, 1655 şi 1657, în timp ce două dintre grinzile pictate de la cor şi sacristie au fost datate după 1670 (TÓTH 2019, 1). Luând în discuţie şi aspectul asemănător al picturii de pe grinzile celor două zone, navă şi cor cu sacristie, concluziile studiului dendrocronologic au fost că toate corzile au fost prelucrate şi pictate în acelaşi timp, doar după 1670 şi, în consecinţă, inscripţia cu anul 1650 de pe peretele de vest al navei nu este legată de aceste lucrări, ci de alte intervenţii anterioare (TÓTH 2019, 2-3). Considerăm că această concluzie trebuie verificată suplimentar, având în vedere coincidenţa ultimului an de datare a corzilor de deasupra navei, 1967, cu cronica lui SZALÁRDI care notează în acelaşi timp că biserica a primit o învelitoare din ţiglă.

Cea de-a doua ipoteză care se subînţelege din aceste analize este cea a existenţei la un moment dat şi deasupra corului a unui tavan din lemn similar cu cel al navei. ENTZ menţionează că la incendiul de la 1642 doar bolţile navei şi turnului s-au prăbuşit (ENTZ 1942, 14), însă KÁDÁR se referă explicit doar la bolta sacristiei ca rămânând intactă după acest eveniment (KÁDÁR 1882, 100). Drept urmare, posibilitatea acoperirii cu un tavan şi a acestei zone în secolul al XVII-lea este o direcţie ce va trebui explorată atunci când se va ivi ocazia unor noi cercetări extinse în şarpantă.

În anul 1697 este menţionat un nou incendiu, iar în 1706, în timpul Războiului curuţilor, a fost furat tezaurul îngropat în sacristie, iar biserica a fost distrusă din nou, inclusiv tavanul cu grinzi pictate şi şarpanta. După

The roof structure is likely to have been reconstructed and heightened as well at the same time. A detail in the historic building, supporting ENTZ's hypothesis, is that the nave's roof ridge rises above the cornice between levels 4 and 5 of the belfry which is preserved only on its other three façades.

Based on the stylistic analysis of the net vault, historiography dates to the beginning of the 16th century the erection of the sacristy's upper floor (VĂTĂŞIANU 1959, 548), placed under the same roof as the chancel, generating works on the roof structure in this area as well. During the dendrochronological research in 2019, a piece of scaffolding still preserved in the sacristy wall was found, which was dated in the laboratory as coming from a tree cut down in the summer of 1478 (TÓTH 2019, 1-2), and thus allowing the certain dating of the construction period for this part of the church. Therefore, the first building phase of the edifice, which also included the change of the initial nave vault, was completed towards the end of the 15th century and the beginning of the following one, when the altars dedicated to St. Stephen, the Holy Cross, the Holy Trinity, and the Holy Virgin are mentioned in the church, although support for repairs is also recorded in the years 1551-1553 (ENTZ 1945, 38).

In 1554, after the death of the church's last Catholic parish priest, the king appointed a successor, but he did not get to take up his position, because religious conflicts had already begun, as the community of Dej adopted the Protestant Reformation, so that in 1558 the church became Calvinist and from 1568 Unitarian (ENTZ 1942, 13; WEISZ 2007, 284-287).

The religious disputes caused extensive damage not only to the parish one but also to the Óvár former church dedicated to Virgin Mary, which was demolished. Fragments of this edifice were salvaged and incorporated into a tower-monument erected on the same site in 1578 by Mayor Fabius, but later destroyed in 1938. In 1556 the chapels of the parish church were demolished or converted into storehouses, including the one dedicated to the Holy Spirit, built before 1458 to the south of the ensemble (ENTZ 1942, 13). Some urgent repairs were carried out on the church in 1588, as revealed by the inscription on the west wall. However, the fire of 1591 consumed most of the town, and, in 1602, General Basta's troops damaged the building again, which required further repairs (WEISZ 2007, 284-287). Because of these frequent dangers, in 1612, the parish surrounded the church with a stone wall and towers, including the chapel of the Holy Spirit in the enclosure. Ten years later, in 1622, Prince Gabriel Bethlen donated the "old and unused" church to the Calvinists (ENTZ 1945, 39).

On July 25, 1642, a lightning bolt struck the belfry triggering a new fire, this time so strong that the church lost its vaults in the tower and the nave, which were unstable anyway because the interior pilasters were not in continuation of the

buttresses (POP 2015, 137), the bells melted, and everything made of wood burned down (ENTZ 1942, 14).

It was Prince György RÁKÓCZI I who supported the renovation of the church, sending numerous donations, materials, and craftsmen to rebuild the edifice (ENTZ 1945, 39). The intervention conducted between 1643 and 1650, contemporary with the repairs of the Calvinist churches in Cluj and Turda Veche, was a large-scale one. The most important master stonemasons of the prince visited Dej i.e., Imre FUNDÁLÓ in 1643 and the Italian Agostino SERENA in 1647 and 1648. However, the craftsmen from Kurlanda who worked on the vault of the Calvinist church in Cluj were not sent, so the collapsed vaults of the nave and tower in Dej were not rebuilt. Instead, craftsman János ÁCS, who was responsible for the wooden parts of the church until 1645, placed a wooden ceiling above the nave (ENTZ 1942, 14). This ceiling had painted beams with a dark brown background, over which three rows of yellowish white palmettes and dots were applied. Below the beams, the wall top was decorated with a painted frieze with stylized lily flowers (LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998, 11; LÁNGI & MIHÁLY 2002, 22-23). The completion of the works is recorded on an inscription on the west wall and the 1657 chronicle of János SZALÁRDI who, after a detailed description of the princely repairs of the church in Cluj, noted that the old church in Dej, which had been abandoned for a long time, also received a tile covering (ENTZ 1942, 14).

A novel hypothesis about this stage in the church's history was launched in 2019 by the authors of the dendrochronological research conducted on the painted beams. During the inspection of the roof, they noticed that not only the beams above the nave but also those of the chancel and sacristy have the same decoration with stylized palmettes and dots. Laboratory analysis showed that the nave beams were made of trees cut after 1639, 1654, 1655, and 1657, while two of the painted beams from the chancel and sacristy were dated after 1670 (TÓTH 2019, 1). Taking into account the similar appearance of the painting on the beams of the two areas, nave and chancel with sacristy, the dendrochronological study concluded that all the tie-beams were made and painted at the same time, only after 1670, and, consequently, the inscription with the year 1650 on the west wall of the nave cannot be related to these works, but to other earlier interventions (TÓTH 2019, 2-3). We believe this conclusion needs to be further verified, given the coincidence of the last dating year of the tie-beams above the nave i.e., 1967, with SZALÁRDI's chronicle, which also noted that the church had received a tile covering.

The second hypothesis that emerges from these analyses is that at some time the chancel must have had a wooden ceiling similar to that of the nave. ENTZ mentions that in the fire of 1642, only the nave and tower vaults collapsed (ENTZ 1942, 14),

aceste evenimente, până către sfârşitul secolului al XVIII-lea, au fost realizate noi intervenţii de amploare la biserică şi, în ciuda faptului că în 1754 şi 1760 catolicii au încercat ocuparea bisericii, aceasta a rămas tot calvină (WEISZ 2007, 284-287).

În 1712 sunt menţionate primele reparaţii, probabil la şarpantă, în 1720 Sigismund PETKI NAGY a finanţat ridicarea tribunei de vest, iar în 1726 a fost construit noul tavan peste navă (ENTZ 1942, 15), la un nivel mai jos decât cel de secol XVII, astfel încât grinzile primului tavan, friza de crini şi inscripţia din 1650 au rămas în podul bisericii, unde sunt vizibile până astăzi. Indicând autonomia judiciară a localităţii, *jus gladii*, acoperişul turnului de vest a primit în 1721 cele patru turle de colţ şi a fost apoi reparat între 1753 şi 1754 (ENTZ 1942, 15; SABĂU 1966, 71; LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998, 3; LÁNGI & MIHÁLY 2002, 22-23).

În 1765 Lőrinc UMLING a construit tribuna din corul bisericii şi a prelungit-o pe cea de vest şi pe peretele de nord al navei. Casetele cu decor floral şi inscripţii menţionează că Farkas de Frata János şi soţia sa, Zsuzsanna BEREGSZÁSZI, comanditarii acestora, au dispus ca după pictarea tribunei de nord, şi cea dinspre vest, construită cu 45 de ani mai devreme, să fie renovată pentru a fi la fel cu cealaltă. Inscripţia şi vechea poziţionare a parapetului au fost păstrate în câteva fotografii realizate de Comisia Naţională pentru Monumente la începutul secolului XX (ENTZ 1942, 15).

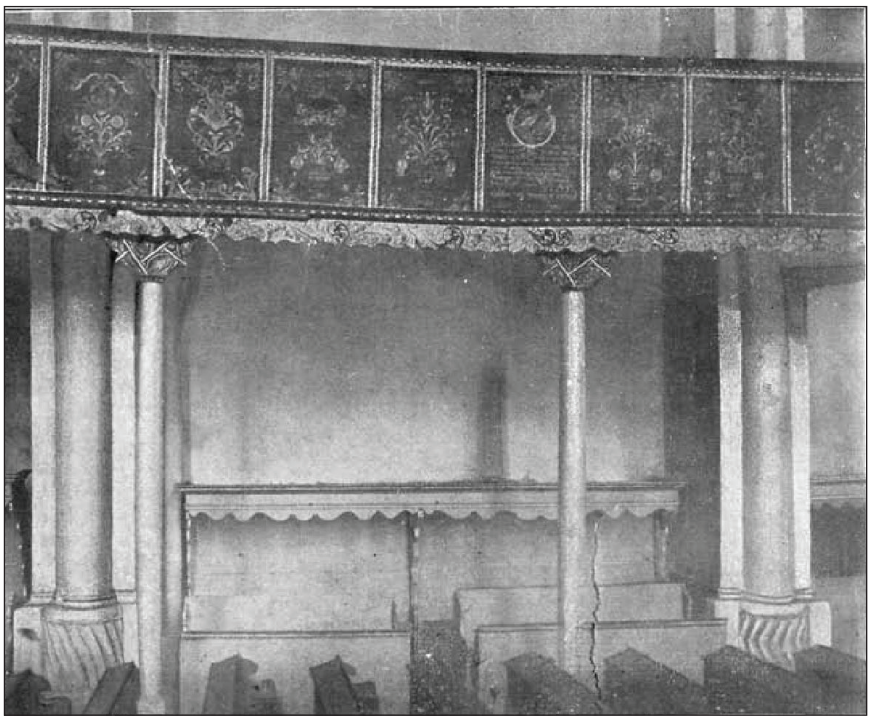
În 1752 este construit amvonul din piatră de către cunoscutul meşter transilvănean Dávid SIPOS (MURÁDIN 1994, 151). Din aceeaşi perioadă datează şi amplasarea pe peretele de nord al corului epitaful în stil rococo al curatorului bisericii, László MÓSA (1710-1775), notar, jude al comitatului Solnocul Interior şi renumit traducător al mai multor opere literare (WEISZ 2007, 284-287).

Lucrările de refacere a unor părţi ale bisericii, care s-au desfăşurat între 1776-1779, au fost concepute de arhitectul Iosif NEUBURGER, lucrările de dulgherie de Márton KÁDÁR, iar cele de sticlărie de János LUKÁCS (ENTZ 1942, 16). Astfel, în anul 1776 a fost reboltit corul, care a primit o structură nouă, de formă semicilindrică cu penetraţii. Însă, deşi noua structură a fost sprijinită pe vechile console medievale, pentru că a fost ridicată la o înălţime mai mare decât cea gotică, bolta de factură barocă a altarului a fost amplasată deasupra contraforturilor, care n-au mai fost prelungite şi astfel au devenit ineficiente în noul sistem (***, *Memoriu* 1975). O parte a istoriografiei menţionează anul 1779 ca dată de realizare a celui de-al treilea tavan din navă, de culoare albastru închis cu decor stelat, cu sprijinul lui Petru CSERNÁTONI şi Adam SZACSVAI (ENTZ 1942, 16). Însă alţi cercetători sunt mai rezervaţi, spunând că acesta este cel de-al doilea, construit în anul 1726 şi care în 1779 a fost doar repictat (LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998, 12; LÁNGI & MIHÁLY 2002, 22-23), lucrare consemnată de inscripţia plasată în mijlocul tavanului.

Tot la 1779 a fost realizat şi coronamentul amvonului la comanda lui László MÓSA şi Zsuzsanna NAGY, meşterii aduşi din Cluj cioplind Masa Domnului şi pictând amvonul din piatră. În această perioadă au avut loc şi lucrări de zidărie, respectiv au fost reparate ferestrele (ENTZ 1942, 16).

Restaurarea de la sfârşitul secolului al XIX-lea

■ Începutul secolului al XIX-lea a fost o perioadă fără evenimente în istoria edificiului din cauza lipsei fondurilor, fiind efectuate doar cele mai urgente reparaţii (ENTZ 1942, 17). Însă deceniul al nouălea a reprezentat un moment de cotitură şi pentru biserica din Dej, în contextul creşterii interesului general pentru soarta monumentelor istorice, personalităţi şi



■ ***Fig. 6.*** *Galeria de nord la sfârşitul secolului al XIX-lea. © Géza ENTZ 1942*
■ ***Fig. 6.*** *North gallery at the end of the 19th century. © Géza ENTZ 1942*

asociaţii de cultură susţinând cauza acestora tot mai fervent. Înfiinţarea în 1881 a Comisiei Naţionale a Monumentelor în cadrul monarhiei dualiste a contribuit considerabil la creşterea interesului pentru patrimoniul cultural, inclusiv în Transilvania. Şi deşi aceste măsuri nu le-au asigurat încă o protecţie foarte eficientă, simpla recunoaştere a valorii monumentelor a determinat efecte pozitive, mai ales pentru bisericile romanice şi gotice, cărora statul a început să le finanţeze întreţinerea şi restaurarea (FORSTER 1905).

Totuşi, încă nu se punea problema conservării ţesutului urban istoric, în contextul în care tendinţa de modernizare a oraşelor era orientată spre dezvoltare. Poate că cea mai mare pierdere în acest sens a fost demolarea fortificaţiilor şi restructurarea străzilor prin realinieri fără o documentare prealabilă riguroasă, cu excepţia unor desene, vedute sau fotografii care surprind oraşele transilvănene la sfârşitul secolului al XIX-lea. La Cluj, consiliul oraşului decisese demolarea vechii incinte pentru modernizarea şi extinderea aşezării, însă în urma numeroaselor presiuni din partea *Aedilis Directio*, deşi toate turnurile de poartă au fost demantelate, au fost recuperate şi încorporate în noi construcţii cele mai importante piese de epigrafie (MIHÁLY 2010). Remarcabilă a fost atitudinea lui Lajos PÁKEY, arhitectul şef al Clujului la acea vreme, care a cercetat amănunţit turnurile principale şi a recuperat un număr impresionant de ancadramente medievale şi renascentiste, inscripţii, reliefuri sau steme. Pe multe dintre acestea le-a încastrat în pereţii propriei vile construite pe actuala stradă Republicii, după un concept tributar romantismului epocii. Pe altele le-a donat muzeului, care au devenit baza lapidariului medieval al Muzeului de Istorie a Transilvaniei de astăzi (MIHÁLY 2013).

Acest lucru nu s-a întâmplat însă şi la Dej, unde vechiul zid al fortificaţiei din jurul bisericii reformate şi capela închinată Sfântului Duh au căzut victime ale modernizării. Neţinându-se cont de valoarea acestora, ele au fost demolate între 1884 şi 1888 fără o minimă documentare prealabilă cum s-a întâmplat la Cluj şi înlocuite cu noul zid de factură istoricibut KÁDÁR explicitly refers to the sacristy vault as the only one remaining intact after this event (KÁDÁR 1882, 100). As a result, the possibility that this area was also covered with a ceiling in the 17th century is a direction to be further explored in the future, in the event of new extensive research in the roof structure.

In 1697 a new fire was mentioned, and in 1706, during the Kuruc War, the treasure buried in the sacristy was stolen and the church was destroyed again, including the painted beam ceiling and the roof structure. After these events, by the end of the 18th century, further extensive interventions were carried out on the church and, even though the Catholics tried to occupy it in 1754 and 1760, the edifice remained Calvinist (WEISZ 2007, 284-287).

In 1712 the first repairs were recorded, probably to the roof structure, in 1720 Sigismund Petki Nagy financing the erection of the west gallery, and in 1726 the new ceiling above the nave (ENTZ 1942, 15), at a lower level than the 17th century one. Thus, the painted beams of the first structure, the lily frieze, and the 1650 inscription remained in the church's attic, where they are visible to this day. As an indication of the judicial autonomy of the settlement, *jus gladii*, the roof of the west belfry received the four corner turrets in 1721 and was later repaired between 1753 and 1754 (ENTZ 1942, 15; SABĂU 1966, 71; LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998, 3; LÁNGI & MIHÁLY 2002, 22-23).

In 1765, Umling Lőrinc built an organ gallery in the chancel and extended the west one on the nave's north wall also. The panels with floral decorations and inscriptions mention that János Farkas of Frata and his wife Zsuzsanna BEREGSZÁSZI, their patrons, ordered that after the painting of the north gallery, the west one, built forty-five years earlier, was renovated to match the other. The inscription and the old position of the parapet have been preserved in several photographs taken by the National Commission for Historic Buildings at the beginning of the 20th century (ENTZ 1942, 15).

In 1752, the well-known Transylvanian craftsman Dávid SIPOS built the stone pulpit (MURÁDIN 1994, 151). The Rococo epitaph of the church curator, László MÓSA (1710-1775), a notary and judge of the Inner Solnoc County, as well as renowned translator of several literary works, was placed on the north wall of the chancel in the same period (WEISZ 2007, 284-287).

The partial restoration of the church, which took place between 1776 and 1779, was designed by architect Iosif NEUBURGER, Márton KÁDÁR for the carpentry, and János LUKÁCS for the glasswork (ENTZ 1942, 16). Thus, in 1776, the chancel received a barrel vault with lunettes. However, although the new structure leaned on the old medieval corbels since it was built at a higher level than the Gothic one, the Baroque vaulting of the apse was placed above the buttresses, which were not extended and thus became ineffective in the

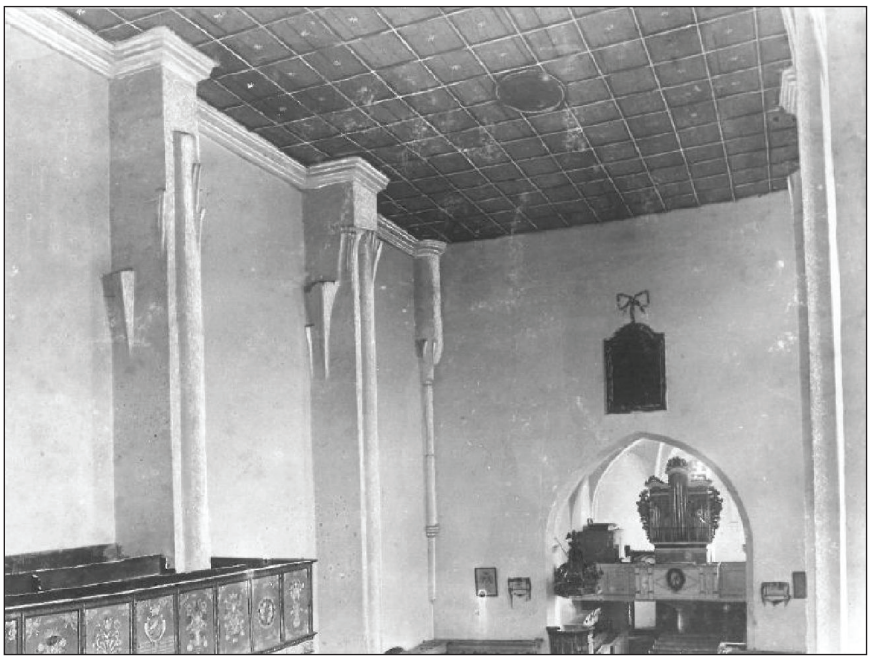
new system (***, *Memoriu* 1975). Part of the historiography mentions the year 1779 for the construction of a third ceiling in the nave, dark blue and decorated with stars, with the support of Peter CSERNÁTONI and Adam SZACSVAI (ENTZ 1942, 16). However, other scholars are more reserved, saying that it is only the second one, built in 1726 and which was probably just repainted in 1779 (LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998, 12; LÁNGI & MIHÁLY 2002, 22-23), as it is recorded on the inscription in the middle of the ceiling.

In the same year 1779, László MÓSA and Zsuzsanna NAGY commissioned the canopy of the pulpit. Craftsmen from Cluj carved the Lord's Table and painted the stone pulpit. During this period, masonry works were also carried out and the windows were repaired (ENTZ 1942, 16).

The late 19th century restoration

■ The beginning of the 19th century was an uneventful period in the history of the building due to the lack of funds, with only the most urgent repairs being carried out (ENTZ 1942, 17). But the ninth decade was also a turning point for the church in Dej, as the general interest in the fate of historic buildings grew, with cultural personalities and associations supporting their cause ever more fervently. The establishment of the National Commission for Historic Buildings in 1881 under the dualist monarchy contributed considerably to the growing interest in cultural heritage, including in Transylvania. And although these measures did not yet provide very effective protection, the mere recognition of the value of historic buildings led to positive consequences, especially for the Romanesque and Gothic churches, whose maintenance and conservation the state began to finance (FORSTER 1905).

However, there was no question of preserving the historic urban fabric, in a context where the trend towards the modernisation of towns was oriented towards development. Perhaps the greatest loss in this respect is the demolition of fortifications and the restructuring of streets through re-alignments, without rigorous prior documentation, except for some drawings or Romantic paintings, and some old photographs capturing Transylvanian towns from the end of the 19th century onwards. In Cluj, the city council had decided to demolish the old enclosure to modernise and extend the settlement, but following numerous pressures from the *Aedilis Directio*, although the gate towers were dismantled, the most important epigraphic pieces were recovered and incorporated into new buildings (MIHÁLY 2010). Remarkable was the attitude of Lajos PÁKEY, the chief architect of Cluj at that time. He thoroughly surveyed the main towers and recovered an impressive number of medieval and Renaissance door frames, inscriptions, reliefs, decorative elements, or coats of arms. Many of these PÁKEY embedded in the walls of his villa built on today's Repub-



■ ***Fig. 7.*** *Interiorul bisericii văzut dinspre vest, cu tribuna din cor încă nedemantelată.*
© LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998
■ ***Fig. 7.*** *The church interior seen from the west, with the chancel gallery still in place.*
© LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998

zantă proiectat de către Endre FERENCZI şi Balázs DEBRECZENI (ENTZ 1942, 13-17). Noua incintă, care a încorporat o parte din vechile pietre sculptate, a fost tencuită cu mortar de ciment, fără să-i fie însă asigurată drenarea apei dinspre interior, ceea ce avea să cauzeze serioase probleme de stabilitate în următoarele decenii (***, *Memoriu* 1975).

Spre sfârşitul secolului al XIX-lea, odată cu generalizarea istorismului în arhitectură prin stilurile „naţionale" căutate în trecut, monumentele medievale au fost copleşite de noua atenţie a disciplinelor care se maturizau atunci: istoria artei şi restaurarea monumentelor (POP 2015, 167). Astfel, mai multe biserici romanice şi gotice reprezentative au fost „restaurate" şi în Transilvania în spiritul romantismului, al căutării unei expresii naţionale şi a unităţii stilistice, ca de exemplu la Turda, Acâş, Strei sau Alba Iulia.

La Dej, pe peretele interior de sud al corului bisericii reformate, o placă comemorativă din marmură neagră şi ancadrament din piatră relatează despre amplele renovări realizate între anii 1896 şi 1908 pe cheltuiala curatorului Ferencz VÉKONY şi a soţiei sale, Vilma BRUSZT. Fiind declarată monument istoric în anul 1902 (ENTZ 1942, 17), pentru evaluarea lucrărilor realizate la biserică, Comisia Naţională a Monumentelor l-a delegat pe arhitectul István MÖLLER, care relata că zidurile edificiului de secol XV erau puternice, iar ferestrele erau în mare parte în starea lor iniţială. Însă tot el punea în discuţie neprofesionalismul restaurării conduse de către Endre FERENCZI la exterior şi Károly KÁDÁR la interior, criticând faptul că repararea zidurilor cu ciment a „pus în pericol numeroasele semne şi piese sculptate în piatră" (ENTZ 1942, 17). Pentru că în această campanie, tencuiala exterioară a bisericii a fost îndepărtată integral fără a fi cercetată în prealabil şi înlocuită cu mortar de ciment, alături de soclul edificiului îmbrăcat şi el într-un strat înalt şi consistent cu acelaşi material (***, *Memoriu* 1975). Tot atunci a fost montată şi învelitoarea din şindrilă peste acoperişurile navei şi corului, în timp ce cele trei portaluri ale turnului de vest au fost închise cu uşi din lemn, în două canaturi, şi supralumină cu trafor ce imită partea superioară a ferestrelor cu decor flamboiant (***, *Dosar desene şi relevee* 1913).



■ ***Fig. 8.*** *Ernő FOERK și studenții săi la Dej. Henrik STIASZNY 1915. © Muzeul Maghiar de Arhitectură și Centrul de Documentare a Protecției Monumentelor, număr inventar 70.466*

■ ***Fig. 8.*** *Ernő FOERK and his students in Dej. Henrik STIASZNY 1915. © Hungarian Museum of Architecture and Monument Protection Documentation Center, inventory no. 70.466*

Din fericire, la interior nu s-a intervenit la nivelul pardoselii şi al zidurilor, care şi-au păstrat urmele istorice, prilejuind descoperirea unor detalii interesante la restaurarea din anii 2020, ca diverse morminte şi cripte cu inventar relevant (CSÓK 2021), porţiuni de tencuială istorică, decorul policrom cu asize galben şi gri închis ale consolelor şi ancadramentelor, sedilii, locul unui fost tabernacol şi nişe înzidite (***, *Notă şi dispoziţii de şantier*. 2020).

S-a intervenit însă fără să se ţină cont de valoarea acestuia asupra mobilierului de secol XVIII. Astfel, la începutul secolului al XX-lea, tribuna din absida corului a fost demontată şi orga mică a fost reamplasată la nivelul pardoselii, iar tribunele de vest şi nord au fost desfăcute şi complet remodelate (ENTZ 1942, 15-16). Din cele 27 de casete pictate şi purtătoare de inscripţii ale celor două galerii, 24 au fost refolosite, cu unele repictări, la realizarea unei singure tribune de concepţie istoricizantă, montată pe peretele de vest (LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998, 12; LÁNGI & MIHÁLY 2002, 22-23).

O propunere de reconstrucție la 1914

■ La sfârşitul secolului al XIX-lea şi începutul celui următor, Universitatea Tehnică Regală József şi Şcoala Regală Maghiară Industrială şi de Arhitectură au lansat o practică de documentare pe teren a patrimoniului construit, în colaborare şi cu sprijinul financiar al Comisiei Naţionale a Monumentelor, care presupunea organizarea de campanii de relevare pe timpul verii la care participau studenţi coordonaţi de profesori ai celor două instituţii. Imre STEINDL de la Universitatea Tehnică şi asistentul său, Ernő FOERK, au cercetat printre altele şi monumente transilvănene, dintre care cele mai importante au fost Alba Iulia, Băgaciu, Prejmer, Moşna şi Biertan (KOVÁCS 2019, 11).

Mai târziu, după preluarea catedrei proprii la Şcoala Industrială şi după ce a devenit şi membru al Comisiei Naţionale a Monumentelor, FOERK şi-a folosit experienţa acumulată anterior pentru a continua tradiţia lui STEINDL a campaniilor de vară, relevând împreună cu echipe

licii Street, following a concept tributary to the Romanticism of the time. He donated others to the museum, which became the basis of its medieval lapidarium, the present Museum of Transylvanian History (MIHÁLY 2013).

But this did not happen in Dej, where the old fortification wall around the Calvinist church and the chapel dedicated to the Holy Spirit fell victim to modernisation. Disregarding their value, they were demolished between 1884 and 1888, without minimum prior documentation as it happened in Cluj, and replaced by the historicist enclosure designed by Endre FERENCZI and Balázs DEBRECZENI (ENTZ 1942, 13-17). The new enclosure, which incorporated part of the old carved stones, was plastered with cement mortar but was not provided with water drainage from the inside, which were to cause serious stability problems in the following decades (***, *Memoriu* 1975).

Towards the end of the 19th century, with the generalization of historicism in architecture through the "national" styles sought in the past, medieval historic buildings were overwhelmed by the new attention of the then-maturing disciplines of art history and historic building conservation (POP 2015, 167). Thus, several representative Romanesque and Gothic churches were "restored" in Transylvania as well, in the spirit of Romanticism, of the search for national expression and stylistic unity, like in Turda, Acâș, Strei, or Alba Iulia.

In Dej, on the inner south wall of the Calvinist church's chancel, a commemorative plaque in black marble with a stone frame records the extensive renovations conducted between 1896 and 1908 at the expense of curator Ferencz VÉKONY and his wife Vilma BRUSZT. After having been declared a historic building in 1902 (ENTZ 1942, 17), the National Commission for Historic Buildings appointed architect István Möller to evaluate the works on the church. He reported that the walls of the 15th-century building were strong and the windows were largely in their original state. However, he also discussed the unprofessionalism of the restoration conducted by Endre FERENCZI on the exterior and by Károly KÁDÁR on the interior, criticizing that the repair of the walls with cement had "endangered the numerous signs and stone carved pieces" (ENTZ 1942, 17). For in this campaign, the exterior plaster of the church was removed entirely, without prior investigation, and replaced with cement mortar, together with the plinth of the building, also coated in a high and consistent layer of the same material (***, *Memoriu* 1975). The shingle roof covering of the nave and chancel was also fitted at the same time, while the three portals of the west tower were closed with double wooden doors and overlights imitating the upper part of the Gothic windows with flamboyant decoration (***, *Dosar desene şi relevee* 1913).

Fortunately, the interior floor and walls were left untouched. They thus preserved

their historical traces, leading to the discovery of interesting details during the 2020 conservation, such as various tombs and crypts with relevant inventory (CSÓK 2021), areas of historical plaster, polychrome decoration with yellow and dark grey on the corbels and frames, sedilia, the place of a former tabernacle and built-in niches (***, *Notă şi dispoziţii de şantier*. 2020).

However, the 18th century furnishings were altered without considering their value. Thus, at the beginning of the 20th century, the gallery in the chancel was removed and the small organ was relocated at floor level, while the west and north tribunes were dismantled and completely remodelled (ENTZ 1942, 15-16). Out of the twenty-seven painted and inscribed panels of the two galleries, twenty-four were reused, with some repainting, to create a single historicist tribune, mounted on the west wall of the nave (LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998, 12; LÁNGI & MIHÁLY 2002, 22-23).

A reconstruction proposal in 1914

■ At the end of the 19th century and the beginning of the following one, the Hungarian Royal Joseph Polytechnic and the Hungarian Royal Public Higher Architectural Industrial School launched a practice of field documentation of the built heritage in collaboration with and financially supported by the National Commission for Historic Buildings, namely the organising of summer survey campaigns for students coordinated by professors from the two institutions. Steindl Imre from the Polytechnic and his assistant, Ernő FOERK, surveyed several Transylvanian monuments, among which the most significant were Alba Iulia, Băgaciu, Prejmer, Moşna, and Biertan (KOVÁCS 2019, 11).

After becoming a professor at the Industrial School and a member of the National Commission for Historic Buildings, FOERK used his earlier experience to continue STEINDL's tradition of the summer campaigns, surveying with teams of ten students the monuments around Mediaş, the churches of Saschiz, Viscri, Copşa Mare, Richiş, and Biertan (KOVÁCS 2019, 10-13). Spanning more than a decade, FOERK published these works between 1912 and 1930, recently reprinted in a new volume (FOERK 2002).

Imre STEINDL would immediately draft proposals for purist restorations of the churches surveyed by his students. The most ambitious reconstruction plan, though never implemented, was his 1898 proposal for the Alba Iulia Cathedral, which called for partially rebuilding the northwest tower and adding pointed pyramidal roofs to both the northwest and southwest belfries (KOVÁCS 2019, 15).

In the same manner, FOERK also based most of his sketches for the restoration of historic buildings on the documentation made by his students. In 1912, after having surveyed the Fortified Church of



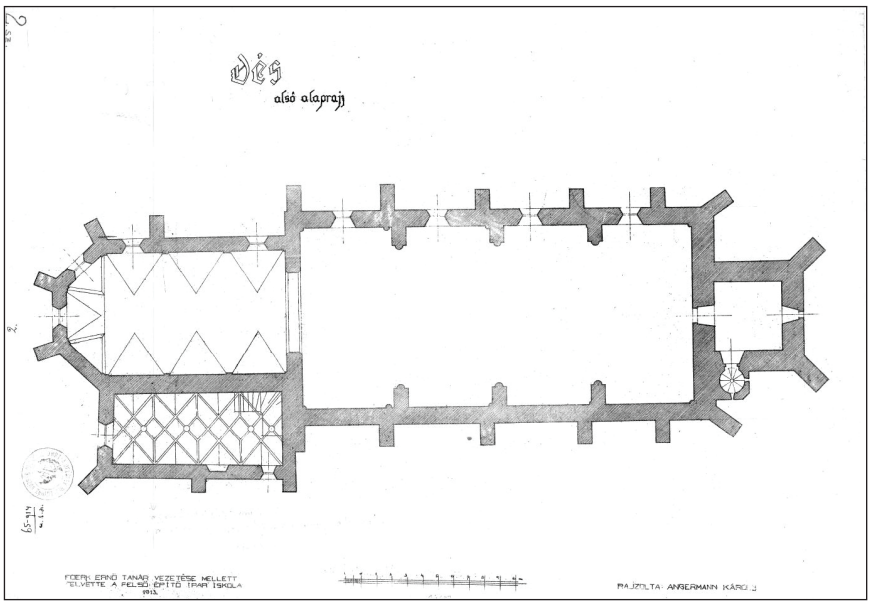
■ ***Fig. 9.*** *Releveul faţadei de sud a bisericii 1913. © Muzeul Maghiar de Arhitectură şi Centrul de Documentare a Protecţiei Monumentelor, număr inventar K 134*
■ ***Fig. 9.*** *Survey of the church's South façade in 1913. © Hungarian Museum of Architecture and Monument Protection Documentation Center, inventory no. K 134*

de câte zece studenţi monumentele din împrejurimile Mediaşului, bisericile din Saschiz, Viscri, Copşa Mare, Richiş şi Biertan (KOVÁCS 2019, 10-13). Desfăşurate timp de mai bine de un deceniu, FOERK a publicat aceste lucrări între 1912 şi 1930, retipărite într-un volum apărut recent (FOERK 2002).

Imre STEINDL obişnuia ca pe baza releveelor studenţilor săi să realizeze aproape imediat propuneri de restaurare cu orientare puristă a bisericilor cercetate. Cel mai ambiţios plan de reconstrucţie, rămas nerealizat, a fost cel din 1898 pentru Catedrala din Alba Iulia, căreia i-ar fi reconstruit parţial turnul de nord-vest şi ar fi plasat acoperişuri piramidale înalte şi ascuţite deasupra acestuia şi a celui de sud-vest (KOVÁCS 2019, 15).

În aceeaşi manieră, şi FOERK şi-a bazat schiţele de restaurare a monumentelor în mai multe rânduri pe documentările făcute de studenţii săi, în 1912, după relevarea Bisericii fortificate din Biertan, acesta fiind însărcinat chiar de către parohia locală să restaureze edificiul, însă din lipsă de fonduri, lucrările s-au blocat (KOVÁCS 2019, 15).

În cazul bisericii reformate din Dej, posibilitatea reconstrucţiei bolţilor medievale prăbuşite fusese discutată în 1912 de către Comisia Naţională a Monumentelor, care la 22 februarie 1913, i-a solicitat lui FOERK să realizeze o propunere pentru aceasta (KOVÁCS 2019, 15). Drept urmare, arhitectul a organizat pentru studenţii săi următoarea campanie de documentare în vara aceluiaşi an la Dej, întocmind o serie de relevee care au

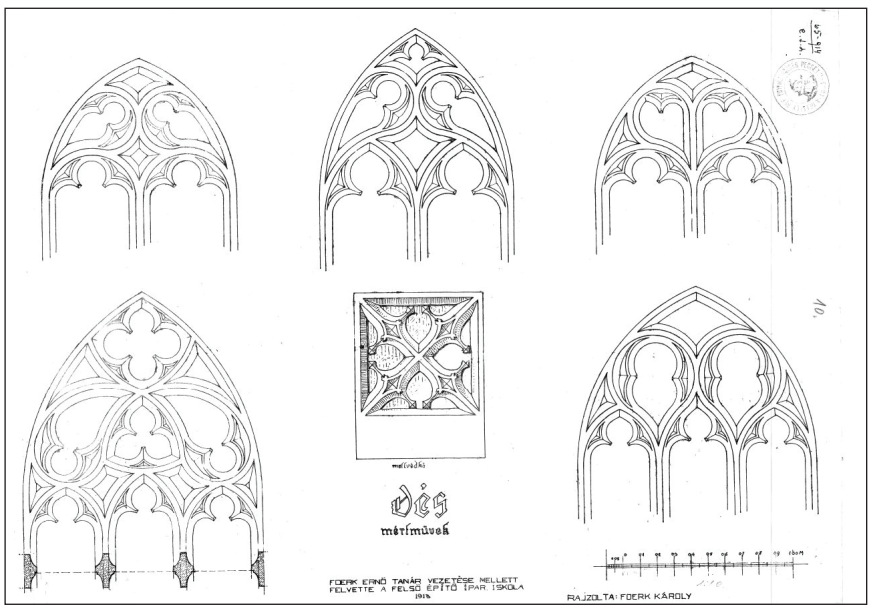


■ ***Fig. 10.*** *Planul etajului bisericii, ***,* Dosar desene și relevee istorice realizate de Școala Regală Maghiară Industrială și de Arhitectură din Budapesta. *1913. © Arhiva Parohiei Reformate Dej*

■ ***Fig. 10.*** *Plan of the church first floor, in ***,* Dosar desene și relevee istorice realizate de Școala Regală Maghiară Industrială și de Arhitectură din Budapesta. *1913. © Archive of the Reformed Parish Dej*

cuprins: planul de situaţie al bisericii, planurile parterului şi etajului, faţade, secţiuni şi schiţe de detaliu cu naşterile bolţilor prăbuşite, ancadramentele uşilor şi ferestrelor, amvonul şi alte piese sculptate (***, *Dosar desene şi relevee* 1913). Apoi, în 1914, arhitectul a realizat pe baza acestora o propunere de restaurare în stil conform concepţiei puriste promovate de Friedrich VON SCHMIDT, al cărui discipol era şi FOERK, care din 1889 beneficiase de o bursă la Viena (BALDAVÁRI, KOVÁCS 2023).

Schiţa păstrată astăzi în arhiva Muzeului Maghiar de Arhitectură şi a Centrului de Documentare a Protecţiei Monumentelor din Budapesta ilustrează secţiunea longitudinală a bisericii relevate în 1913, peste care este suprapusă propunerea de reconstrucţie a bolţilor prăbuşite. Atât în



■ ***Fig. 11.*** *Ferestrele bisericii și detaliu păstrat din parapetul vechii tribune de piatră, ***,* Dosar desene și relevee istorice realizate de Școala Regală Maghiară Industrială și de Arhitectură din Budapesta. *1913. © Arhiva Parohiei Reformate Dej*

■ ***Fig. 11.*** *Church windows and details of the parapet of the old stone gallery, in ***,* Dosar desene și relevee istorice realizate de Școala Regală Maghiară Industrială și de Arhitectură din Budapesta. *1913. © Archive of the Reformed Parish Dej*

Biertan, the local parish commissioned him to restore the building; however, due to a lack of funding, the works stalled (KOVÁCS 2019, 15).

In the case of the Calvinist church in Dej, the possibility of reconstructing the collapsed medieval vaults had been discussed in 1912 by the National Commission for Historic Buildings, which, on February 22, 1913, asked FOERK to draw a proposal for this (KOVÁCS 2019, 15). As a result, the architect organized the following documentation campaign for his students in the summer of the same year in Dej, drawing up a series of surveys that included the church site plan, ground and first-floor plans, façades, sections, and detail sketches of the collapsed vaults' springers, door and window frames, the pulpit, and other carved pieces (***, *Dosar desene şi relevee* 1913). Then, in 1914, the architect crafted on these surveys his restoration proposal in line with the purist concept of Friedrich VON SCHMIDT, under whom FOERK had studied in Vienna since 1889 (BALDAVÁRI, KOVÁCS 2023).

The sketch, preserved today in the archives of the Hungarian Museum of Architecture and Historic Building Protection Documentation Centre in Budapest, illustrates the longitudinal section of the church surveyed in 1913, with the restoration proposal. For both the tower and the nave, FOERK suggested the reconstruction of the ribbed cross vaults, which would have continued from the preserved springers and featured circular and shield-shaped keystones. At the extrados, he proposed adding reinforced concrete supporting elements to anchor the vaults in the transversal walls. Certainly, this intervention would have meant removing the 18th-century ceiling, but also the 16th-century painted beams preserved in the church's attic, and probably the roof structure, at least above the nave. The proposal thus illustrates that although in the early 20th century, the modern approach to historic building protection was gaining ground in Hungary as elsewhere, historicist tendencies continued to persist in practice. In the reconstruction of buildings, FOERK did not hesitate to use his architectural qualities to design in style, seeking to the best of his knowledge to create an ideal image and improve the truncated reality of the buildings developed in time (ROZMANN 2019, 74-81). However, probably due to the outbreak of World War I in the same year, the reconstruction of the vault of the Calvinist church in Dej was eventually dropped.

Some repairs in the 1930s and 1965

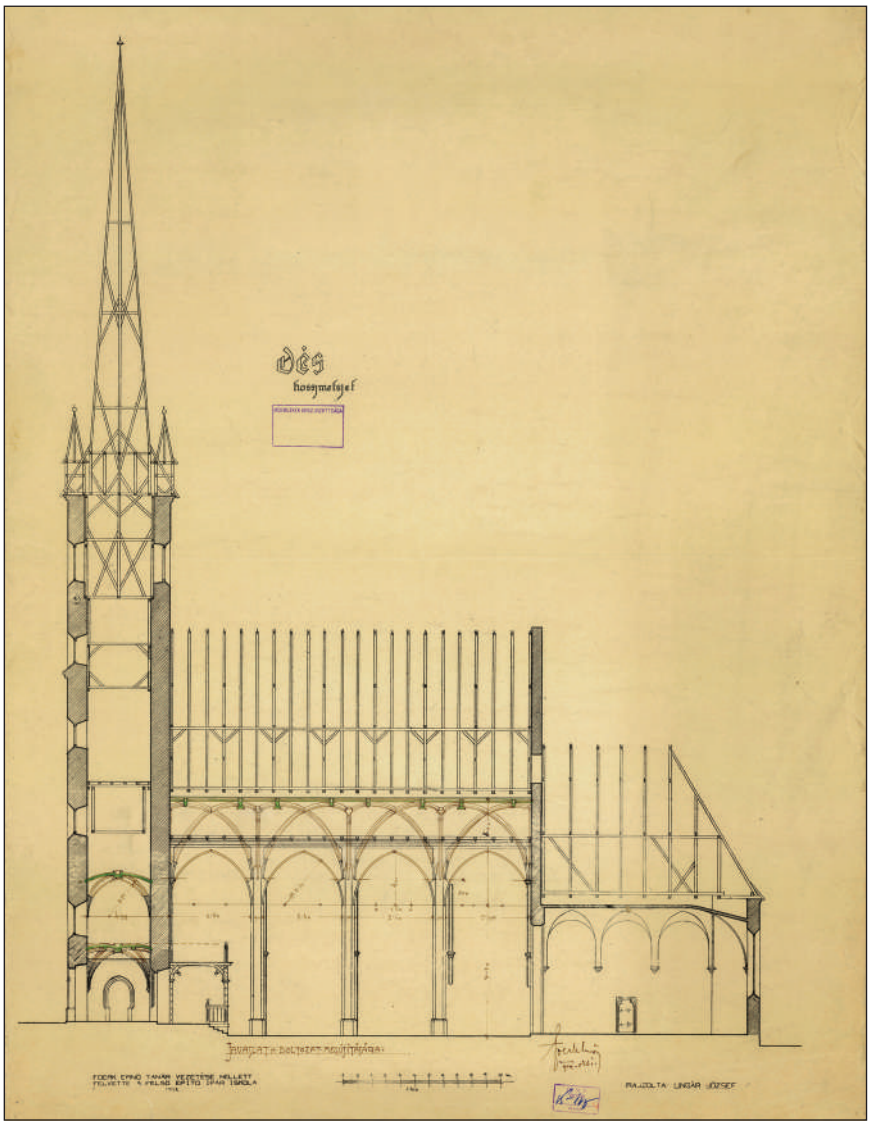
■ In the inter-war period, only minor works were carried out, recorded by the date of September 9, 1930, inscribed on one of the buttresses of the church in Dej, when the zinc plates were installed on the roof of the west tower and the four corner turrets (***, *Memoriu* 1975).

In the 1960s, the most active era of the Directorate for Historic Buildings (DHM),

no works were carried out on the church either, except for a temporary intervention on the roof of the tower. Around 1965, several roof sheets were blown off by the wind, but instead of restoration, only punctual repairs were carried out with galvanized sheet metal fitted from the inside (***, *Memoriu* 1975).

The 1970s restoration

■ Presented as one of the valuable Gothic historic buildings of Transylvania to justify the intervention, the documents in the INP archive and especially the *General report on the capital repair and consolidation works at the Calvinist Church in Dej*, drawn up in 1975 by project manager Katona Kálmán, detail the poor state of preservation of the building in the 1970s and the causes of its deterioration. The condition of the walls was generally good, except for the chancel, where the walls and vaults had cracks up to 5 cm wide, caused by the rotting of the wall plate, as well as by "construction defects", such as the lack of tie rods and the low height of the buttresses on the outside, which had become ineffective in supporting the vault. The 1880 enclosure was leaning outwards in several places and was in danger of collapse due to the thrust caused by the earth behind the walls, the lack of a water drainage system, and inadequate plastering and repairs. There were no sidewalks and gutters around the church so that rainwater was not being drained away from the walls. The lack of horizontal damp-proof insulation at floor level and the previous covering of the plinth and walls with cement had caused major seepage. A careful study of the roof structure above both the church and the tower pointed out that, together with all the ceilings, were made of roughly sawn and hewn fir and spruce. Only the structure of the belfry and the longitudinal beams supporting the nave ceiling were made of oak. In addition, the tower spire and the corner turrets, which had the zinc covering repaired with galvanized sheets, although not more than 50 years old, were in very poor condition. On an area of 260 m^2, there were hundreds of cracks and holes in the covering, through which water poured inside, reducing the strength of the wood and the stability of the roof (***, *Memoriu* 1975). The causes for the deterioration of the covering were some ornaments pressed into it, which had thinned it. Moreover, during the war bullets had pierced it. From the base to the top, the roof of the tower was inclined by approx. 50 cm, menacing to collapse in the south-eastern direction over the church. The nave, chancel, and sacristy were covered at that time with shingle fitted at the beginning of the 20th century, which was also in a "pitiful" state, allowing water to penetrate inside, which had rotted the wood of the roof structure precisely in its most important points. In addition to all this, some inadequate strengthening solutions had been previously conducted, considerably reducing the stability of the



■ ***Fig. 12.*** *Secțiunea longitudinală a bisericii cu propunerea de reconstrucție a bolților prăbușite 1914. © Muzeul Maghiar de Arhitectură și Centrul de Documentare a Protecției Monumentelor, număr inventar K 167*

■ ***Fig. 12.*** *Longitudinal survey section through the church with the reconstruction proposal for the collapsed vaults 1914. © Hungarian Museum of Architecture and Monument Protection Documentation Center, inventory no. K 167*

cazul turnului cât şi cel al navei, este propusă reconstrucţia bolţilor în cruce cu nervuri care urmau să pornească de pe naşterile bolţilor încă păstrate în pereţi şi care să se încheie cu chei de boltă în forme circulare şi de scut. La extrados, FOERK a propus pentru ambele cazuri elemente de susţinere suplimentară din beton armat, care ar fi ancorat bolţile în pereţii transversali. Cu certitudine, această intervenţie ar fi însemnat desfacerea tavanului de secol XVIII, dar şi a grinzilor pictate de secol XVI păstrate în podul bisericii şi probabil şi şarpanta, cel puţin de deasupra navei. Propunerea ilustrează astfel faptul că deşi la începutul secolului al XX-lea, şi în Ungaria se consolida tot mai mult abordarea modernă a protecţiei monumentelor, tendinţele istoriste continuau să persiste în practică. În reconstrucţia edificiilor, FOERK nu a ezitat să îşi folosească calităţile arhitecturale pentru a proiecta în stil, căutând pe măsura cunoştinţelor sale să realizeze o imagine ideală şi să îmbunătăţească realitatea trunchiată a clădirilor formate în procesul istoric (ROZMANN 2019, 74-81). Însă, probabil din cauza izbucnirii Primului Război Mondial în acelaşi an, reconstrucţia bolţii bisericii reformate din Dej a fost în cele din urmă abandonată.

Câteva reparaţii în anii 1930 şi 1965

■ În perioada interbelică s-au realizat doar câteva lucrări minore, atestate de data de 9 septembrie 1930 inscripţionată pe unul dintre contraforturile bisericii din Dej, când s-a montat învelitoarea din tablă de zinc la turnul de vest şi la cele patru turnuleţe de colţ (***, *Memoriu* 1975).

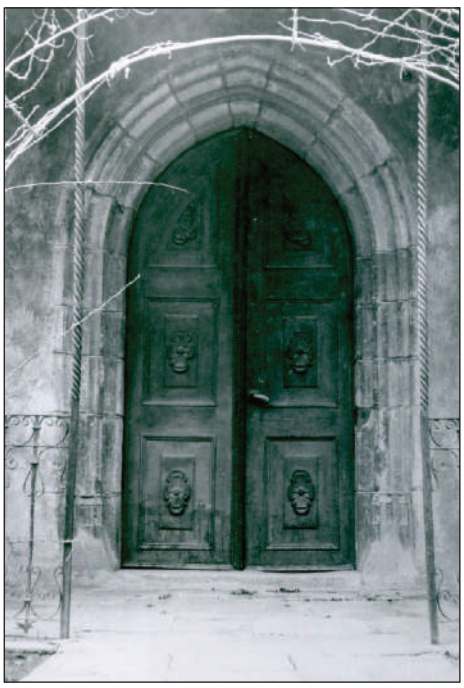
Nici în anii 1960, epoca cea mai activă a Direcţiei Monumentelor Istorice (DMI), nu s-a lucrat la biserică, cu excepţia unei intervenţii provizorii la acoperişul turnului. În jurul anului 1965, mai multe foi de tablă au fost smulse de vânt, dar în locul unei restaurări, s-au făcut doar reparaţii punctuale cu tablă galvanizată, montată de la interior (***, *Memoriu* 1975).

Restaurarea anilor 1970

■ Prezentată ca unul dintre monumentele gotice valoroase ale Transilvaniei pentru justificarea intervenţiei, în documentele aflate în Arhiva INP şi în special în *Memoriul general privind lucrările de reparaţii capitale şi consolidare de la biserica reformată din Dej*, întocmit în 1975 de către şeful de proiect Kálmán KATONA, este prezentată detaliat starea precară de conservare în care se afla biserica în anii 1970 şi cauzele degradării sale. Starea pereţilor era în general bună, cu excepţia corului, unde zidurile şi bolţile aveau fisuri de până la 5 cm lăţime, cauzate de putrezirea cosoroabei, cât şi de unele „defecţiuni de construcţie", ca lipsa tiranţilor şi înălţimea mică a contraforturilor la exterior, care astfel deveniseră ineficiente în sprijinul bolţii. Incinta din anii 1880 era pe mai multe porţiuni înclinată înspre exterior, existând pericolul să se prăbuşească din cauza împingerilor cauzate de pământul din spatele zidurilor, a lipsei de drenuri pentru evacuarea apei din dosul peretelui, precum şi a tencuielilor şi reparaţiilor necorespunzătoare. În jurul bisericii nu exista trotuar şi jgheab, astfel încât apele pluviale nu erau îndepărtate de lângă ziduri. Lipsa izolaţiei hidrofuge orizontale la nivelul pardoselii şi acoperirea anterioară a soclului şi a pereţilor cu ciment cauzaseră infiltraţii majore. La un studiu atent al şarpantei, se constatase că acoperişul bisericii şi al turnului, respectiv toate tavanele, erau executate din lemn de brad şi molid ecarisat şi cioplit. Numai scheletul clopotniţei şi grinzile longitudinale pe care rezemau cele transversale ale tavanului navei erau executate din lemn de stejar. Apoi, coiful turnului şi turnuleţele fiale ce aveau o învelitoare din tablă de zinc, reparată cu tablă galvanizată, deşi nu erau mai vechi de 50 de ani, se aflau într-o stare foarte proastă. La o suprafaţă de 260 m^2, existau sute de crăpături şi găuri în tablă, prin care pătrundea apa în interior, reducând rezistenţa lemnului şi stabilitatea acoperişului (***, *Memoriu* 1975). Cauzele degradării tablei erau nişte ornamente presate în aceasta, care o subţiaseră, respectiv fusese ciuruită de gloanţe în timpul războiului. De la bază şi până la vârf, acoperişul turnului era înclinat cu cca. 50 cm, tinzând să se prăbuşească în direcţia sud-est, peste acoperişul bisericii. Nava, corul şi sacristia erau acoperite la acel moment cu şindrila montată la începutul secolului al XX-lea, aflată, de asemenea, într-o stare „jalnică", ce permitea pătrunderea apei la interior, care putrezise lemnul şarpantei chiar pe porţiunile cele mai solicitate. La toate acestea se mai adăugau şi unele soluţii necorespunzătoare de consolidare realizate anterior, care reduseseră considerabil stabilitatea acoperişului. Tavanul navei era şi el deteriorat, cu grinzi putrezite la reazăm, cu capetele din lemn crăpate şi cu izolaţie termică necorespunzătoare. Cele două clopote se manevrau manual, la o înălţime de 30 m faţă de sol, iar ceasul din turn, orga şi electromotorul acesteia necesitau reparaţii generale. Biserica era încălzită cu calorifere pe gaz inestetice şi rudimentare, iar iluminatul se realiza cu neoane suspendate de tavan sau montate pe coronamentul baroc al amroof. The nave ceiling was also deteriorated, with rotten beams in the support area, cracked wooden ends, and inadequate thermal insulation. The two bells were manually operated at a height of thirty meters above the ground, and the tower clock, the organ, and its electromotor needed general repairs. The church was heated with unsightly and rudimentary gas radiators,



■ ***Fig. 13.*** *Portalul de nord și soclul îmbrăcat în mortar de ciment. © Nicolae SABĂU 1966*
■ ***Fig. 13.*** *The north portal and the plinth covered in cement mortar. © Nicolae SABĂU 1966*



■ ***Fig. 14.*** *Portalul de sud și detaliu al copertinei pe stâlpi și parapet din fier forjat. © Nicolae SABĂU 1966*
■ ***Fig. 14.*** *The south portal and detail of the canopy with wrought-iron pillars and parapet. © Nicolae SABĂU 1966*



■ ***Fig. 15.*** *Consolă cu urme de policromie descoperite în contextul ultimei restaurări. © Ioana RUS-CACOVEAN 2015*
■ ***Fig. 15.*** *Corbel with polychrome traces discovered during the last restoration. © Ioana RUS-CACOVEAN 2015*



■ ***Fig. 16.*** *Urmele tabernacolului descoperite recent pe peretele de nord al corului. ***,* Notă și dispoziții de șantier. *2020. © S.C. UTILITAS C.C.P.D.R.P.C. Srl.*
■ ***Fig. 16.*** *Tabernacle traces recently discovered on the north wall of the chancel. ***,* Notă și dispoziții de șantier. *2020. © UTILITAS C.C.P.D.R.P.C. Ltd.*

and lighting was provided by neon lamps suspended from the ceiling or mounted on the Baroque canopy of the pulpit. The stone floor inside was worn out, and the doors, windows, and furniture needed capital repairs (***, *Memoriu* 1975).

In 1975, the intervention at the turn of the century was seen as "inappropriate", conveying the church an "ugly" appearance, which was sought to be solved through a reparative restoration, intended to be more appropriate for a historic building (***, *Memoriu* 1975).

However, the context at the time was not favourable for science-based extensive restorations. As early as 1972, the state had imposed drastic austerity measures, according to which all the people's councils, enterprises and state institutions were to work hard and implement the steps set out in the *Programme of Measures for Saving the Expenditures of the Socialist Units*, which called for an increase in labour productivity, established as a decisive factor for the victory of the new order and for the country's economic and social development. Expenditure reduction was to be achieved by eliminating waste and establishing a strict regime of savings in each activity. The construction sector had an obligation to manage materials judiciously, to reduce the consumption of wood, cement, and reinforced concrete, to reduce the costs for site organization, and to achieve savings compared to the initial estimates. So, the allocation of substantial funds from the previous decade for the conservation of historic buildings was interrupted.

Then, in 1974, the DHM was reorganized as the Directorate for National Cultural Heritage (DPCN), and gradually lost its design tasks and specialists until 1978, to only keep its role in endorsing and giving recommendations to the few proposals

vonului. Pardoseala din piatră la interior era uzată, iar uşile, ferestrele şi mobilierul necesitau lucrări capitale (***, *Memoriu* 1975).

În 1975, intervenţia de la începutul secolului era văzută ca fiind „necorespunzătoare", conferind un aspect „urât" bisericii, pe care urmăreau să-l rezolve printr-o restaurare reparatoare şi care se dorea a fi una mai adecvată unui monument istoric (***, *Memoriu* 1975).

Totuşi, contextul vremii nu era favorabil unei restaurări extinse pe baze ştiinţifice. Încă din 1972 statul impusese măsuri drastice de economisire potrivit cărora toate consiliile populare, întreprinderile şi instituţiile de stat urmau să muncească din greu şi să implementeze paşii prevăzuţi în *Programul de măsuri pentru economisirea cheltuielilor unităţilor socialiste*, care impunea creşterea productivităţii muncii, stabilită ca factor decisiv pentru victoria noii ordini şi pentru dezvoltarea economică şi socială a ţării. Reducerea cheltuielilor urma să fie realizată prin eliminarea risipei şi prin stabilirea unui regim strict de economii în fiecare activitate. Sectorul construcţiilor avea obligaţia de a gestiona judicios materialele, de a reduce consumul de lemn, ciment şi beton armat, de a diminua costurile de organizare a şantierelor, precum şi de a realiza economii faţă de estimările prevăzute în devizele iniţiale. Deci alocarea de fonduri substanţiale din deceniul anterior pentru restaurarea monumentelor istorice a fost întreruptă.

Apoi, în 1974, DMI a fost reorganizată ca Direcţia Patrimoniului Cultural Naţional (DPCN), pierzându-şi treptat până în 1978 atribuţiile de proiectare şi specialiştii, pentru a-şi păstra doar rolul în avizarea şi oferirea de recomandări puţinelor propuneri făcute de alte instituţii, ca serviciile tehnice ale eparhiilor, singurele care încă se mai bucurau de o oarecare autonomie faţă de stat.

La Dej se simte lipsa implicării DMI, a unei analize riguroase a proiectului şi a specialiştilor de obicei delegaţi să dezbată situaţia pe şantier. De exemplu, s-a studiat destul de sumar materialul de construcţie al bisericii, menţionându-se doar că era construită din piatră de talie la colţuri, contraforturi, cornişe, brâie, ancadramente, respectiv din piatră spartă neregulată la restul zidurilor. Se mai menţionează o „porţiune din cărămidă la calcan", dar niciun rând despre numărul mare de spolia, piese din piatră profilată, în special bucăţi de nervuri reutilizate de la bolţile anterioare, care au fost descoperite recent încastrate în peretele din pod (***, *Notă şi dispoziţii de şantier*. 2020). Calitatea cercetărilor la Dej n-a fost nici pe departe atât de

riguroasă ca cea întreprinsă la Biserica Neagră din Braşov, unde încă din perioada antebelică şi până în anii 1965 s-au făcut analize de laborator la Viena, s-au căutat soluţii pentru identificarea pietrei potrivite pentru fiecare detaliu în parte şi s-a discutat despre modul de patinare, răspunsul diferitelor tipuri de roci la intemperii şi gradele lor de rezistenţă (ROTH 1953; ***, *Proiect A47/1967*; ***, *Proiect 49/1967*; ZEIDNER 1972).

Un alt neajuns a fost lipsa oricărei dezbateri legate de soluţiile propuse pentru tratarea paramentului exterior, aşa cum se procedase în anii 1960 la biserica reformată de pe Strada Kogălniceanu din Cluj (RUS-CACOVEAN 2020). La Dej, după ce au îndepărtat în grabă tencuielile anterioare cu ciment şi au înlocuit pe alocuri pietrele fisurate, care nu fuseseră schimbate la intervenţia anterioară, au refăcut rosturile tot cu ciment, fără să ia măcar în considerare varianta retencuirii şi fără să mai consulte alţi specialişti (***, *Memoriu* 1975).

Din cauza dispoziţiilor statului de a se axa pe economisire şi eficienţă, a apărut şi în restaurare o tendinţă constantă a şantierelor de a se concentra pe rapiditate şi de a efectua numai „lucrări productive", multe intervenţii importante ca cercetările arheologice, studiul pietrelor rămase de la campanii de restaurare anterioare sau alte lucrări minore dar esenţiale pentru îndepărtarea umezelii fiind mereu amânate din cauza manipulării laborioase. Ca să demonstreze că se conformau politicii oficiale, la Dej au întocmit chiar şi un „Raport de producţie", care menţionează pe larg „lucrările ascunse" efectuate (***, *Raport de producţie* 1977).

În plus, majoritatea şantierelor de restaurare din timpul regimului comunist s-au împiedicat mereu de lipsuri la toate nivelurile, de la specialişti şi forţă de muncă calificată, la finanţare sau materiale de calitate. Confiscarea întreprinderilor private nu-i sărăcise doar pe „exploatatori", ci încurcase de fapt întreaga producţie, lipsită de materie primă de calitate, astfel încât noile fabrici au livrat ani de zile doar câteva sortimente din fiecare produs. Izolarea de Occident a cauzat dispariţia mai multor materiale de bază, care au fost înlocuite cum s-a putut, dar a dus la obţinerea unor produse aproape inutilizabile din cauza calităţii lor scăzute (BENTOIU 2019, 340), iar sistemul defectuos de distribuţie a bunurilor a ignorat nevoile reale sau comenzile. La Dej, deşi încă din 1970 fusese elaborată o documentaţie tehnică pentru repararea şi consolidarea acoperişului, avizată de Eparhia Reformată, Departamentul Cultelor şi Consiliul Popular al Judeţului Cluj, din cauza greutăţilor întâmpinate în aprovizionarea şantierului, lucrările nu erau începute nici în anul 1974, fiind nevoie de prelungirea autorizaţiei de construire. Cea mai mare dificultate a fost în legătură cu procurarea lemnului pentru înlocuirea grinzilor putrezite şi a şindrilei de lemn necesare la acoperişul bisericii. La începutul trimestrului III/1974, numai 20% din grinzile necesare fuseseră livrate pe şantier, cu care se înlocuiseră parţial elementele cele mai deteriorate. Însă din lipsa furnizorilor, din cele peste 90.000 de bucăţi de şindrilă necesare, numai 66.000 fuseseră livrate, dar de către două unităţi distincte, cu dimensiuni diferite şi o calitate necorespunzătoare (***, *Memoriu* 1975). Greutăţi similare au fost şi la Palatul Brukenthal din Sibiu, unde pentru îndepărtarea umidităţii ridicate în pereţi, deşi DMI recomandase dotarea acestora cu tuburi Knappen, lucrarea nu a putut fi implementată din cauza faptului că nicio fabrică de ceramică românească nu le producea. Şi, deşi şantierul comandase ţigle ceramice, a primit unele din ciment, având în vedere că fabrica la care fuseseră repartizaţi producea doar acest tip. În plus, fabrica din Bocşa ce trebuia să le livreze parchetul de stejar era mereu închisă „din motive tehnice" (BĂNIŞOR 1957).

După începerea lucrărilor, la o examinare minuţioasă a şarpantelor şi a învelitorilor bisericii din Dej, s-a constatat că şi tabla turnului trebuia înlocuită integral, toate instalaţiile electrice şi de încălzire trebuiau schimbate sau recondiţionate, astfel încât a fost nevoie de modificarea soluţiilor



■ ***Fig. 17.*** *Nervuri ale bolții navei reutilizate în calcanul de est descoperite recent ****, Notă și dispoziții de șantier. *2020. © S.C. UTILITAS C.C.P.D.R.P.C. Srl.*

■ ***Fig. 17.*** *Recently discovered ribs of the nave vault reused in the east fire wall ****, Notă și dispoziții de șantier. *2020. © UTILITAS C.C.P.D.R.P.C. Ltd.*

made by other institutions, such as the technical services of the dioceses, the only ones still enjoying some autonomy from the state.

The lack of DHM's involvement, of a rigorous analysis of the project and of the specialists usually delegated to discuss the situation on site is noticeable in Dej. For example, the construction material of the church was studied rather briefly, the only specifications referring to the use of cut stone for the corners, buttresses, cornices, belt courses, frames, and of irregular crushed stone for the rest of the walls. "A brick part in the fire wall" is also recorded, but no mention of the large number of spolia, blocks of stone, and especially reused ribs from the earlier vaults, which have been recently discovered embedded in the attic (***, *Notă şi dispoziţii de şantier*. 2020). The research quality in Dej was nowhere near as rigorous as that undertaken at the Black Church in Braşov, where from the pre-war period until the 1965s laboratory analyses were carried out in Vienna, solutions were sought to find the right stone for each individual detail, and discussions were held on their patina, the response of different types of rock to weathering and their degrees of strength



■ ***Fig. 18.*** *Detaliu al frizei de crini conservate parțial în podul bisericii.*
© LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998
■ ***Fig. 18.*** *Detail of the lily frieze partially preserved in the church attic.*
© LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998

(ROTH 1953; ***, *Proiect A47/1967*; ***, *Proiect 49/1967*; ZEIDNER 1972).

Another shortcoming was the lack of any debate on the proposed solutions for the treatment of the exterior facing, as was the case in the 1960s at the Calvinist church on Kogălniceanu Street in Cluj (RUS-CACOVEAN 2020). In Dej, after the previous cement plaster was hastily removed and the cracked stones that had not been changed during the previous intervention were replaced, the joints were repointed with cement again, without even considering the possibility of replastering and without consulting other specialists (***, *Memoriu* 1975).

Because of the state's orders to focus on savings and efficiency, the conservation sites developed a constant tendency of prioritising speed and carrying out only "productive works". Many important interventions, such as archaeological research, the study of stones from previous restoration campaigns, or other minor but essential works, such as the removal of dampness, were constantly postponed because of their laborious handling. To comply with the official policy, in Dej was drawn up even a "Production Report", which extensively mentions the "hidden works" that were carried out (***, *Raport de producție.* 1977).

In addition, most of the conservation sites during the communist regime were constantly hampered by shortages at all levels, from specialists and skilled labour to financing or quality materials. The confiscation of private enterprises had not only impoverished the "exploiters", but had in fact hampered the entire production and the quality of raw materials, so that the new factories delivered for years only a few assortments of each product. The isolation from the West caused the disappearance of several basic materials, which were replaced to the possible extent, but resulted in products that were almost unusable due to their low quality (BENTOIU 2019, 340),

prevăzute în documentația inițială (***, *Memoriu* 1975). Constrâns de împrejurări și de faptul că stabilitatea monumentului se înrăutățea tot mai mult, beneficiarul a cerut avizul DPCN pentru consolidarea tavanului de lemn și a șarpantelor cu grinzi și centuri de beton armat, iar învelitoarea să fie din șiță de azbociment în locul șindrilei din lemn mai greu de procurat (***, *Memoriu* 1975). Astfel, începând cu 1975 s-au efectuat intervenții de consolidare la nivelul șarpantei, dar care i-au schimbat aspectul istoric și comportarea mecanică. Zidurile corului și ale sacristiei au primit la partea superioară centuri de beton armat (LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998, 14-17; LÁNGI & MIHÁLY 2002, 22-23). Învelitoarea turnului a fost concepută în două variante, cu tablă de cupru sau de aluminiu, alegându-se cea de-a doua variantă, mai ieftină. În paralel cu înlocuirea învelitorii cu șiță de azbociment s-au consolidat șarpanta și planșeul din lemn de deasupra navei, nervurile bolții sacristiei s-au rostuit cu mortar de ciment, iar ușile și ferestrele au fost reparate și revopsite (***, *Memoriu* 1975). În plus, s-a prevăzut repararea pardoselii și a treptelor bisericii, realizarea unui trotuar din piatră în jurul edificiului și executarea de barbacane pentru evacuarea apei din spatele zidului de sprijin (***, *Memoriu* 1975).

Ultimul document de arhivă este o dispoziție de șantier din martie 1977 referitoare la desfacerea mortarelor de ciment. Și deși încălzirea defectuoasă și iluminatul improvizat reprezentau un mare pericol de incendiu, probabil din lipsa fondurilor, nu s-a mai realizat instalația de încălzire centrală propusă și nici iluminatul cu candelabre la tavan și corpuri în consolă la pereți, abia mai târziu, în 1998, fiind montată o serie de corpuri de iluminat moderne, cu abajururi de formă sferică pe platbande metalice.

Din cauza contextului nefavorabil și grabei cu care s-a intervenit asupra bisericii reformate din Dej, memoriul prezintă și unele erori de datare a fortificației din jurul edificiului în funcție de anul 1458 al capelei Sfântul Duh, respectiv omisiuni, lăsând nepomenite unele intervenții ca îndepărtarea copertinei cu stâlpi și parapet din fier forjat îmbrăcat în vegetație cățărătoare, vizibile în fotografiile din 1966, sau lipsa oricărei mențiuni legate de grinzile de secol XVII din pod, care au fost puse în valoare abia la restaurarea din anii 2020.

Concluzii

■ Așadar, la biserica reformată din Dej, au avut loc două restaurări istorice de la sfârșitul secolului al XIX-lea și până în 1977. Însă, deși în 1975 intervenția de la începutul secolului era văzută ca fiind „necorespunzătoare", conferind un aspect „urât" bisericii pe care inițial au intenționat să-l rezolve printr-o restaurare reparatoare mai adecvată unui monument istoric, în cele din urmă contextul vremii nu a fost favorabil unei lucrări pe criterii științifice. Rezultatul a fost mai degrabă o intervenție de consolidare și reparații extinse și aceasta neterminată conform proiectului din cauza măsurilor de economisire impuse după 1972 de către stat și pierderea autorității DMI în proiectare, care i-au făcut imposibilă implicarea pe șantier așa cum procedase la alte monumente importante cu un deceniu mai devreme.

Bibliografie / Bibliography

Surse arhivistice și în manuscris / Archival and manuscript sources:

■ ***, *Dosar desene și relevee istorice realizate de Școala Regală Maghiară Industrială și de Arhitectură din Budapesta*. 1913. Arhiva Parohiei Reformate Dej.
■ ***, *Memoriul general privind lucrările de reparații capitale și consolidare de la biserica reformată din Dej*. 1975. Arhiva INP, Fond DMI.

- ***, *Notă şi dispoziţii de şantier*. 2020. S.C. UTILITAS CCPDRPC S.R.L.
- ***, *Proiect A47/1967*. Arhiva INP, Fond DMI, Dosar nr. 1300.
- ***, *Proiect 49/1967*. Arhiva INP, Fond DMI, Dosar nr. 1300.
- ***, *Raport de producţie la biserica reformată din Dej*. 1977. Arhiva INP, Fond DMI.
- ZEIDNER, Helmut. 1972. *Raport asupra naturii şi procesării pietrelor la Biserica Neagră din Braşov*, Fond DMI, Dosar nr. 1300.
- ROTH, Frederic. 1953. *Proiect 347/18*. Arhiva INP, Fond DMI, Dosar nr. 1296.
- BĂNIŞOR, M. 1957. *Raport*. Arhiva INP, Fond DMI, Dosar nr. 8238.
- CSÓK, Zsolt. 2021. *Cercetare arheologică preventivă. Biserica Reformată-Calvină din Dej*. Cluj-Napoca: manuscris / manuscript.
- KISS, Loránd. 2016. *Studiu de parament la Biserica Reformată din Dej (jud. Cluj)*. Bozeni: manuscris / manuscript.
- KOLOZSI, Tiberiu. 2016. *Studiu privind restaurarea elementelor din piatră din cadrul Bisericii Reformate Dej*. Cluj-Napoca: manuscris / manuscript.
- LÁNGI, József; MIHÁLY, Ferenc; KIS, Margit; KIRIZSÁN, Imola şi SZABÓ, Bálint. 1998. Biserica reformată din Dej, judeţul Cluj. *Inventarierea patrimoniului arhitectural din Transilvania având pictură murală şi/sau planşeu casetat pictat*. Bucureşti: manuscris / manuscript.
- MIHÁLY, Melinda. 2013. *Lapidarul medieval al Muzeului Naţional de Istorie a Transilvaniei* Teză de doctorat la Universitatea Babeş-Bolyai. Cluj-Napoca: manuscris / manuscript.
- POP, Virgil. 2015. *Restaurarea bisericilor medievale în epoca barocă*. Teză de abilitare la Universitatea Tehnică din Cluj. Cluj-Napoca: manuscris / manuscript.
- RUS-CACOVEAN, Ioana. 2016. *Studiu istoric al Bisericii Reformate, Piaţa Bobâlna, nr. 6, Dej, jud. Cluj*. Cluj-Napoca: manuscris / manuscript.
- SABĂU, Nicolae. 1966. *Aspecte ale arhitecturii ecleziastice de piatră romanice şi gotice din Dej şi împrejurimi*. Lucrare de diplomă la Facultatea de Istorie şi Filosofie a Universităţii Babeş-Bolyai. Cluj: manuscris / manuscript.
- TÓTH, Boglárka. 2019. *Jelentés a Dési Református Templomban 2019-ben végzett dendrokronológiai vizsgálatról*. Miercurea Ciuc: manuscris / manuscript.

Surse publicate / Published sources

- BALDAVÁRI, Eszter & KOVÁCS, Gergely Károly. 2023. 155 éve született Foerk Ernő építész, a hazai műemlékvédelem jelentős alakja. *Magyar Építészeti Múzeum és Műemlékvédelmi Dokumentációs Központ*, https://memmdk.hu/cikkek/evfordulok/155-eve-szuletett-foerk-erno-epitesz-a-hazai-muemlekvedelem-jelentos-alakja (27.10.2024).
- BENTOIU, Annie. 2019. *Timpul ce ni s-a dat. Memorii 1944-1959*. Bucureşti: Editura Humanitas.
- DRĂGUŢ, Vasile. 1979. *Arta gotică în România*. Bucureşti: Editura Meridiane.
- ENTZ, Géza. 1942. *A dési református templom*. Kolozsvár: *Erdélyi Tudományos Füzetek*.
- ENTZ, Géza. 1945. *A dési középkori templomok legrégibb ábrázolásai*. Kolozsvár: *Erdélyi múzeum*.
- ENTZ, Géza. 1944. Szolnok-Doboka műemlékei. *Szolnokdoboka magyarsága*, ed. SZABÓ T., Attila. Dej-Cluj.
- FOERK, Ernő, ed. 2002. *A Magyar Királyi Állami Felső Építő Ipariskola szünidei felvételei 1912-1942*. Budapesta: TERC.



■ ***Fig. 19.*** *Grindă decorată cu palmete stilizate conservată în podul bisericii.*
© LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998

■ ***Fig. 19.*** *Beam decorated with stylized palmettes preserved in the church attic.*
© LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998

while the defective system of distribution of goods ignored the orders or real needs. In Dej, although technical documentation for the repair and consolidation of the roof had been drawn up as early as 1970, endorsed by the Calvinist Eparchy, the Department of Religious Affairs, and the People's Council of Cluj, due to the difficulties encountered in supplying the building site, work stalled as late as 1974, and the building permit had to be extended. The greatest difficulty was related to the procurement of wood to replace the rotten beams and wooden shingles needed for the church roof. By the beginning of the third quarter of 1974, only 20% of the required beams had been delivered to the site, allowing the partial replacement of the most damaged elements. However, due to a lack of suppliers, only 66,000 of the more than 90,000 pieces of needed shingle had been delivered, but by two separate units, of different sizes and inadequate quality (***, *Memoriu* 1975). Similar difficulties were encountered at the Brukenthal Palace in Sibiu, where, although the DHM had recommended that the walls be fitted with Knappen tubes to remove the high dampness, the works could not be carried out because no Romanian ceramic factory produced these. Moreover, although the site had ordered ceramic tiles, it received cement ones, as the factory to which they had been assigned produced only this type. In addition, the factory in Bocşa that was supposed to deliver the oak parquet was always closed "for technical reasons" (BĂNIŞOR 1957).

After the beginning of the works and a thorough examination of the roof structure and covering of the church in Dej, it was found that the tower sheet metal also had to be completely replaced, all the electrical and heating installations had to be made anew or reconditioned, so that the solutions provided in the initial documentation needed to be changed (***, *Memoriu* 1975). Under these circumstances and in view of the worsening stability of the building, the beneficiary asked the DPCN for its opinion on the consolidation of the wooden ceiling and roof structures with reinforced concrete beams and belts, and on roofing with asbestos cement shingle instead of

the more difficult-to-obtain wooden one (***, *Memoriu* 1975). Thus, from 1975 onwards, consolidation works were carried out on the roof structure, but this changed its historical appearance and mechanical behaviour. The walls of the chancel and sacristy received reinforced concrete ring beams at the top (LÁNGI, MIHÁLY, KIS, KIRIZSÁN & SZABÓ 1998, 14-17; LÁNGI & MIHÁLY 2002, 22-23), while the tower's roof cover was designed in two variants, with copper or aluminium plates. Eventually, the latter was chosen as the cheaper option. In parallel with the replacement of the asbestos cement shingle, the timber roof structure and timber ceiling above the nave were reinforced, the ribs of the sacristy vault were grouted with cement mortar, and the doors and windows were repaired and repainted (***, *Memoriu* 1975). In addition, it was planned to repair the church floor and steps, build a stone pavement around the building, and make barbicans to drain water from behind the precinct (***, *Memoriu* 1975).

But the last archival document is a change order dated March 1977 concerning the removal of cement mortar. Moreover, although the faulty heating and improvised lighting posed a great fire hazard, probably due to a lack of funds, the proposed central heating system and lighting with ceiling chandeliers and cantilevered wall fixtures were not implemented. It was only later, in 1998, that a series of modern lighting fixtures with spherical lampshades on steel strips were installed.

Due to the unfavourable context and the hasted intervention on the Calvinist church in Dej, the general report also includes some errors, dating the fortification around the building in 1458, the same year as the Holy Spirit chapel. There are also omissions, failing to mention some interventions, such as the removal of the canopy with wrought-iron pillars and parapet covered in climbing vegetation, visible in the 1966 photographs, or the 17th-century beams in the attic, which were brought to the fore only during the 2020s intervention.

Conclusions

■ The Calvinist church in Dej underwent two historical restorations from the end of the 19th century until 1977. However, although in 1975 the turn-of-the-century intervention was seen as "inappropriate", conveying the church an "ugly" appearance, which was initially to be solved through a reparative restoration more appropriate for a historic building, in the end, the context of the time was not favourable to scientific works. The result was rather an intervention for consolidation and extensive repairs, which was not completed according to the design due to the austerity measures imposed by the state after 1972 and the loss of DHM authority in design, for which it became impossible to get involved on the site as it had done for other important historic buildings a decade earlier.

- FORSTER, Gyula. 1905. A műemlék védelme a magyar kormány visszaállítása óta 1867-1900. *Magyarország Műemlékei*.
- GERGELY, Kovács. 2019. The History of the Summer Survey of the Hungarian Royal Public Higher Architectural School – in the Mirror of Collection resources. *Ybl Journal of Built Environment*.
- GRANASZTÓINÉ GYÖRFFY, Katalin. 1996 A Műemlékek Országos Bizottságának tevékenyége a trianoni békekötés után (1920–1934). *A magyar műemlékvédelem korszakai. Tanulmányok*, ed. BARDOLY, István & HARIS, Andrea. Budapest.
- KÁDÁR, József; TAGÁNYI, Károly; RÉTHY, László; POKOLY, József. 1902. Deés. *Szolnok-Doboka vármegye monographiája* III.
- KÁDÁR, József. 1882. *A Deési Ev. Ref. Egyházközség története kapcsolatban a város kiválóbb eseményeivel*. Dés.
- LÁNGI, József & MIHÁLY, Ferenc. 2002. *Erdélyi falképek és festett faberendezések* I. Budapesta: Állami Műemlékhelyreállítási és Restaurálási Központ.
- MÂNZAT, George. 2006. *Monografia oraşului Dej*. Dej: Editura Astra.
- MIHÁLY, Melinda. 2010. Fragmente din zidul celei de-a doua incinte a oraşului medieval, Cluj-Napoca. *Enciclopedia virtuală maghiară din România*, http://referinte.transindex.ro/enciclopedie/monument.php?id=244 (26.03.2024).
- MURÁDIN, Katalin. 1994. *Faragott kőszószékek Erdélyben*. Budapest-Kolozsvár: Editura Polis.
- ROZMANN, Viktor. 2019. The Turn-of-The-Century Monument Protection Practice in Light of Ernő Foerk's Work. *YBL Journal of Built Environment*.
- RUS-CACOVEAN, Ioana. 2013. Lucrările experimentale de restaurare din anii 1970-1973 a Bisericii Adormirii Maicii Domnului din Strei, Hunedoara. *Volumul omagial Studii de istoria artei, Nicolae Sabău*. Cluj-Napoca: Editura Argonaut.
- RUS-CACOVEAN, Ioana. 2017, "SOCIALISM. HAPPINESS." The "NEW WAY" of the Haller Castle in Coplean after 1950. *Annales Universitatis Apulensis. Series Historica*, Universitatea „1 Decembrie 1918" din Alba Iulia.
- RUS-CACOVEAN, Ioana. 2020. Dezbateri principiale cu ocazia restaurării Bisericii Reformate de pe Strada Kogălniceanu din Cluj în anii 1957-1962. *Istoria ca interogaţie. Mariei Crăciun, la o aniversare*. Cluj-Napoca: Editurile Mega şi Argonaut.
- RUS-CACOVEAN, Ioana. 2021. "A Disaster for the History of Transylvanian Architecture, a Disgrace for the Local Bodies that 'Take Care of it' and a Load on the Conscience of Architects and People of Culture from this Country". The Fate of the Bánffy Castle in Bonţida during the Communist Regime in Romania. *Brukenthal. ActaMusei*.
- RUS-CACOVEAN, Ioana. 2021. Condemned Historic Restorations and Restorations Preserved as Document. *Transylvania Nostra Journal*.
- RUS-CACOVEAN, Ioana. 2023. Is "Conservation in Ruin" Always the Best Solution? The Case of the Romanesque Church in Gârbova. *Studia Universitatis Babeş-Bolyai Historia Artium*.
- RUSU, Adrian Andrei. 2005. *Castelarea carpatică: fortificaţii şi cetăţi din Transilvania şi teritoriile învecinate: sec. XIII-XIV*. Cluj-Napoca: Editura Mega.
- SIPOS, Dávid. 2017. Néhány adat a történelmi Dési, Széki és a Görgényi református egyházmegyék orgonáiról. *Studia Universitatis Babeş-Bolyai Theologia Reformata Transylvanica*.
- VĂTĂŞIANU, Virgil. 1959. *Istoria artei feudale în Ţările Române*. Bucureşti: Editura Academiei.
- WEISZ, Attila. 2007. *Száz erdélyi műemlék*. Cluj-Napoca: Editura Utilitas.

■ MAKAY Dorottya[1]

Mottó: „Oszd meg a tudásodat másokkal: ez az egyik módja annak, hogy halhatatlan légy.” (Gyaco Tendzin, 14. dalai láma)

Számadás – az erdélyi építettörökség-védelem egy kolozsvári műhelyének 20 éves beszámolója

AD HONOREM DR. SZABÓ BÁLINT (1944–2024)

■ **Kivonat:** *Amikor ezen cikk megírására felkért a* Transsylvania Nostra *folyóirat szerkesztősége, akkor születésnapra készültünk: dr. SZABÓ Bálint 80. születésnapjának megünneplésére. A 2023–24-es időszak évfordulókban gazdag: számomra 30 év a műemlékvédelemben, az Irod M csapata 20 éve „az épített örökség megőrzésének elkötelezettjeként” / Dedicated to built heritage restoration (20) tevékenykedik, melyhez 10 éves múlttal csatlakozik a ConsolideM Kft., áfamentes entitásként szolgálva az egyházak, civil társadalmi szervezetek vagy magánszemélyek örökségvédelmi beruházásait.*

Adta tehát magát a téma: mérlegkészítés. 20 év adataiból kiindulva, az alapokat biztosító ideológia áttekintése által: (2.) néhány példa a kolozsvári (erdélyi) tartószerkezet-helyreállítási iskola alaptételeiből; a cikk gerincét pedig tevékenységi beszámoló képezi: (3.) erdélyi emblematikus épületek megújulása – avagy két kolozsvári Europa Nostra *díj között (1998–2024), illetve (4.) az épített örökség zömét képező átlagos történeti épületek helyreállításának kihívásai. Ahhoz, hogy egy kigondolt megoldás vagy egy kidolgozott munkamenet ne csak egy szűkebb szakmai csoportot szolgáljon, hanem arra mások is építhessenek, publikálásra, információmegosztásra van szükség: (5.) a szakmai oktatás és publikálás fontossága.*

2024. június 14-én bővebb munkatársi, baráti körben kiállításmegnyitót, előadásokat és kerekasztal-beszélgetést magában foglaló szakmai nappal állítottuk meg néhány órára az időt. Felidéztük, hogy az összkép meglátásának, a folyamatok felismerésének, a tevékenységünk kiértékelésének igényét visszavonhatatlanul elsajátítottuk, sőt igyekszünk tovább örökíteni. Mesterünk ebben is, mint a szakmai igényesség és széleslátókörűség kívánalmában, SZABÓ Bálint volt. Tanítóink munkája a mi eredményeinkben is jelen van.

Ezeket a gondolatokat kívántuk az alábbi cikkben megfogalmazni, illusztrálni, megmutatni, hogy tanítványai munkáiban él tovább a mester. Ad honorem Magister! *Sajnos az év nemcsak évfordulókban, de búcsúkban is bővelkedett, így a köszöntő megemlékezéssé, szakmai főhajtássá lénye-*

1 Dr., mérnök, műemlékvédelmi szakmérnök, az Irod M és a ConsolideM Kft. alapító-igazgatója, Kolozsvár, Románia.

Motto: “Share your knowledge. It is a way to achieve immortality.” (Tenzin Gyatso, His Holiness the 14th Dalai Lama)

Account – 20-Year Report of a Transylvanian Built Heritage Conservation Workshop

AD HONOREM BÁLINT SZABÓ, PhD (1944-2024)

■ **Abstract:** *When the editorial board of the* Transsylvania Nostra *journal invited me to write this article, we were preparing for Bálint SZABÓ’s 80th birthday. 2023-2024 has been rich in anniversaries: I have personally been involved in heritage conservation for 30 years, the Irod M team has been working and “dedicated to built heritage restoration” for 20 years, which has been joined by the 10-year-old ConsolideM Ltd., a VAT-exempt entity in the service of the heritage-related investments of churches, civil society organisations or private individuals.*

So the topic was obvious i.e. drafting a written account, based on 20 years of data, by reviewing the ideology that underpins it: (2) a few examples of the core principles of the Cluj (Transylvanian) School of load-bearing structure restoration; while the backbone of the article is an activity account: (3) the revival of Transylvanian emblematic buildings – between two Europa Nostra *Awards in Cluj-Napoca (1998-2024) and (4) the challenges of conserving minor historic buildings, i.e. the bulk of built heritage. In order to ensure that a solution or a working process not only serves a narrower professional group, but can also be built upon by others, it is necessary to publish and disseminate information: (5) the importance of professional training and publication.*

On June 14, 2024, we stopped time for a few hours with a professional day including an exhibition opening, lectures, and a round table discussion with a wider group of colleagues and friends. We recalled that the need to see the big picture, acknowledging what was happening and evaluating our activities were something we had definitely acquired and were trying to pass on.

1 PhD, engineer, historic building conservation specialist, founder and head of Irod M and ConsolideM Ltd., specialist in historic building conservation, Cluj-Napoca, Romania.

gült át, mire elkészült, mire nyomtatásban megjelenik. SZABÓ Bálint halhatatlan, hisz tudását megosztotta, örökké él.

■ **Kulcsszavak:** építettörökség-védelem, empirikus-intuitív tartószerkezeti koncepció, a kolozsvári (erdélyi) tartószerkezet-helyreállítási iskola alapelvei, történeti épületek felújítása, műemlék-helyreállítás, szakmai oktatás, képzés

1. Bevezető gondolatok

■ Amikor ezen cikk megírására felkérést kaptam a *Transsylvania Nostra* szakfolyóirat szerkesztőségétől, a szándék az volt, hogy dr. SZABÓ Bálint 80. születésnapja tiszteletére egy tudományos igényességű írás készüljön, ezzel fejezve ki hálánkat mindenért, amit 1992-től egyfelől személyesen,[2] másfelől, munkatársaim által, a különböző szakoktatási programokban és konferenciákon történő részvételünk során kaptunk, mindazt, ami sokkal több az átfogó szakmai tudás megosztásánál. Az írás célja, hasonlóan a 2014-ben készült tiszteletadó cikkhez, mely „A kolozsvári Farkas utca barokk jellegű fedélszerkezetei" címet kapta (MAKAY 2014), az, hogy ezt a köszönetet egy olyan tematika kifejtése által fejezzük ki, melynek alapját az a tudásanyag képezi, amelynek elsajátításában meghatározó szerepe volt SZABÓ Bálint szakmai iránymutatásának.

Azonban már a megírás időszaka és nyilván a megjelenés pillanata az erdélyi örökségvédelmi szakma egy újabb korszakába esik, amikor az „alapító atyák"[3] már nincsenek közöttünk, nem szólnak hozzá – dicsérve vagy fejcsóválva – prioritásainkhoz, munkamódszereinkhez, helyreállítási koncepcióinkhoz, meglátásainkhoz, eredményeinkhez.

Az ilyen jellegű esszék két különböző fókusszal készülhetnek, az egyik elsősorban SZABÓ Bálint személyére és a közös szakmai múlt felelevenítésére összpontosítana, mi azonban a másik utat választottuk, melyben áttekintést adunk arról, mekkora többszöröző hatása lehet egy-egy karizmatikus vezetőnek, rendszerépítő szakembernek, született oktatónak. Úgy tekintjük, hogy mind közvetve, mind közvetlenül csapattagjaink szakmai tudása, felelősségvállalása, munkabírása és ilyetén megvalósításaink SZABÓ Bálint tanítása, cikkei, szótárai – azaz tevékenysége nélkül, ebben a formában, ezekkel az eredményekkel nem jöhetett volna létre.

Bár mi mérnökök szeretjük a számokat a tevékenység, a hatékonyság vagy eredményesség kifejezésére, ebben a cikkben a terjedelem féken tartása érdekében mégis lemondtunk a száraz statisztikai adatok közléséről. A későbbiekben az Irod M 20., illetve a ConsolideM Kft. 10. alapítási évfordulójára készült kiállítási anyagokból szemlézünk.

Bár továbbra is igaz Romániában, hogy nincs elég szakember, a minőség sok esetben megkérdőjelezhető, a bürokrácia burjánzik, a szabályozás ellentmondásos, és a műszaki szabványok az új épületeket szolgálják – mégis lehetünk optimisták. Létezik egy relatív stabilitás, a történeti épületek helyreállítására fordítható anyagi keret sokkal nagyvonalúbb, amely úgy jöhetett létre, hogy döntési helyzetbe kerültek többen, akiknek szívügye az értékvédelem.[4] A kutatás–tervezés–kivitelezés minden lépcsőfokán találhatók képzett szakemberek, így egyre több projekt zárható le sikeresen. Az utolsó másfél évtized eredményeit egyértelműen a rendszerváltás utáni első évtized stratégiai, képzési programjai alapozták meg. Az a 150-nél is több történeti épület, amelynek teljes vagy részleges helyreállítása elkészült vagy kivitelezése folyamatban van a csapatunk által kidolgozott, 350-et meghaladó kutatási és tervdokumentáció alapján, tulajdonképpen közvetetten SZABÓ Bálint eredményeinek is tekinthetők.

Bálint SZABÓ was our master in this, as well as in the demand for professionalism and a broader vision. Our teacher's work is also present in our achievements.

These are the thoughts we wanted to express and illustrate in the following article, to show that the master lives on in the works of his students. Ad honorem Magister! *Unfortunately, the year abounded not only in anniversaries but also in farewells, so the toast turned into a commemoration, a professional eulogy, by the time I got ready to have it published. Bálint SZABÓ is immortal, for he shared his knowledge and will live forever.*

■ **Keywords:** built heritage protection, empirical-intuitive load-bearing structure concept, principles of the Cluj (Transylvanian) school of load-bearing structure rehabilitation, restoration of heritage buildings, historic building conservation, professional education, training

1. Opening ideas

■ When the editors of the *Transsylvania Nostra* journal asked me to write this article, the intention was to deliver a scientific paper honouring Bálint SZABÓ, PhD, on his 80th birthday, expressing our gratitude for all that I have personally received since 1992 on the one hand[2], and on the other what my colleagues got through our participation in various specialisation programmes and conferences, as we have received much more than just the mere sharing of comprehensive professional knowledge. The aim of this article, similar to the 2014 tribute article titled "Baroque Roof Structures on Mihail Kogălniceanu Street in Cluj-Napoca" (MAKAY 2014), is to express gratitude by presenting a theme based on the knowledge that we acquired thanks to Bálint SZABÓ's influential professional guidance.

However, already the time of writing and obviously the time of publication mark a new age in the Transylvanian heritage conservation profession, when "the founding fathers"[3] are no longer among us, they do not comment – praising or shaking their heads – on our priorities, our working methods, our restoration concepts, our insights, or our results.

Such essays could be written with two different focuses: one could concentrate primarily on Bálint SZABÓ and our common professional past. However, we have chosen the other way, giving an overview of the multiplier effect that a charismatic leader, a system-builder, a born tutor can have. We consider that without Bálint SZABÓ's teaching, articles, dictionaries – in other words, his activity –, the professional knowledge, responsibility, work ethic, and achievements of our team members would not have been possible in this form, with such results.

Although we engineers like to use numbers to express activity, efficiency, or effectiveness, in this article we have refrained from giving dry statistics to keep it shorter.

2. Néhány példa a kolozsvári (erdélyi) tartószerkezet-helyreállítási iskola alaptételeiből

■ SZABÓ Bálint az összefüggések feltérképezésének, a teljes kép felvázolásának, a szintézisek megfogalmazásának tántoríthatatlan híve, meggyőződése volt, hogy a félreértések elkerüléséhez és a témák tudományos igényű feldolgozásához elengedhetetlen a fogalmak tisztázása. Cikkei, könyvei, illusztrált szakszótárai, gazdag bibliográfiája rögzítették azt az eszmerendszert, melyet a kolozsvári (vagy általánosabban erdélyi) helyreállítási, pontosabban tartószerkezet-helyreállítási iskolának nevezhetünk.

Jelen fejezetben ebből az átfogó eszmerendszerből három olyan alapelvcsoportot emelünk ki, amelyeket mindennapi kutató-tervező tevékenységünk irányelveiként alkalmazunk, és tudományos cikkekben, oktatói tevékenységben igyekszünk továbbadni.

2.1. Történeti fedélszerkezetek intrinzik tartószerkezeti és örökségi értéke

A XXI. század harmadik évtizedére lassan általánossá válik az érdeklődés a történeti fedélszerkezet iránt, nemcsak Európa- vagy világszerte, de Romániában is. Évtizedeken át úgy fogalmaztunk, hogy a történeti fedélszerkezetek a műemlék-helyreállítás árvái, az állami egyetemi alapképzésben (legyen az mérnöki vagy építészképzés) leginkább nem tanítják.[5] Így már az is kérdés, hogy melyik szakmai csapat készíti el a tetőszerkezetek műemléki – építészeti, geometriai, tartószerkezeti és állapotfelmérését?

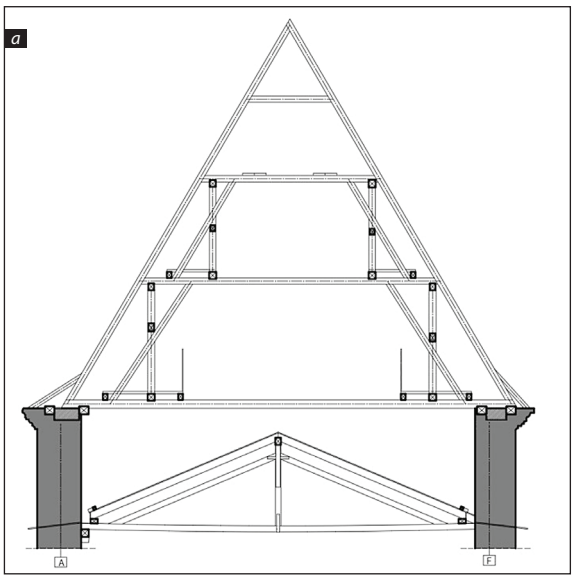
Az, hogy Erdélyben mára már több történeti tartószerkezet-helyreállítást tervező műhely foglalkozik rutinszerűen a fedélszerkezetekkel, vagy hogy már a Kárpátok vonalától keletre és délre eső történelmi régiók építészei is felfedezték az eklektikus, XIX. századi épületek fedélszerkezeteinek szépségét, illetve hogy művészettörténészek figyelme is csatlakozik a dendrokronológusok[6] és farestaurátorok[7] érdeklődéséhez – meggyőződésünk szerint dr. SZABÓ Bálint személyes és az 1990-es évek első felében végzett, akkor fiatal, kezdő tervezőmérnökök szisztematikus és következetes munkájának köszönhető. Az érdeklődés az ő esetükben egyfelől a külföldön összegyűlt tudás[8] romániai terjesztése és adaptációja, illetve tudományos kutatások (doktori dolgozatok) keretében történő feldolgozását jelentette. (1. a[9], 1. b[10], 1. c[11] ábrák)

In the following, we will take a look at the exhibition material for the 20th anniversary of Irod M and the 10th anniversary of ConsolideM Ltd.

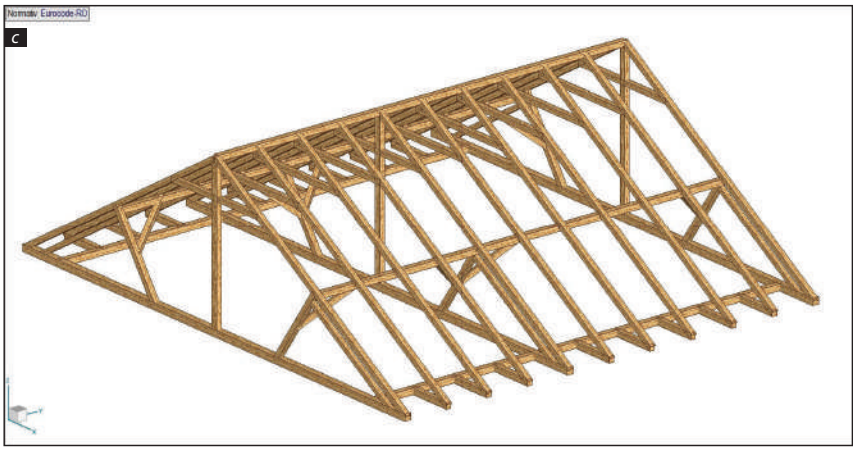
While it is still true that there are insufficient professionals in Romania, quality is often questionable, bureaucracy is rampant, legislation is controversial, and technical standards serve the new buildings, we can still be optimistic. There is a relative stability, a much more generous financial framework for the conservation of heritage buildings, which has come about by placing more people concerned with heritage value preservation in decision-making positions.[4] With skilled professionals at every stage of the research, design, and implementation process, more and more projects are being successfully completed. The achievements of the last decade and a half have clearly been based on the strategic and training programmes of the first decade after the change of regime. The more than 150 historic buildings that have been fully or partially conserved or are under rehabilitation, based on more than 350 research and design documents developed by our team, can in fact be indirectly attributed to Bálint SZABÓ.

2. A few examples of the core principles of the Cluj (Transylvanian) School of load-bearing structure restoration

■ Bálint SZABÓ was a firm believer in mapping connections, sketching the whole picture, and formulating syntheses, convinced that clarifying concepts was essential to avoid misunderstandings and to process topics in a scientific manner. His articles, books, illustrated dictionaries, and rich bibliography have recorded the system of ideas that can be called the Cluj (or broadly the Transylvanian) school of restoration, or more accurately the school of load-bearing structure rehabilitation.







■ ***1. ábra.*** *Erdélyi történeti fedélszerkezetek:* ***a.*** *a székelydályai református templom gótikus jellegű fedélszerkezetének főállása, felmérés;* ***b.*** *a kolozsvári Farkas utcai református templom felújított, barokk jellegű (1800–1801) fedélszerkezete, általános nézet;* ***c.*** *a nagybányai Máramaros Megyei Történelmi Múzeum egyik szárnyának eklektikus, XIX. századi fedélszerkezete, számítógépes modell © Irod M*

■ ***Fig. 1.*** *Transylvanian historic roof structures:* ***a.*** *main truss of the roof structure of Gothic character over the Calvinist Church in Daia (Harghita County), survey;* ***b.*** *the restored roof structure of Baroque character (1800-1801) over the Calvinist Church in Kogălniceanu Street, Cluj-Napoca, general view;* ***c.*** *19th-century roof structure of Eclectic character over one of the wings of the Maramureș County Museum of History in Baia Mare, computer model © Irod M*

In this chapter, we shall highlight three sets of principles from this overarching system of ideas, which we use as guidelines for our everyday research and design activities and try to hand down in scientific articles and teaching.

2.1. The intrinsic structural and heritage value of historic roof structures

By the third decade of the 21st century, the interest in historical roof structures has slowly become general, not only in Europe or worldwide, but also in Romania. For decades, we have said that historic roof structures are the orphans of historic building conservation, mostly omitted from undergraduate courses in public universities (be it engineering or architecture).[5] So the question remains: which professional team will carry out the professional (architectural, geometrical, structural, and condition) survey of roof structures?

We are convinced that the current interest, i.e. the fact that several Transylvanian workshops active in the field of design for historic load-bearing structure conservation routinely deal with roof structures, or that the architects in the historic regions east and south of the Carpathians have discovered the beauty of Eclectic 19th century roof structures, and that the art historians' attention conjoins the interest of dendrochronologists[6] and wood restorers,[7] are all due to the systematic and consistent work of Bálint SZABÓ, PhD, alongside the work of the young, then junior design engineers in the first half of the 1990s. Their interest was directed first of all towards disseminating international knowledge[8] and adapting it to Romania, as well as processing it in scientific research (PhD theses). (Figures 1. a[9], 1. b[10], 1. c[11])

The principle stands on two pillars: (1) roof structures, including historical ones, are load-bearing structural sub-units, so the structural engineer (or expert) is responsible for their safety, structural capacity, and stability; they are not merely borne, architectural, or decorative elements.[12] (2) In terms of their structural concept (i.e. in the way they function), materials, technical design, technology (construction principles, woodworking, joints, connections, etc.), we are talking about unique structures, which

A szemlélet két alappilléren áll: (1) a fedélszerkezetek, a történetiek is, tartószerkezeti alegységek, így biztonságukért, tartószerkezeti teherbírásukért, stabilitásukért a tartószerkezet-tervező mérnök (illetve szakértő) felel, nem hordott, építészeti vagy díszítőelem.[12] (2) Tartószerkezeti koncepciójukban (azaz működési módjukban), anyagukban, műszaki kialakításukban, technológiájukban (szerkesztési elvek, fafeldolgozás, csomópontok, illesztések stb.) egyedi szerkezetekről beszélünk, melyek így történetiségükben intrinzik értéket képviselnek, ergo a helyreállításuk során mindezen elemeket figyelembe kell, hogy vegyék. Ennek feltétele működésük, kialakításuk megértése.

A princípiumot a saját tervezőcsapatunk azzal az elvvel egészítette ki, hogy a számítógépes tartószerkezeti modellezés, számítás évszázadában ezek a több száz éves fedélszerkezetek, mint lineáris elemekből álló (elasztikus) rácsszerkezetek, tökéletes lehetőséget adnának a szisztematikus modellellenőrzéshez, hisz a valóságos tartószerkezeti válasznak és a modell eredményeinek konvergensnek kell lenniük.

2.2. A történeti tartószerkezetek szakvéleményezése nem szűkíthető le a földrengési szempontok tárgyalására. Alapját az épület állapotának feltérképezése kell hogy jelentse

A romániai történeti épületállomány jelentős része átesett több egymásra tevődő és egymást erősítő károsító folyamaton: (i) etnikai-szociális változások (a határok módosulásával etnikai, vallási vagy társadalmi csoportok tűnhettek el, illetve gazdasági erejük csökkenhetett, már a XX. század első felében is), (ii) ezt követték a háborús károk, tovább fokozva az etnikai átalakulásokat (észak-erdélyi szász, valamint általánosan az erdélyi zsidó közösségek jelentős csökkenése); majd (iii) felerősödtek újra az (i) pontban megfogalmazott folyamatok a szocialista államosítás hatására, amikor a (iv) polgári, az arisztokrata és a vallásos kultúra alkotásainak tudatos pusztítása is cél volt, illetve (v) 1977-től országunkban az állami műemlékvédelmi szervezeteket is megszüntette a Ceauşescu-diktatúra, mely végső éveiben általános falurombolási tervek előkészítésén dolgozott, (vi) az 1989-es változások után az általános szegénység és a visszaszolgáltatások elhúzódása tovább rontottak az épített örökség általános műszaki állapotán.

Tekintettel arra, hogy a történeti épületek anyaga nagy százalékban vagy mészhabarccsal kötött (tégla-, kő-, vegyes) falazat vagy fa, mindezek nagyon érzékenyek a nedvességre, vízre, tehát ha az épületek esővíz elleni védelem nélkül maradnak (csatornázás, héjazat sérülése), károsodásuk gyorsuló tendenciát mutat. Ilyen értelemben nagyon sok történeti épület jelenlegi állapota az akut karbantartáshiány eredménye, mely akár az önsúlyból eredő teher következtében részlegesen összeomolhat. (2. a[13] és 2. b[14] ábrák)



■ ***2. ábra. a.*** *A vermesi evangélikus templom(rom) nyugati oromfala a 2022-es omlás után;* ***b.*** *a fületelki evangélikus templom beomlott boltozatának részleges kiegészítése/megerősítése © Irod M*

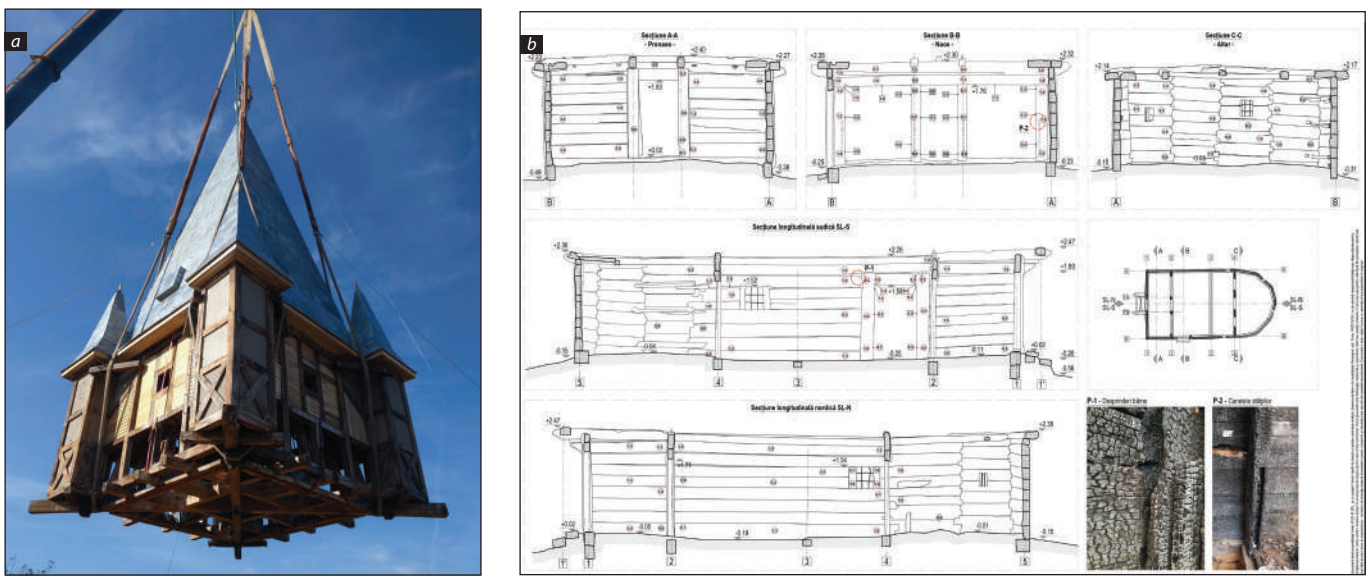
■ ***Fig. 2. a.*** *The western gable of the Lutheran Church (ruin) in Vermeș (Bistrița-Năsăud County) after the 2022 collapse;* ***b.*** *partial completion/reinforcement of the collapsed vault of the Lutheran Church in Filitelnic (Mureș County) © Irod M*

Erdély (de általánosan országunk teljes területe)[15] kiemelten gazdag történeti fatemplomokban, de Erdélyben a faszerkezetű harangtornyok, haranglábak, sőt máig fennmaradt fedett fahíd (Hordó falu) is gazdagítják a népi építészetéről a XXI. században is méltán híres régiót. A faszerkezetek a már említett nedvesség (biológiai károkozók) és karbantartáshiány okozta károsodás mellett a tűz (3.b ábra),[16] valamint az egyre növekvő szélterhek hatásának (3.a ábra)[17] is fokozottan ki vannak téve.

Az előzőeket felismerve, dr. SZABÓ Bálint már az 1990-es évek közepén a később megszövegezett, ICOMOS „Az építészeti örökség vizsgálatának, megőrzésének és szerkezeti-helyreállítási elveinek” kartájával (2003) és az ISCARSAH iránymutatásaival teljesen egybevágó elveket fogalmazott meg, alkalmazott és adott tovább a történeti épületek tartószerkezeti diagnosztikája és terapeutikája kapcsán.

are therefore intrinsically valuable in their historicity and ergo their conservation must take all these elements into account. This requires an understanding of their function and configuration.

The principle was supplemented by our own design team with the idea that in this century of computer-aided structural modelling and calculation, these centuries-old roof structures, as (elastic) truss structures made up of linear elements would provide the perfect opportunity for systematic model validation since the real structural response and the model results should be convergent.



■ ***3. ábra. a.*** *Az igazfalvi templomtorony rekonstruált faszerkezetének helyreemelése;* ***b.*** *a porzsoni (Temes megye) leégett ortodox fatemplom károsodásfelmérési rajza © Irod M*

■ ***Fig. 3. a.*** *Re-positioning the reconstructed wooden structure of the church tower in Dumbrava (Timiș County);* ***b.*** *the degradation survey of the burnt-down Orthodox wooden Church in Povergina (Timiș County) © Irod M*

2.2. Assessing historic load-bearing structures should not be limited to earthquake-related aspects. It should be based on mapping the building's condition

A significant part of the historic building stock in Romania has undergone a series of overlapping and synergistic damaging processes: (i) ethnic and social changes (ethnic, religious, or social groups may have disappeared or their economic power diminished as borders changed, even in the first half of the 20th century), (ii) this was followed by the mass destruction of war, further exacerbating the ethnic transformations (significant decline in the northern Transylvanian Saxon community and the overall Jewish communities around Transylvania in general); then (iii) the processes described in (i) were again intensified by socialist nationalisation, when (iv) the aim was the deliberate destruction of the works of bourgeois, aristocratic, and religious culture, and (v) starting 1977, the Ceauşescu dictatorship also abolished state heritage protection organisations in our country, which in its final years worked on the preparation of general village demolition plans; (vi) after the changes of 1989, general poverty and the prolongation of restitution have further deteriorated the overall technical state of the built heritage.

Given that many heritage buildings were made of either masonry (brick, stone, mixed) with lime mortar or wood, they are very sensitive to moisture and water, so if buildings are left unprotected against rainwater (drainage, damaged roof covering), their deterioration will accelerate. In this sense, the current condition of many heritage buildings is the result of an acute lack of maintenance, which may even partially collapse due to the weight of the building itself. (Figures 2. a[13] and 2. b[14])

Transylvania (but also our entire country)[15] is particularly rich in historic wooden churches, but in Transylvania, wooden bell towers, belfries, and even a covered wooden bridge (Coşbuc village) that still survives today, enrich the region, which is still famous for its vernacular architecture in the 21st century. In addition to the aforementioned damage caused by moisture (biological decay agents) and lack of maintenance, wooden structures are particularly exposed to fire (Figure 3.b)[16] and the effect of increasing wind loads (Figure 3.a).[17]

Acknowledging the foregoing, Bálint SZABÓ, PhD, formulated, applied, and passed on principles fully in line with the ICOMOS "Principles for the Analysis, Conservation and Structural Restoration of Architectural Heritage" (2003) and the ISCARSAH Guidelines for the structural diagnosis and therapeutics of historic buildings already in the mid-1990s.

It was (and is) of the utmost importance that any research should start with an architectural and structural survey of a building, with damage mapped on the building's survey drawings, supported by detailed photographic documentation. The results of the field inspection and the struc-

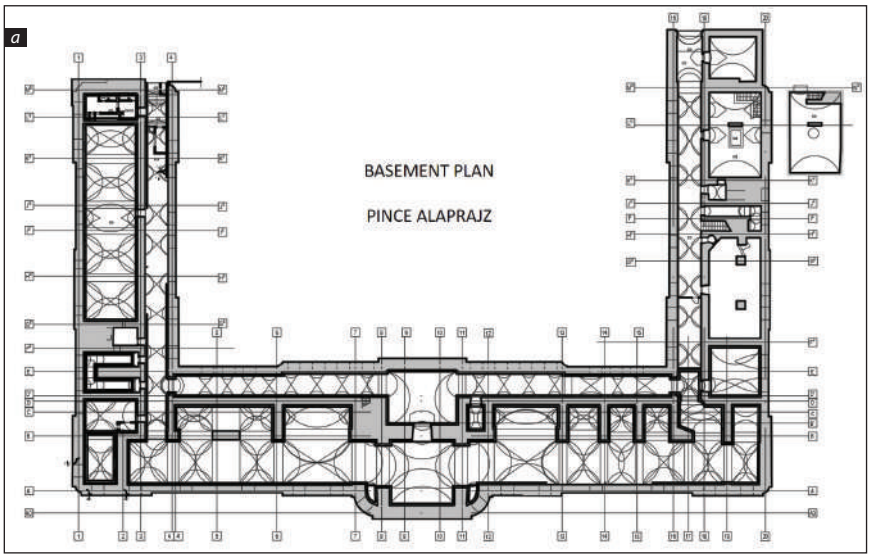
Kiemelten fontosnak tartotta (tartjuk), hogy bármely kutatásnak egy adott épület építészeti és tartószerkezeti felmérésével kell kezdődnie, az épület felmérési rajzaira fel szükséges térképezni a károsodásokat, melyeket részletes fotódokumentációval kell alátámasztani. A helyszíni szemrevételezés és a tartószerkezeti modellezés eredményei összeegyeztethető károsodási forgatókönyvet kell hogy mutassanak. A történeti tartószerkezetek/épületek egyfelől a múlt generációk gondolkodási módját, műszaki szintjét bemutató, háromdimenziós „könyvek", másfelől a különböző hatások és igénybevételek tesztelésének 1:1-es modelljei. Azaz a XXI. század számítógépes mechanikai modelljei kalibrálhatók és finomíthatók lehetnek, ha összevetjük a kapott eredményeket a vizsgált épület állapotával.

2.3. Empirikus-intuitív tartószerkezeti koncepció, valamint a mérnöki elvek alapján készült szerkezetek különbözősége

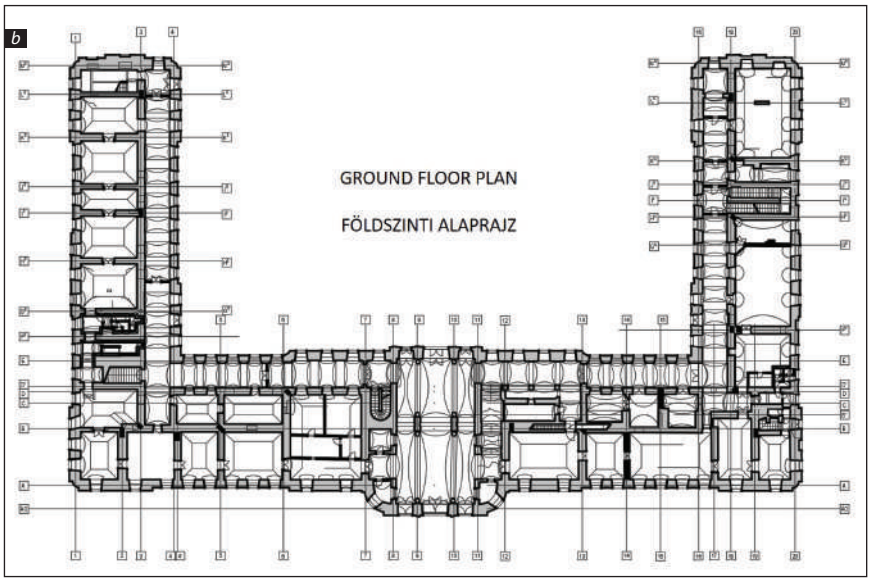
Az építés mindig tervezett tevékenységet feltételezett, akkor is, ha ezek évszázadokon, évezredeken át nem voltak a mai értelemben vett szabványosított, alkalmazott természettudományi számítások és elvek alapján készült mérnöki koncepciók. A mértani szerkesztés, az egyensúly és erőjáték intuitív megértése, a generációról generációra átadott empirikus próbálkozások, megfigyelések egy-egy földrajzi régióban (bizánci vagy nyugat-európai építészet) a történelem folyamán különböző megoldásokhoz vezettek (antik, román kori, gótikus, barokk stb.).

Az 1989-es politikai változások előtt (és rövid ideig utána is) SZABÓ Bálint vasbeton szerkezetek tervezését tanította, tökéletesen értette tehát, hogy melyek azok a mérnöki alapelvek, amelyek ezen (és a hasonló elvek alapján számított acél) tartószerkezetek kialakításának és méretezésének módszerei mögött állnak (elasztikus, izotrop, homogén anyagok stb.).

A minimum 1,5, de nemritkán akár 4-5 tégla vastagságú falazatokkal rendelkező épületek esetén, a mai értelemben vett tárcsamerevséget nem biztosító fa- vagy boltozott födémek ugyan nem járulnak hozzá, hogy a vízszintes terhek egy-egy épület függőleges elemei között elosztódjanak, de az épületek méretéből, alaprajzi kialakításából (pl. nagy méretű U alaprajzú paloták vagy harántmerevítés nélküli csarnoktemplomok stb.) adódóan erre nincs is szükség. Ugyanakkor az összetett (nehéz héjazatot hordozó) fedélszerkezetek olyan összekötést biztosítanak a falak között, amelyeket a mai mérnöki szabványok egyáltalán nem vesznek figyelembe. Ilyen értelemben a vasbeton magvak (vagy oszlopocskák) jelenlétét 25–37,5–45 cm vastag falakba előíró szabványok egy-egy 80–120 cm (4. ábra) vastag falakkal



4. a. ábra. *A nagyváradi Római Katolikus Püspöki Palota pincealaprajza © Irod M*
Fig. a. 4. *Basement plan and of the Roman Catholic Bishop's Palace in Oradea © Irod M*



■ ***4. ábra. b.*** *A nagyváradi Római Katolikus Püspöki Palota földszinti alaprajza © Irod M*
■ ***Fig. 4. b.*** *Ground floor plan of the Roman Catholic Bishop's Palace in Oradea © Irod M*

rendelkező épületben nem értelmezhetők. A terheléseket hajlítással, következésként húzással (is) felvevő modell helyett a nem tökéletes síkokban elhelyezett habarcsrétegek nyírásán, a habarcs kötéseinek morzsolódásán alapuló energiafelvételt modellező megközelítésre volna szükség a történeti épületek esetén. (4. a, 4. b ábra)

A sok esetben 150–250 éves, de nemritkán akár 700 éves épületek több extrém igénybevételnek voltak kitéve létezésük folyamán (árvizek, földcsuszamlások, szélviharok, földrengések, tűzvészek, robbanások), így egyszerű létezésük is bizonyíték tartósságukra, amit állapotuk és az abból következő beavatkozások meghatározásakor figyelembe kell venni. Így a 4. ábrán bemutatott esetben a barokk palota három szintjének (földszint és két emelet) haránt falai több esetben direkt (vagy rejtett teherhordó ív segítségével) a pince falazott dongaboltozatára terhelnek, a díszudvar felé néző hosszanti homlokzati falakat a folyosók több tíz méteres hosszában nem harántfalak, csak ívek kötik a teremsorok szerkezetéhez. Mindkét megoldás a jelenlegi szabványok előírásaival teljesen összeegyeztethetetlen, ugyanakkor az épület károsodás jeleit nem mutatta.

A beavatkozási terv[18] nem módosított ezen a koncepción, ezt a döntést segítette, hogy országos jelentőségű (A kategóriás) műemlékről van szó.

Mindennapi kutatási-tervezési gyakorlatunkban fontos alapelv megfogalmazására sarkallt, hogy egyfelől a népi építészet emlékei (függetlenül koruktól), másfelől pedig a XIX. század végén vagy a XX. század első felében épült lakó- és ipari épületek jelentős része ugyanúgy még empirikus-intuitív elvek alapján készült (vagy csak statikus terhekre volt kialakítva), mint az előbb bemutatott eset is, azonban sok esetben nem rendelkeznek műemlékvédelmi védettséggel, így még inkább ki vannak téve a mérnöki szabványok alkalmazása kötelezettségének. Fontos még egyszer hangsúlyozni, hogy a műemlékek és az ugyanúgy empirikus-intuitív elvek alapján készült történeti épületek között műszaki szempontból nincs különbség, csak a bennük fellelhető esztétikai-történeti értékek sűrűségében lehet eltérés. Tehát kutatásuk és az alkalmazott beavatkozási elvek azonosak kellene hogy legyenek a műemlékileg védett épületekkel. A szabályozás tehát figyelembe kellene hogy vegye a tartószerkezeti alapkoncepciót, amely szerint egy épület készült: empirikus-intuitív *versus* mérnöki koncepció.

tural modelling should show a compatible damage scenario. Heritage structures/buildings are on the one hand three-dimensional "books" showing the way of thinking and the technical level of past generations and on the other hand 1:1 models for testing different impacts and stresses. In other words, the computerised mechanical models of the 21st century can be calibrated and refined by comparing the obtained results with the condition of the building under study.

2.3. Empirical-intuitive structural concept and differences between structures based on engineering principles

Construction has always implied planned activities, even if for centuries and millennia these were not engineering concepts based on standardised, applied scientific calculations and principles in the modern sense. Geometrical construction, an intuitive understanding of balance and the interplay of forces, empirical experiments and observations handed down from generation to generation in a particular geographical region (Byzantine or Western European architecture) have led to different solutions throughout history (ancient, Romanesque, Gothic, Baroque, etc.).

Before the political changes of 1989 (and for a short time afterwards), Bálint SZABÓ would teach reinforced concrete structure design, so he understood perfectly well the engineering principles behind the design and dimensioning methods of these (and similar steel) structures (elastic, isotropic, homogeneous materials, etc.).

In the case of buildings featuring masonry of at least 1.5, but quite often up to 4-5 bricks width, wooden or vaulted slabs without the present-day diaphragm rigidity do not contribute to the distribution of horizontal loads between the vertical elements of a building, but due to the size and layout of the buildings (e.g. large U-shaped palaces or hall churches without transversal bracing, etc.), this is not necessary. At the same time, complex roof structures (with heavy roof covering) provide connections between walls that are not at all considered in today's engineering standards. In this sense, standards requiring the presence of reinforced concrete cores (or columns) in 25-37.5-45cm thick walls in a building with 80-120cm thick walls (Figure 4) are not meaningful. Instead of a model that assumes loads by bending and consequently by tension (as well), an approach based on shearing of mortar layers placed in imperfect planes and on crumbling mortar joints would be needed to model energy absorption in heritage buildings. (Figures 4. a and 4. b)

Often 150-250-year-old, but not uncommonly up to 700-year-old buildings have been subjected to many extreme stresses during their existence (floods, landslides, windstorms, earthquakes, fires, explosions), so their very existence is evidence of their durability, which must be taken into account when determining their condition and the resulting interventions. Thus, in the case shown in Figure 4, the cross-walls

of the three storeys of the Baroque palace (ground floor and two floors) are in several cases directly (or by means of hidden load-bearing arches) supported by the masonry barrel vault of the basement, while the longitudinal elevation walls facing the courtyard are connected to the structure by arches rather than cross-walls along the tens of metres of corridors. Both solutions are totally incompatible with current standards, but the building has shown no signs of deterioration.

The intervention plan[18] did not alter this design; this decision was also supported by the fact that it is a listed historic building of national importance (category A).

In our everyday research and design practice, it is important to consider that many buildings pertaining to vernacular architecture (regardless of their age) on the one hand and the residential and industrial buildings of the late 19th or early 20th century on the other were built on the basis of empirical-intuitive principles (or were designed to carry static loads), as in the above example, but in many cases they are not protected as listed historic buildings and are therefore even more exposed to the application of engineering standards. Once again, it is important to stress that there is no technical difference between listed and unlisted historic buildings, as the latter were also built according to empirical-intuitive principles, but there is rather a difference in the density of aesthetic-historical values they contain. Their research and the intervention principles applied should consequently be the same as for listed buildings. Legislation should therefore take into account the basic structural concept according to which a building is constructed: empirical intuition *versus* engineering concept.

3. The revival of Transylvanian emblematic buildings – between two Europa Nostra Awards in Cluj-Napoca (1998-2024)[19]

■ Almost 30 years ago, I could not have known how fortunate the division of labour within the team would be for me, as I was able to participate as a structural engineer in the conservation of the Roman Catholic Church of Cluj-Mănăştur[20] under the lead of architect Éva EKE and Bálint SZABÓ, as well as in the research and design work preceding it. It was an incredible experience to walk around the building, looking for damaged parts and listening to Bálint SZABÓ's thoughts on what could have caused them. To climb up to the dusty attic through a narrow opening or to be surprised, during implementation, that the rib vaulting of the choir, thought to be Gothic, was in reality a piece restoration work, a pioneer in the history of technology, carried out in honour of the millennium celebration: an early Rabitz-mesh cement, i.e. concrete vault. The eclectic roof structure had strength reserves, which were demonstrated using plane models of an elementary

3. Erdélyi emblematikus épületek megújulása – avagy két kolozsvári Europa Nostra díj között (1998–2024)[19]

■ Majdnem 30 évvel ezelőtt nem tudhattam, hogy milyen szerencsésen alakul számomra az akkori csapaton belüli munkaleosztás, és EKE Éva építész, valamint SZABÓ Bálint mellett, illetve vezetésével a kolozsmonostori római katolikus templom[20] helyreállítási munkálataiban, illetve az azt megelőző kutatásban-tervezésben tartószerkezet-tervezőként vehettem részt. Élmény volt körbesétálni az épületet, keresni a károsodásokat és hallgatni SZABÓ Bálint gondolatait arról, hogy melyiknek mi lehet az oka. Felmászni a poros padlásra egy szűk nyíláson át, vagy meglepődni kivitelezés közben azon, hogy a szentély gótikusnak hitt keresztboltozata a valóságban a technikatörténet egyik úttörője, a millennium tiszteletére készült helyreállítás műve: Rabitz-hálós korai cement-, avagy betonboltozat. Az eklektikus fedélszerkezet erőtartalékokkal rendelkezett, amit kezdetleges számítógépes program (P-phrame) síkmodelljei segítségével bizonyítottunk, és amely így lehetőséget adott egy látványos kazettás mennyezet felfüggesztésére. Az 1990-es évek általános szegénysége olyan megoldások felé irányította a beruházást, amelyek megelőzték korukat, így például a héjazat újrahasznosított cserepekből készült, olyan jó minőségben, hogy 25 évvel a munkálatok befejezése után sem igényel általános cserét.

A fejezet első bekezdése megpróbálta visszaadni, hogy mennyire organikusan kapcsolódnak össze az erdélyi műemlékvédelem eseményei, mennyire azonosítható a későbbi gyümölcsökben a mag, amelyből a felhasznált és továbbadott tudás sarjadt.

Az elmúlt 20 évben befejezett helyreállításokból nem sorolhatunk fel minden ikonikus vagy akár kiemelkedő épületet, hisz már csak ez messze meghaladná a rendelkezésre álló keretet. Az időrendiség, illetve a funkcionalitás szűrője közül az utóbbit választottuk, ugyanis az első öt évben a kisebb jelentőségű épületek voltak túlsúlyban, és sokszor tervezési feladatként a következő öt évben, míg kivitelezésileg a következő évtizedben is sok épülettel újra találkozunk.

3.1. Kiemelkedő fontosságú templom-helyreállítások[21] *falusi környezetben*

Felekezeti szempontból a lezárult helyreállítások elsősorban négy történeti egyház köré csoportosulnak. (5. ábra) Elsőként az unitárius templomokat említenénk, legtöbbjük a 2014–2020-as, második európai uniós támogatási szakaszban, az Országos Vidékfejlesztési Program (OVP=PNDR) keretében valósult meg, részletes ismertetésükre nem térek ki,[22] megjegyzendők itt: a bágyoni (Kolozs megye), városfalvi és oklándi (Hargita megye) templomok, melyek mind helyi fontosságú (B kategóriás) műemlékek, és 2020–2021-ben került sor befejezésükre, hivatalos átadásukra.

A falusi református templomok mind műemléki védettség, mind finanszírozás szempontjából összetettebb képet mutatnak. Az országos jelentőségű (A kategóriás) templomok közül a legpublikáltabb, a széki (2015, Kolozs megye) református templom[23] még az első Regionális Operatív Program (ROP 5.1.=POR 5.1.) 2007–2013-as időszakában, míg az ákosi református templom (2020, Szatmár megye) a második POR 5.1., 2014–2020-as időszakában újult meg. A következő műemlék templomok helyi jelentőségűek: a magyarberkeszi (2020, Máramaros megye) és az etédi (2020, Hargita megye), mindkettő a már említett PNDR keretében, a magyarlapádi és csombordi templomok (2022, Fehér megye) az Erdélyi Református Egyházkerület által koordinált magyarországi állami támo-


a


b

gatásból, a péri (2024, Szatmár megye) a Királyhágómelléki Református Egyházkerület által összehangolt anyaországi és hazai támogatásból került teljes körű felújításra. A csomaközi (2013, Szatmár megye) templom a helyi értelmiségi réteg érdeklődésének középpontjában állt már az 1990-es évektől, tudva annak kora középkori eredetéről, a XIX. és XX. századi, az épületet jellegtelenné tevő beavatkozások ellenére. Az apparens tégla román kori architektúrát a Magyarország–Románia Határon Átnyúló Együttműködési Programból sikerült teljes szépségében bemutatni. Szükséges megjegyezni, hogy elsősorban 2010–2020 között több olyan műemlék templom került kis lépésenként felújításra Bihar és Szatmár megyében, amelynek finanszírozását a Teleki László Alapítvány biztosította, ezek példázatára az érábrányi templomot említjük.[24] (5. a, 5. b, 5. c, 5. d ábra)

A teljesen felújított, falusi római katolikus, országos jelentőségű műemlék templomok sorából elsőként Csíkkarcfalva[25] (2012, Hargita megye) rekordidő alatt megtervezett és kivitelezett, erődítéssel rendelkező templomát emeljük ki, melyet teljes egészében a PNR – Programul Naţional de Restaurare, azaz az Országos Helyreállítási Terv (az INP – Institutul Naţional al Patrimoniului, Országos Örökségi Hivatal lebonyolításával) finanszírozott. Hargita megyében még megemlítjük a múlt évtized megvalósításaiból a csobotfalvi Szent Péter- és Pál-templomot (2015), mely

computer programme (P-phrame), and thus provided us with the possibility of suspending a spectacular coffered ceiling. The general poverty of the 1990s led the investment towards solutions that were ahead of their time, such as a roof covering made of good quality recycled tiles, which does not require general replacement even 25 years after completion.

The first paragraph of the chapter tried to reflect how organically the events of Transylvanian heritage conservation are connected, how the seed from which the knowledge used and transmitted grew can be identified in the later fruits.

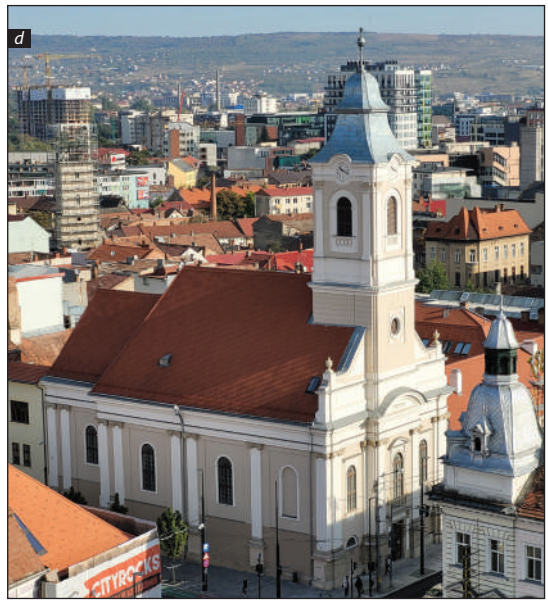
We cannot list all the iconic or even outstanding buildings whose conservation has been completed in the last 20 years, as this alone would be far beyond the allowed length. Between filtering in terms of chronology versus functionality, we have chosen the latter, as the first five years were dominated by buildings of minor importance, and we often revisited buildings as design tasks in the following five years, as well as implementation tasks in the next decades.

3.1. Outstanding rural church conservations[21]

In terms of denominations, the completed conservation works are mainly clustered around four historical churches (Figure 5). First of all, I would mention the Unitarian churches, most of which were conserved under the National Rural Development Programme (NRDP=PNDR), in the second phase of EU funding 2014-2020, but I will not describe them in detail,[22] but rather name a few: the churches in Bădeni (Cluj County), Orăşeni and Ocland (Harghita County), all of which are listed historic buildings of local importance (category B) and were due to be completed and officially re-opened in 2020-2021.

The Calvinist churches in the rural area show a more complex picture, both in terms of protection and funding. Among the churches of national importance (category A), the most published is the Calvinist Church of Sic (2015, Cluj County)[23] in the first Regional Operational Programme (ROP 5.1.) during 2007-2013, while the Calvinist Church of Acâş (2020, Satu Mare County) was renovated in the second ROP 5.1 funding period 2014-2020. The following listed churches are of local importance: Berchez (2020, Maramureş County) and Atid (2020, Harghita County), both under the RDP mentioned above, the churches of Lopadea Nouă and Ciumbrud (2022, Alba County) were fully renovated with the support of the Hungarian state coordinated by the Transylvanian Calvinist Diocese and the church of Pir (2024, Satu Mare County) with the support of the Calvinist Diocese of Királyhágómellék that coordinated and managed the financing offered by Hungary and Romanian local support. The church in Ciumeşti (2013, Satu Mare County) was the focus of interest of local intellectuals since the 1990s, aware of its early medieval origins, despite the interventions in the





■ ***5. ábra. a.*** *Az ákosi református templom, főhajó, nézet a szentély felé;* ***b.*** *a csíkszentmihályi római katolikus templom külső falképe;* ***c.*** *a felsőgörbédi ortodox fatemplom kivitelezés közben;* ***d.*** *a kolozsvári evangélikus templom helyreállítás után © Irod M*

■ ***Fig. 5. a.*** *The nave of the Calvinist Church in Acâș (Satu Mare County), view towards the apse;* ***b.*** *fresco on the outer wall of the Roman Catholic Church in Mihăileni (Harghita County);* ***c.*** *the Orthodox wooden Church in Crivina de Sus (Timiș County), under reconstruction;* ***d.*** *the Lutheran Church in Cluj-Napoca, after conservation © Irod M*

19th and 20th centuries that have left the building unattractive. The apparent brick Romanesque architecture has been showcased in all its beauty thanks to the Hungary-Romania Cross-border Cooperation Programme. It is worth noting that, mainly between 2010 and 2020, several monumental churches in Bihor and Satu Mare counties were renovated in small steps, financed by the Teleki László Foundation, the church in Abram being an example in this sense.[24] (Figures 5.a, 5.b, 5.c, 5.d)

From the vast range of Roman Catholic village churches of national importance to be fully conserved, I would like to mention first the fortified church of Cârţa[25] (2012, Harghita County), designed and implemented in record time and fully funded by the PNR – Programul Naţional de Restaurare, i.e. the National Conservation Plan (implemented by INP, Institutul Naţional al Patrimoniului, National Heritage Office). In Harghita County, among the projects of the last decade, St. Peter's and Paul's Church in Cioboteni (2015) is a case of small steps and coordination of different sources in terms of funding, highlighting the Harghita County Heritage Conservation Support Programme, for which one building can apply several times, in the research, design, and implementation phases. Among the works carried out in recent years, the church of Mihăileni (2021) is an outstanding example of how any small rural historic building can offer countless surprises, with external and internal wall paintings, dendrochronologically dated 15th-century choir roof structure, etc.

The Orthodox historic churches were the fourth important category of denominational buildings, mostly wooden churches, which we came across in three different civil heritage organisations. The fully

finanszírozási szempontból a kis lépések és a különböző források összehangolásának esete, kiemelve itt Hargita megye örökségi helyreállításokat támogató programját, ahová egy-egy objektumra többször, a kutatási, a tervezési és a kivitelezési fázisban is lehet pályázni. Az utóbbi évek munkáiból a csíkszentmihályi templomot (2021) említjük, mely kiemelkedő példája annak, hogy bármely kisebb falusi emlék megszámlálhatatlan meglepetéssel szolgálhat, külső és belső falképek, XV. századi, dendrokronológiailag datált szentély-fedélszerkezet stb.

A negyedik kiemelt felekezet az ortodox (görögkeleti) falusi műemlék templomokat jelenti, ezek közül jelentős hányadot tesznek ki a fatemplomok, amelyekkel háromféle civil örökségvédelmi szervezet keretében találkoztunk. A teljesen befejezett, kiemelt példa a felsőgörbédi (2020, Temes megye), amely oktatási programként az Asociaţia Bisericii Înlemnite kezdeményezésére és szervezésében, dr. OBRADOVICI Vladimir építész vezetésével speciális kutatási és tervezési módszer kidolgozását tette lehetővé. Megnyitotta az utat olyan formabontó megközelítések felé, mint például megtartani a faépületekre jellemző történeti műszaki megoldást az alapozások esetében. A felszíni (maximum 40–60 cm) száraz (habarcs nélküli) kőfalazatú alapok rekonstrukciója, mely nem tartja be a fagyási mélységre vonatkozó szabványt. A megoldás figyelembe veszi, hogy számítógépes modellezéssel igazolható, hogy ezek a rugalmas, statikailag többszörösen határozatlan szerkezetek nem érzékenyek a lokális süllyedésekre. A másik két egyesület: az Ambulanţa pentru Monumente,[26] amelynek köszönhetően elsősorban héjazatcserét feltételező sürgősségi beavatkozásokra kerül sor; és a két módszer kombinációját alkalmazza (az épület igénye és az anyagi lehetőségek szerint) a ROST[27] Egyesület Máramarosban.

A fejezet illusztrációja is mutatja, hogy a kiemelt négy felekezet mellett tevékenységünkben jelen van az evangélikus egyház is, mind szász, mind magyar emlékekkel. A szász emlékek esetében egyelőre azonban inkább sürgősségi beavatkozási munkákat végzünk, teljes helyreállítás befejezésére még nem került sor, mint ahogy a zsinagógák esetében sem. Az (5d) illusztráció a kolozsvári evangélikus templomot mutatja a Szent Mihály-templom tornyából, mely átvezetésnek tekinthető a következő alfejezethez.

3.2. Kiemelkedő fontosságú templom-helyreállítások[28] *városi környezetben*

Az evangélikus egyházat, a fentebb hivatkozott kolozsvári barokk templom[29] helyreállítása (2021, POR 5.1.) mellett, a Házsongárdi temetőben épült kápolna kapcsán is megemlítjük. Ez utóbbi ugyan új tervezésű épület, de szemléltetni hivatott csapatunk azon elvét, mely szerint a helyreállítást tervező szakembereknek uralniuk kell a kortárs előírásokat is. A széki református templom testvérbefektetése mindenféle szempontból, beleértve az oktatási felhasználást is, vagy azt, hogy az egyik legkutatottabb, barokk jellegű fedélszerkezetet foglalja magában – a kolozsvári Farkas utcai református templom[30] (2015, POR 5.1.), melyet évente több tucat magiszteri, egyetemi vagy posztgraduális képzést végző hallgató látogat meg.

A 2022 nyarán újraszentelt, Kolozsvár főterét dominálo Szent Mihály-plébániatemplom nagyszabású helyreállítását[31] az európai uniós POR 5.1. program, valamint hazai és magyarországi állami támogatás mellett egyéni adományok is segítették. A komplex helyreállítás legalább annyira jelentett kihívást tartószerkezeti szempontból, mint kőrestaurátori feladatként. A 2024-ben elnyert *Europa Nostra* örökségi díjjal, a helyreállítás magas színvonala mellett (melyben 200-at is meghaladó szakember és szervezet, cég vállalt szerepet), a közösség részvételét, az egyházi és kulturális események szervezését, a templom oktatási helyszínként történő felhasználását értékelte a zsűri. (6. ábra)[32]



completed, prime example is the church in Crivina de Sus (2020, Timiş County), which, as an educational programme, was initiated and organised by Asociaţia Biserci Înlemnite, led by architect Vladimir OBRADOVICI, PhD. It enabled the development of a specific research and design methodology. It has opened the way to innovative approaches such as retaining the historical technical solution for foundations typical of wooden buildings. Reconstruction of dry (mortar free) stone-masonry foundations on the surface (up to 40-60 cm depth) that do not comply with the frost depth standard. The solution takes into account the fact that computer modelling demonstrated that these flexible, statically multi-indeterminate structures are not sensitive to local settling. The two other associations were: Ambulanţa pentru Monumente[26] thanks to whom, in most cases, emergency interventions involving the replacement of the roofing are carried out. A combination of the two methods is used (depending on the building's needs and financial possibilities) by the ROST[27] Association in Maramureş.

The illustrations of the chapter show that besides the aforementioned four denominations, the Lutheran Church is also present in our activity, with both Saxon and Hungarian buildings. For the time being, however, the Saxon historic buildings have undergone only emergency interventions and full conservation has not yet been completed, as is the case with the synagogues. Figure 5.d shows the Lutheran Church of Cluj-Napoca from the tower of St. Michael's Church, which can be seen as a transition to the next sub-chapter.

3.2. Outstanding urban church conservations[28]

We shall mention the Lutheran church both in the context of the conservation of the aforementioned Baroque church in Cluj-Napoca[29] (2021, ROP 5.1.) and the chapel in the Házsongárd (Central) Cemetery, also in Cluj-Napoca. Although the latter is a new-building design, it illustrates the team's principle that conservation designers must also master contemporary standards. The sister church of the Calvinist Church in Sic, in all its aspects, including its educational use or the fact that it incorporates one of the most researched Baroque roof structures, is the Calvinist Church on Kogălniceanu Street in Cluj-Napoca[30] (2015, ROP 5.1.), visited by dozens of masters, undergraduate, or postgraduate students every year.

The major conservation of St Michael's Church dominating the main square of Cluj-Napoca, re-consecrated in the summer of 2022,[31] was financed by the EU ROP 5.1. programme, domestic and Hungarian sources, and individual donations. The complex conservation was as much a challenge from a structural point of view as it was from the point of view of the stonework. In addition to the high quality of the conservation (involving more than 200 professionals, organisations, and companies), the jury of the 2024 *Europa Nostra* Heritage





■ ***6. ábra.*** *A kolozsvári Szent Mihály-plébániatemplom* ***a.*** *keleti nézete és* ***b.*** *a tartószerkezeti megerősítést biztosító térrácstartó behelyezése © KÉSZ Románia;* ***c.*** *helyreállított gótikus csillagboltozatok, templomhajó – részlet © Irod M*

■ ***Fig. 6.*** *Saint Michael's Church in Cluj-Napoca:* ***a.*** *eastern view and* ***b.*** *the insertion of truss-girders to provide structural reinforcement © KÉSZ Romania;* ***c.*** *conserved Gothic stellar vaults, nave – detail © Irod M*

Award also appreciated the community involvement, the organisation of church and cultural events, as well as the use of the church as an educational venue (Figure 6)[32].

3.3. Castles, manor houses, mansions, convents – rehabilitation of (originally) residential buildings

Given that these buildings are much more challenging, not only physically (built area, volume) but also in terms of the complexity of the design, financing is often a complex process that can take decades. Therefore, instead of the detailed description presented for churches, in this sub-chapter we will simply highlight some of the buildings and ensembles in this category which have become popular tourist attractions thanks to their complete renovation.

Bologa Castle[33] (2021, NRDP) could be completed thanks to its size, while Oradea Castle is being restored bastion by bastion, wall by wall. Out of the Franciscan convents in Transylvania, the one in Estelnic is almost complete, while the convent in Cluj-Napoca (which also houses the Talentum Calvinist School) is also being renovated in small stages.

Since 2022, anyone visiting Oradea cannot miss the Roman Catholic Bishop's Palace,[34] and the permanent ecclesiastical and temporary art exhibitions hosted in it. The restoration of the building was made possible by a Hungarian state grant. From the basement to the second floor, most of the building, which houses the bishop's residence, great hall, and chapel, can be visited, and the impressive wine cellar also houses lecture halls and business HUBs. Our team owes a detailed technical report on the works, as the conservation of the

3.3. Várak, kastélyok, kúriák, kolostorok – (eredetileg) lakófunkciót ellátó épületek helyreállítása

Tekintettel egyfelől arra, hogy ezek az épületek nemcsak fizikailag (beépített felület, volumetria), de a tervezési téma összetettségében is sokkal nagyobb kihívást jelentenek, a finanszírozás is sok esetben évtizedeken át elhúzódó, összetett folyamat. Ezért, a templomok esetében bemutatott részletes ismertetés helyett, ebben az alfejezetben csak felvillantunk néhány olyan, ebbe a kategóriába tartozó épületet, épületegyüttest, amelyek teljes körű felújításuknak köszönhetően mára kedvelt turisztikai látványosságokká váltak.

A sebesvári vár[33] (2021, PNDR) méreténél fogva is elkészülhetett, míg a nagyváradi vár bástyáról bástyára, falszakaszról falszakaszra kerül helyreállításra. Az Erdélyben fellelhető ferences rendi kolostorok közül az esztelneki majdnem teljesen elkészült, míg a kolozsvári (mely egyben a Talentum Református Iskolának is helyet ad) szintén kisebb lépésekben újul meg.

2022 óta, aki Nagyváradon jár, nem hagyhatja ki a Római Katolikus Püspöki Palota[34] és azon belül az állandó egyházművészeti, illetve időszakos művészeti kiállítások megtekintését. Az épület helyreállítását magyarországi állami támogatás tette lehetővé. Pincétől a második emeletig látogatható a püspöki lakosztálynak, nagyteremnek és kápolnának is otthont adó épület legnagyobb része, melynek impozáns borospincéjében előadótermek és vállalkozási HUB-ok is helyet kaptak. Csapatunk tartozik részletes szakmai beszámolóval a munkálatokról, hisz a barokk fedélszerkezet helyreállítása tökéletes állatorvosi ló (*exemplum omnium malorum*).

Az idei évben került sor a gyalui Bánffy–Rákóczi–Barcsay-kastély teljes körű felújítását követő ünnepi átadásra[35] (2024, POR 5.1. és anyaországi állami támogatás), megelőzve így a bonchidai Bánffy-kastély helyreállításának befejezését, melyhez SZABÓ Bálint neve már az első politikai változásokat követő felmérések és szakvéleményezés elkészítése által kapcsolódott. A kastélyt a BÁNFFY-örökösöktől koncesszióba vevő Transylvania Trust Alapítvány[36] állítja helyre és működteti az épületegyüttest, többek között a cikkben már többször említett oktatási programok segítségével. Megtiszteltetés számomra, hogy nemcsak az 1994-es

felmérésekben, az oktatás kezdeti periódusában (1999–2002), de 2007-től már csapatommal közösen járulhatunk hozzá az épületről épületre, szárnyról szárnyra haladó helyreállításhoz. Az 1944-ben, 80 éve kezdődő pusztítást és pusztulást követően idén végre minden szárnyra újra fedélszerkezet és héjazat került.

A kastélyokhoz történetileg számos mellék- és gazdasági épület tartozott, ebben a csoportban a sepsikőröspataki istálló és lovarda teljes körű felújítását, rekonstrukcióját, illetve az egykor a bonchidai Bánffy-kastélyhoz tartozó malom épületének sürgősségi beavatkozásait is megemlíthetjük.

Az alfejezet illusztrációjaként egy teljesen helyreállított vár, egy palota és egy kastély helyreállításából választottunk képeket. (7. ábra)

Baroque roof structure is the perfect epitome for the practice (*exemplum omnium malorum*).

The Bánffy-Rákóczi-Barcsay Castle in Gilău has been inaugurated this year following its complete renovation[35] (2024, ROP 5.1. and state financing from Hungary), thus preceding the completion of the conservation works of the Bánffy Castle in Bonţida, to which Bálint SZABÓ's name was already linked through the surveys and expert opinions he had prepared first after the political changes. The historic ensemble is being conserved and run by the Transylvania Trust Foundation,[36] which has taken over the concession from the BÁNFFY heirs, including via the educational programmes mentioned several times in this article. I am honoured to have been able to contribute, not only to the 1994 surveys, in the initial training programme (1999-2002), but also to the conservation works carried out building by building, wing by wing that my team and I have been doing since 2007. After 80 years of devastation and destruction, which began in 1944, this year all the wings have finally received a new roof structure and roof coverings.

Castles and manor houses historically comprised many outbuildings and farm buildings. In this category, we can mention the complete renovation and reconstruction of the stables and riding school in Valea Crişului and the emergency interventions on the mill that once belonged to the Bánffy estate in Bonţida.

To illustrate this sub-chapter, we have chosen images of fully conserved examples: a mediaeval castle, a palace, and a rural aristocratic residence. (Figure 7)







■ ***7. ábra.*** *Helyreállított, egykori lakó- és védelmi funkcióknak helyet adó épületek:* ***a.*** *sebesvári vár, általános nézet;* ***b.*** *a nagyváradi Római Katolikus Püspöki Palota turisták számára nem látogatható barokk fedélszerkezete, kivitelezés alatt;* ***c.*** *a gyalui várkastély egykori gabonaraktára, nagyteremként helyreállítva © Irod M*

■ ***Fig. 7.*** *Conserved former residential and defensive buildings:* ***a.*** *bird's eye view of the Bologa Castle;* ***b.*** *under construction picture of the roof structure of Baroque character over the Roman Catholic Bishop's Palace in Oradea, which is not open to tourists;* ***c.*** *the former granary of Gilău Castle, reused as a great hall © Irod M*

3.4. Schools, boarding schools, kindergartens – educational institutions in listed historic buildings

In the early years of our activity, we were involved as lead and/or structural designers in various state-funded school renovation programmes, including listed historic buildings (of local value: Beiuş, Oradea, or Cluj-Napoca). Although we tried to take heritage conservation aspects into account to the greatest extent possible, the public procurement system and the lack of specialists 15-20 years ago meant that we could mention only the building of the Gustáv Majláth School in Alba Iulia,[37] which housed the primary and middle-school classes.

The three school ensembles presented here are all owned by the Transylvanian Calvinist Church Diocese and their conservation was carried out under different funding schemes. The history of the Kogălniceanu Street Calvinist Boarding School (Figure 8.a) in Cluj-Napoca was the longest, starting in 2005 (for us) and ending in 2018, completed after having applied for three building permits, replaced designers[38] and construction teams. The four wings of the boarding school, built around the enclosed square courtyard after the great fire of 1798, contain three different basic types of historic roof structures of Baroque character, and their relatively small span helped me to observe the basic variations of the load-bearing concept in the discussion of my PhD thesis.

Regarding the second example, the Bethlen Gábor Boarding School in Aiud, its whole history is, once again, much longer and more complex than what can be shown through the cross-section of the last 20 years and the activities of our team. Before recalling this stage, it is important to note that this building ensemble was a milestone in the development of the approach to historic building conservation in Transylvania, represented by the school led by Bálint SZABÓ in Cluj-Napoca. I will not detail the events of the phase that began in 1994, as it should be detailed by a narrative of the activities of the Utilitas Ltd., but I will rather recall three snapshots from that period: (i) the half-log beams of the composite metal-wood slab above the school auditorium partially collapsed due to the damage caused by dry rot fungus: the contractor that wanted to carry out an emergency intervention showed complete incompetence, and as such, was replaced with the help of Bálint SZABÓ, thus the preparation of a professional intervention based on the research and planning of the historic building, reflecting the spirit and knowledge of the time,[39] could begin. (ii) During the first design phase (followed by several cycles of feasibility studies for all buildings, lasting over a decade), we developed the historical roof survey and representation method used and promoted ever since by the Transylvanian (Cluj) school.[40] (iii) The restoration of the Bagolyvár roof structure (Figure 8. b) marked the beginning of the introduction of the British approach to the Transylvanian school of load-bearing

3.4. Iskolák, kollégiumok, óvodák – oktatási intézmények műemlék épületekben

Tevékenységünk kezdeti éveiben még bekapcsolódhattunk fő- és/vagy tartószerkezeti tervezőként különböző állami finanszírozású iskolafelújítási programokba, melyek között voltak műemléki jegyzékben szereplő (inkább helyi értékű: belényesi, nagyváradi vagy éppen kolozsvári) épületek is. Bár igyekeztünk az örökségvédelmi szempontokat messzemenőkig figyelembe venni, a munkálatok közbeszerzési rendszere és a bő 15–20 évvel ezelőtti szakemberhiány következtében ezekből a kezdeti időkből csak a gyulafehérvári Majláth Gusztáv Iskola[37] általános iskolai osztályainak helyet adó épületét tartjuk megemlítendőnek.

A három itt bemutatott iskolaegyüttes mind az Erdélyi Református Egyházkerület tulajdonában van, helyreállításuk különböző forrásbiztosítási sémákban valósult meg. A kolozsvári Farkas utcai Református Kollégium (8. a ábra) története a leghosszabb, 2005-ben kezdődött (számunkra), és 2018-ban, három építési engedély és változó tervező-,[38] illetve kivitelezőcsapatok bevonásával készült el. A zárt, négyzet alakú udvar körül az 1798-as nagy tűzvész után felépült kollégium négy szárnya a barokk jellegű történeti fedélszerkezetek három különböző alaptípusát is tartalmazza, relatív kis fesztávuk miatt a tartószerkezeti koncepció alapváltozatainak megfigyelésében nagy segítséget nyújtottak doktori témám kidolgozásában.

A második példa, a nagyenyedi Bethlen Gábor Kollégium teljes története is sokkal hosszabb és összetettebb, mint az, ami az elmúlt 20 év és csapatunk tevékenységének keresztmetszetéből kiolvasható. Ennek a szakasznak a felelevenítése előtt feltétlenül meg kell jegyezni, hogy ez az épületegyüttes mérföldkő volt az erdélyi műemlékvédelem, a kolozsvári, SZABÓ Bálint által vezetett iskola szemléletének kialakulásában. Nem részletezem az 1994-ben kezdődő szakasz történéseit, azt egy Utilitas tervezőiroda tevékenységét bemutató narratívának szükséges megörökítenie, de három pillanatképet felidéznék abból az időszakból is: (i) a díszterem feletti kompozit fém-fa födém félrönk fagerendái egy részen könnyező házigombakár hatására beszakadtak, a sürgősségi beavatkozást elvégezni akaró kivitelező teljes hozzá nem értésről tett tanúbizonyságot, őket SZABÓ Bálint segítségével sikerült eltávolítani, és elkezdődhetett a műemléki kutatáson, tervezésen alapuló szakszerű, a kor szellemiségét[39] és tudásszintjét híven tükröző beavatkozás előkészítése. (ii) Az első tervezési szakaszban (melyet számos ciklus követett megvalósíthatósági tanulmányi szinten minden épületre kiterjedően, több mint egy évtizeden át) dolgoztuk ki az erdélyi (kolozsvári) iskola által azóta is használt és promotált történeti fedélszerkezeti felmérési és ábrázolási[40] módot. (iii) Az erdélyi tartószerkezet-helyreállítási iskola számára a Bagolyvár fedélszerkezetének (8. b ábra) restaurálásával kezdődött az angliai szemlélet hazai meghonosítása, míg számomra ugyanezzel a barokk jellegű fedélszerkezetek kutatása, publikálása. Az így is hosszúra sikerült felvezetés után, az általunk vizsgált időablakban (2009–2016) a tulajdonos, a felhasználó és a működtető önkormányzat közötti (azóta is példaértékű, de követő nélküli) együttműködésnek köszönhetően elnyert és lebonyolított európai uniós támogatás (POR 3.4.[41]) keretében négy épület, illetve épületrész került teljes körű felújításra: a főépület két különböző építési szakaszban készült déli és keleti szárnya, a Bagolyvár és az elemi osztályoknak helyet adó épület, illetve a közöttük kialakult udvar. Ezek mellett a pályázati összeg biztosította a teljes oktatási segédanyag, iskolai felszerelés a XXI. század elvárásainak csúcsminőségét elérő beszerzését. A végeredmény, újfent a romániai tendertörvények visszásságai (mindig a legkisebb árajánlat nyer) miatt, rengeteg munka, harc és kompromisszum révén jöhetett csak létre.

Mindhárom esetben, mint ahogyan az itt be nem mutatott, a Királyhágómelléki Református Egyházkerülethez tartozó szatmárnémeti Refor-





■ ***8. ábra.*** *Helyreállított, országos jelentőségű iskola-épületegyüttesek:* ***a.*** *a kolozsvári Református Kollégium, északnyugati udvari rész;* ***b.*** *a nagyenyedi Bethlen Gábor Kollégium Bagolyvárának (fiúinternátus/-konviktus) barokk fedélszerkezete, az 1990-es évek egyik legtöbbet publikált történeti fedélszerkezete;* ***c.*** *a marosvásárhelyi Bolyai Farkas Líceum / Református Kollégium régi épülete (egykori internátus) új acélszerkezete és egykori eklektikus fedélszerkezetének bemutatott főállása © Irod M*

■ ***Fig. 8.*** *Conserved school building ensembles, of national importance:* ***a.*** *the Calvinist Boarding School in Cluj-Napoca, north-western side of the courtyard;* ***b.*** *the roof structure of Baroque character over the Bagolyvár (boys' boarding house) of the Bethlen Gábor Boarding School in Aiud (Alba County), one of the most published historical roof structures of the 1990s;* ***c.*** *the new steel structure of the old building of the Bolyai Farkas High School / Calvinist Boarding School (former boarding school) in Târgu Mureș and the displayed main truss of the former roof structure of Eclectic character © Irod M*

mátus Kollégium (egykori Kölcsey Ferenc Főgimnázium, *alma materem*) esetében is a kivitelezési munkálatok az oktatással egyszerre történtek. Ez is oka lehet, az ebben az esetben még az átlagosnál is bonyolultabb szabályozás és nehézkesebb engedélyeztetés, illetve a hatalmas anyagi szükséglet mellett annak, hogy a teljes körű helyreállítás akár évtizedeket is felölelhet.

Az utolsó példa a szintén híres, országos jelentőségű műemlékegyüttes, a marosvásárhelyi Bolyai Farkas Elméleti Líceum (elsősorban szecesszziós stílusú) és Református Kollégium épületállománya[42] (2017–2023), melynek helyreállítás-történetéből szintén csak néhány részletet emelünk ki. A tulajdonjog tisztázása (kataszteri bejegyzés) mintegy bő öt évet késleltette a kutatási-tervezési, helyreállítási folyamatot, ami újabb és újabb témaváltoztatást is vont maga után. A helyreállítást elsősorban az Erdélyi Református Egyházkerület által összehangolt magyarországi állami támogatásból biztosították. Zárógondolatként azt lehet megjegyezni, hogy az ilyen hatalmas épületállomány egyfelől jelentős és állandó karbantartási feladatot jelent, másfelől pedig újabb és újabb feladatok válhatnak időszerűvé, a cikk írásakor fogalmazódott meg a régi épület átalakított, manzárdosítható padlásának beépítése.[43] (8. c ábra)

A bemutatott (vagy megemlített) mintegy 30 műemlék épület vagy együttes a 15%-át is alig éri el a csapatunk által valamilyen formában megkutatott, tervezett és részben kivitelezett 216, törvényi védettséggel rendelkező építménynek. A kiemelt funkciók, rendeltetések mellett számos más is létezik (említettük például a hordói fedett fahidat a 2.2-es fejezetben). A válogatás és a jegyzetek több szempontból is igyekeztek rávilágítani SZABÓ Bálint rendszerépítő, inspiráló hatására mindezekben a megvalósításokban is: A hálózatok nem maguktól épülnek fel; mögöttük

structure rehabilitation, while for me it was the time when I started researching and publishing on Baroque roof structures. After this lengthy introduction, in the period under review (2009-2016), four buildings or parts of buildings were completely renovated thanks to a European Union grant (ROP 3.4.[41]) awarded and implemented in a cooperation (still unprecedented but with no follow-up) between the owner, the user, and the municipality running the building: the south and east wings of the main building, which were built in two different phases, the Bagolyvár and the building housing the elementary school, and the courtyard between them. In addition to these, the grant provided for the purchase of all teaching materials and school equipment of the highest quality to meet the 21st century expectations. The final result, again due to the shortcomings of the Romanian tender legislation (always the lowest bid wins), could only be achieved through a lot of work, struggle, and compromise.

In all three cases, as in the case of the Calvinist School of Satu Mare (formerly Kölcsey Ferenc Boarding School, my *alma mater*), which belongs to the Calvinist Diocese of Királyhágómellék, the construction works were carried out simultaneously with the teaching activities. This may be one of the reasons, in addition to the legislation, more complicated, and the licensing

procedures, more difficult than the average, as well as the huge financial requirements, that the full restoration may take decades.

The last example is the ensemble of the Bolyai Farkas High School (mainly Art Nouveau style) and the Calvinist Boarding School (2017-2023) in Târgu Mureş,[42] also a famous historic building of national importance, whose conservation history shall also be highlighted in a few details. The clarification of the ownership (cadastral registration) delayed the research, design, and conservation process by over five years, which also led to further and further changes of the design brief. The conservation was mainly financed by the Hungarian state subsidies coordinated by the Transylvanian Calvinist Diocese. In conclusion, such a huge historic building ensemble implies a significant and constant maintenance on the one hand and on the other hand, new tasks may become timely, for example, at the time of writing this article, the loft conversion of the old building's modified attic was formulated.[43] (Figure 8.c)

The presented (or mentioned) 30 listed buildings or ensembles are barely 15% of the 216 legally protected heritage buildings that have been surveyed, designed, and partially implemented in some form by our team. In addition to these priority functions and purposes, there are many others (for example, the covered wooden bridge in Coşbuc was mentioned in chapter 2.2). The selection and the notes have tried to highlight Bálint SZABÓ's system-building and inspirational influence in all these achievements in several manners: Networks do not build themselves; they are always backed by a key player who connects people, ideas and opportunities. These individuals, whether consciously or instinctively, create the connections through which ideas and concepts spread, shape the world (Albert-László BARABÁSI).

4. The challenges of conserving minor historic buildings, i.e. the bulk of built heritage

■ The fact that two approaches and ideologies spring from the same root is proven by the fact that two design studios are concerned with the same issue, each building its own narrative. One such issue regards unlisted historical buildings that are not legally protected as such. Our team always defines them as buildings constructed before (or without: see vernacular architecture) the formation (or application) of any engineering design system, which are technically identical and require the same approach, whether they are protected by law or not, the difference between listed and unlisted historic buildings can only rest in the density of the values they display.[44]

In other words, neither the size nor even the richness of the values carried matter for heritage buildings (and their historic load bearing structures); sometimes the conservation of minor historic buildings, which form the bulk of built heritage, pos-


c

mindig egy-egy kulcsszereplő áll, aki összeköti az embereket, gondolatokat és lehetőségeket. Ezek a személyek – akár tudatosan, akár ösztönösen – megteremtik a kapcsolatokat, amelyek révén az ötletek és eszmék elterjednek, formálják a világot (BARABÁSI Albert-László).

4. Az épített örökség zömét képező átlagos történeti épületek helyreállításának kihívásai

■ Azt, hogy két megközelítés, eszmerendszer egy tőről fakad, mi sem bizonyítja jobban, mint az, hogy ugyanaz a kérdéskör foglalkoztat két tervezőirodát, persze mindkettő a saját narratíváját építi fel. Ilyen téma a műemléki törvényes védettségben nem részesülő történeti épületek kérdésköre. Csapatunk ezt mindig úgy fogalmazza meg, hogy a mérnöki tervezési rendszer kialakulása (vagy alkalmazása) előtt (vagy nélkül: lásd népi építészet) készült épületek műszaki szempontból azonosak, és azonos megközelítést is igényelnek, függetlenül attól, hogy törvényileg védettek vagy sem, különbség a műemlékek és a történeti épületek között az értékek sűrűségében lehet csak.[44]

Másként megfogalmazva, az örökségi épületek (és történeti tartószerkezeteik) szempontjából sem a méret, és még csak a hordozott értékek gazdagsága sem számítanak – olykor különlegesebb szakmai kihívást rejt az épített örökség zömét képező átlagos történeti épületek helyreállítása, hisz ilyenkor a szabványok még kevésbé kerülhetők ki, és a megrendelő is csak ritkán érti meg, mit tekintünk védendő értéknek, és esetenként miért választunk ránézésre bonyolultabb megoldást (mint a bontás és modern szerkezettel való kiváltás). Számos negatív példát tudnánk bemutatni, de inkább három – a nehézségek ellenére végül szerencsés – esetet elevenítünk fel.

Az első az ALPÁR Ignác által tervezett (sőt művezetett) igazfalvi (Temes megye) református (műemléki jegyzékben nem szereplő) templom[45] esete, ahol az első tartószerkezeti szakvélemény lebontásra ítélte a templom tornyának felső részét képező Fachwerk-szerkezetet, amely a toronysisakkal közös tartószerkezetet alkotott. A finanszírozást biztosító Teleki László Alapítvány szakemberei brutálisnak és kifizethetetlenül drágának ítélték a megoldást. Felkérésükre vizsgáltuk újra a helyzetet a 2016-os nyári nagy viharok után. A szerkezet helyszíni megmentésére nagy kivitelezési szak-

mai tapasztalatot (magaslati és ácsmunka területén) igénylő terv készült. Sajnos 2017 folyamán kétszer is olyan kivitelező jelentkezett a munkára, aki különböző okok miatt ugyan, de nem tudta elvégezni a feladatot. Az előző év(ek)ben a nagy szélteher által súlyosan megrongált, legfőbb tartószerkezeti csomópontjaiban kiterjedt biológiai károsodást szenvedett szerkezet 2017. szeptember 17-én egy vihar hatására csupán 8 másodperc alatt ledőlt.

Néhány elemet szeretnénk csak kiemelni a helyreállítás-történetből: az első, hogy a hiteles rekonstrukciót a részletes, műemléki igényességű építészeti és tartószerkezeti felmérés tette lehetővé. A térszerkezet modellezése bizonyította, hogy a növekvő szélterhek miatt az eredeti koncepció még teljesen működőképes csomópontokkal is rizikót jelenthet, tehát egy megerősített szerkezet készült el a földön, melyet alig több mint egy évvel a leomlás után, 2018. november 7-én emeltek a helyére (9. a ábra). Társadalmi és gazdasági szempontból a beavatkozás tanulsága, hogy szükség esetén (a nagyobb bajban) hatékonyabb összefogás mozgósítható. Végezetül pedig megjegyeznénk, hogy saját modellezésen alapuló tartószerkezeti számításaink mellett a Budapesti Műszaki és Gazdaságtudományi Egyetem egy oktató-kutató csoportjának a figyelmét is felkeltette az eset, és további, saját kutatásokat is végeztek, cikkben fogalmazva meg az eredményeket (HEGYI et al. 2022).

A második példa a Bánságból Máramarosszigetre, az ukrán határ közelébe kalauzol. Mindkét vidéken a megmaradt magyar kisebbség fogyatkozó, de összetartó közösségeket formál. Máramarosszigetről el kell mondani, hogy az I. világháború utáni határmódosítások elvágták a virágzó gazdasággal rendelkező városközpontot az őt körülölelő települések számottevő részétől. A II. világháborúban a polgársága meghatározó részét kitevő zsidóságot deportálták, a kommunizmusban büntető fegyháznak helyet adó perifériává vált, a társadalmi-politikai változások után lassan éled csak újra a kulturális és gazdasági élet. A történeti épületállomány (függetlenül attól, hogy védett műemlékről vagy átlagos történeti épületről van szó) csak elvétve részesül szakmailag megfelelő kutatásban-tervezésben, és a kivitelezéshez szükséges anyagi források fellelése is nehézkes. Itt a római katolikus plébánia tulajdonában és tőszomszédságában található épület helyreállítását említjük, amelyet magyarországi állami támogatásból épített új óvoda (és bölcsőde) beruházásának részeként lehetett megvalósítani.[46] Az épület nem szerepel műemléki jegyzékben, holott


a

es a more specific professional challenge, because standards are even harder to avoid and the client rarely understands what is considered to be of value to be protected and why a more complex solution (rather than demolition and replacement with modern structures) is sometimes chosen. There are many negative examples, but we will focus on three cases which, despite the difficulties, were eventually fortunate.

The first is the case of the (unlisted) Calvinist Church in Dumbrava (Timiş County), designed (and even built) by Ignác ALPÁR,[45] where the first structural report sentenced the upper Fachwerk structure of the church tower, forming a common load-bearing structure with the steeple, to demolition. The experts at the Teleki László Foundation, which provided the funding, deemed the solution brutal and prohibitively expensive. Upon their request, we reassessed the situation after the major storms in the summer of 2016. A plan was drawn up for the on-site rescue of the structure, requiring considerable workmanship expertise (performance at height and carpentry). Unfortunately, in 2017, two different contractors applied for the project, who were, however, unable to carry out the work, for various reasons. Severely damaged by the high winds of the previous year(s), the structure suffered extensive biological damage to its main structural joints and collapsed in just 8 seconds on September 17, 2017, during a storm.

We would just like to highlight a few elements of the rehabilitation story, the first being that an authentic reconstruction was made possible by a detailed architectural and structural survey meeting the demands of historic building conservation practice. The modelling of the spatial structure proved that the original concept, even with fully functional joints, could be at risk due to increasing wind loads and so a reinforced structure was constructed on the ground and lifted to its place on November 7, 2018, just over a year after the collapse (Figure 9.a). From a social and economic point of view, the lesson of the intervention is that, when needed (in times of greater need), a stronger, more effective unity can be achieved. Finally, we would like to note that, in addition to our own modelling of the load-bearing structure, a group of teachers and researchers within the Budapest University of Technology and Economics have also been interested in the case and have carried out further research of their own, summarising their results in an article (HEGYI et al. 2022).

The second example takes us from Banat to the Maramureş region, near the Ukrainian border. In both areas, the remaining Hungarian minority forms dwindling but cohesive communities. In the case of Sighetu Marmaţiei, it has to be said that the post-World War I border changes cut off the thriving economic urban centre from a significant part of the surrounding settlements. The Jews, who made up the majority of its dwellers, were deported during World War II, and under communism it became a periphery, housing a political prison. After the socio-political changes, cultural and





■ ***9. ábra.*** *Helyreállított, műemlékvédelmi védettségben nem részesülő történeti épületek:* ***a.*** *az igazfalvi rekonstruált torony helyreemelése;* ***b.*** *a máramarosszigeti óvoda régi épületének helyreállított lépcsőháza;* ***c.*** *a kolozsvári Kozmutza Flóra Hallássérültek Speciális Iskolája, műhelyépület, udvari homlokzat. © Irod M*

■ ***Fig. 9.*** *Unlisted conserved historical buildings:* ***a.*** *re-positioning the reconstructed tower in Dumbrava (Timiș County);* ***b.*** *the conserved staircase of the old kindergarten building in Sighetu Marmației (Maramureș County);* ***c.*** *Special School for the Deaf Kozmutza Flóra, Cluj-Napoca, workshop building, courtyard elevation © Irod M*

economic life has just slowly revived. Its built heritage (whether listed historic buildings or minor, unlisted historical buildings) is rarely subjected to professional research and planning, while financial resources are rarely available for their restoration. Here we refer to the conservation of a building owned by and adjacent to the Roman Catholic parish, which could be conserved as part of an investment in a new kindergarten (and nursery) built with Hungarian state funding.[46] The building is unlisted, although its ground floor features Baroque sail vaults, its upper floor and elevations show evidence of a 19th-century extension, and its cellar may be partly mediaeval. The building was also found to be infested with dry rot fungus. The tight financial constraints did not allow the implementation of a loft conversion, foreseen in the design's first version, so it was necessary to reinforce the rudimentary existing structure. At the same time, as it was an unlisted historical building, it was acceptable to find a compromise and replace the (irreparably damaged) wooden winder stairs with a reinforced concrete structure (Figure 9.b). The building was handed over in 2023.

We are coming to the last example, not only in the range of minor or (for many) invisible built heritage and historical buildings, but in this whole chapter, which can perhaps be called a characteristic "microscopic section" of built heritage conservation in Transylvania. The Special School for the Deaf Kozmutza Flóra (formerly No. 2) in Cluj-Napoca, more precisely its building ensemble, has been among the first 10 pro-

földszintje felett barokk jellegű csehsüvegboltozatok találhatók, emelete és homlokzatai XIX. századi bővítésről tanúskodnak, pincéje részben akár középkori is lehet. Az épületben könnyezőházigomba-fertőzés is fellelhető volt. A szűkös anyagi keretek nem tették lehetővé az első változatban átépítésre és manzárdbeépítésre kiképzett fedélszerkezet megvalósítását, így a rudimentális, létező struktúrát volt szükséges megerősíteni. Ugyanakkor, a műemléki védettség hiánya felvállalható kompromisszummá tette a húzott karú (menthetetlenül károsodott) falépcső vasbeton szerkezettel történő pótlását (9. b ábra). Az épületet 2023-ban adták át.

Az utolsó példához értünk, nemcsak az átlagos vagy (sokak számára) láthatatlan épített örökségi, történeti épületpéldákban, hanem ebben a teljes fejezetben, mely az erdélyi építettörökség-védelem szempontjából talán nevezhető karakterisztikus „mikroszkópos metszetnek". A kolozsvári Kozmutza Flóra Hallássérültek (egykor 2-es számú) Speciális Iskolája, pontosabban annak épületegyüttese csapatunk első 10 munkája között szerepel, 2004-től szinte folyamatosan, kisebb-nagyobb szünetekkel,[47] egyik vagy másik épületen lokális vagy átfogó tervezési munkát végeztünk. Itt most a legutóbbi, az egykori műhelyépület helyreállításáról szólunk, csupán két megjegyzéssel. Az épület városképi szempontból jelentős (követi a dombon kanyargó és emelkedő) utca vonalát. Anyagában eléggé kis részben, volumetriájában és koncepciójában azonban teljesen menthető volt az épület, és az udvari homlokzata igyekszik visszaadni az eredeti szanatóriumfunkció hangulatát is. A zárógondolat egy romániai jogszabályi visszásságra hívja fel a figyelmet. Tervezők számára mindig kérdéses, mikor kössenek szerződést a kivitelezési munkák tervezői művezetésére. Ha ez egy többszakaszos tervezési szerződés részeként történik, nagy az esélye, hogy a megtervezett munkálatok bonyolultabbak és így költségesebbek lesznek, mint ahogyan azt az ember a kezdeti kevés információ alapján felbecsülheti. Sok esetben a gazdasági, jogszabályi instabilitás, az infláció elértéktelenítheti a szerződött összeget. Azonban, ha külön közbeszerzés keretében írják ki ezt a szolgáltatási szakaszt, előfordulhat az a lehetetlen helyzet, ami ebben az esetben

megtörtént, hogy egy kívülálló cég olcsóbb árajánlatával megnyerte és leszerződte a művezetési munkálatokat. Itt csak a helyzet abszurditására[48] hívjuk fel a figyelmet. A történtekkor jogi orvoslatot, fogást a helyzeten nem találtunk, bár mindenki (az építésügy-hatóságtól a szakmai érdekvédelmi szervezetekig) szörnyülködött a helyzeten, megoldással senki nem szolgált. A tervezésben részt vevő vezető szakemberek[49] felelősségérzetének, elhivatottságának köszönhető, hogy végig követték a munkálatokat, és beavatkoztak a minőség biztosítása érdekében, annak ellenére, hogy a munkájukért járó pénzt az a bizonyos másik cég kapta meg.

A bemutatásra kiválasztott esetek, mind ebben, mind az előző fejezetben, igyekeztek a hazai realitást tükrözni, nem célja sem a hurráoptimizmus, sem a borúlátás táplálása, szeretné ugyanakkor megmutatni, hogy kitartással, kompromisszumokkal lehet eredményeket elérni, amelyeknek akár sokszorosító hatásuk lesz. A zárógondolat pedig ez: a minőségért elsősorban maguk a szakemberek a felelősek, a professzionalizmus etikai kérdés.

5. A szakmai oktatás és publikálás fontossága

■ Mindannyiunk számára, akik SZABÓ Bálint munkatársai lehettünk az 1990-es években, elvárás, kötelesség, de tulajdonképpen természetes igény is volt, hogy különböző szakmai továbbképzéseken, csereprogramokban, szakmai tanácskozásokon vegyünk részt. Kezdetektől bátorított mindenkit, hogy tartsunk szakmai előadásokat, legyünk jelen publikációkkal nemcsak szaklapokban, de általánosan a kultúrával foglalkozó folyóiratokban is, így népszerűsítve az építettörökség-védelmet, nyilatkozzunk egy-egy rendezvény vagy szakmai megvalósítás kapcsán a sajtónak. Később, a szakképzési programok beindításával, oktatóként is kipróbálhattuk magunkat, már nagyon fiatalon.

Fel lehetne bontani ezt a tematikát is alfejezetekre, kezdeti és mai kiadványok, folyóiratok, szakcikkek, mesteri, szakmérnöki záró- és doktori dolgozatok áttekintésével, megvizsgálva, hogy Erdély hány egyetemén vagy oktatási intézményében milyen képzési formákban vannak jelen a kolozsvári (erdélyi) helyreállítási iskola szakemberei. Azonban a téma kifejtése egy önálló cikket, sőt akár monográfiát is igényelne.

Ha egy gondolatot kellene kiemelni, az az oktatás többszöröző hatásának hangsúlyozása volna. A *Transsylvania Nostra* olvasói számára jól ismert a Transylvania Trust Alapítvány által a Babeş–Bolyai Tudományegyetem keretében szervezett, röviden (félhivatalos nevén) műemlékvédelmi szakmérnökképző (posztgraduális) tanfolyam vagy éppen a bonchidai Bánffy-kastélyban működtetett gyakorlati szakképzés. A szakmérnöki végzősei közül a legjobb záródolgozatok publikációs lehetőséget kapnak a szaklapban. Ezért itt példaként inkább a Gyulafehérvári Egyetem mesterképzős[50] diákjait említem meg, akik közül sokan kutatásokban (pl. az olténiai és moldvai fatemplomok leltározásában), illetve konkrét műemlék-helyreállítási feladatok tervezésében vesznek részt, emellett aktív önkéntesei akár a Műemlékek Mentőszolgálatának (Ambulanţa pentru Monumente), akár a Fába Oltott Templomok Egyesületének *(*Asociaţia Biserici Înlemnite).

A felújítás alatt álló épületek, a helyreállítási építőtelepek rengeteg gyakorlati tudást tesznek elérhetővé, ha szakmai kirándulások keretében ezek akár mester-, akár posztgraduális vagy alapképzésben részesülő diákok számára megtekinthetővé válnak. Az elmúlt időszakban ezeket a szakmai kirándulásokat szemeszterenként megszervezték, főként Kolozsvár vonzáskörzetében.

A jövő pedig a legifjabb generáció, a gyerekek bevonásával válhat ígéretesebbé, az itt említett példa a Szent Mihály-templom (és annak az átlagturista elől rejtett) fedélszerkezetének látogatása, ahová már nemcsak egyetemista MCC-s (Mathias Corvinus Collegium – Erdély) hallgatók, de

jects of our team. Since 2004, almost continuously, with shorter or longer breaks,[47] we have been doing local or comprehensive design work on one or another building. Here we would merely add two remarks on the latest conservation of the former workshop building, which is significant in terms of the urban landscape (it follows the line of the street as it winds and rises up the hill). Only a small part of the material was salvageable, but in volume and concept the building could entirely be saved, and its courtyard elevation tries to restore the atmosphere of its original sanatorium function. The final reflection draws attention to an anomaly in the Romanian legislation. For designers, there is always the question of when to contract for the designer's supervision of the implementation. If this is part of a multi-phase design contract, there is a high chance that the works designed will be more complex and therefore more costly than one might estimate from the little information available at the beginning. In many cases, economic, legislative instability, and inflation can devalue the contracted amount. However, if a separate public procurement procedure is launched for this phase of the service, an impossible situation, which happened in this case, could arise, where an outsider wins by a cheaper bid and contracts out the supervision. We are only drawing attention here to the absurdity of the situation.[48] At the time, no legal remedy or solution was found, although everyone (from the building authorities to professional interest groups) was horrified by the situation, but no one could come up with a solution. It was thanks to the sense of responsibility and dedication of the senior professionals[49] involved in the design that they followed the works throughout and intervened to ensure quality, despite that the money for the works was paid to that particular other company.

The cases selected for presentation, both in this and the previous chapter, have tried to reflect the reality of the country, the aim was neither to encourage optimism nor to spread gloom, but rather to show that results can be achieved with perseverance and compromise, and that the outcome can even have a multiplier effect. This is the final message: quality is primarily the responsibility of the professionals themselves; professionalism is an ethical issue.

5. The importance of professional training and publication

■ For all of us who worked with Bálint SZABÓ in the 1990s, it was an expectation, an obligation, but also a natural need to participate in various professional training schemes, exchange programmes, and professional meetings. From the very beginning, he encouraged everyone to give professional lectures, to publish not only in specialist journals but also in cultural ones in general, thus promoting the protection of built heritage and to speak to the media in connection with an event or a professional achievement. Later on, with the launch of various training

programmes, we were able to try our hand at teaching from a very young age.

This topic could also be broken down into subsections, by reviewing earlier and current publications, journals, articles, master's or postgraduate dissertations, and doctoral theses, examining how many Transylvanian universities or educational institutions and training programmes the professionals of the Cluj (Transylvanian) conservation school are present in. However, a discussion on this topic would require a separate article or even a monograph.

If I had to highlight one idea, it would be the multiplier effect of education. Readers of the *Transsylvania Nostra* journal are well aware of the postgraduate course on historic building conservation (semi-official name) of the Transylvania Trust Foundation organised at Babeş-Bolyai University or the practical training course at the Bánffy Castle in Bonţida. The best dissertations of the postgraduate course's alumni are published in the journal. Therefore, here, as an example, I would rather mention the master's students of the University of Alba Iulia,[50] many of whom are involved in research (e.g. in the inventory of wooden churches in Oltenia and Moldavia historical regions) and in the conservation of specific historic buildings and are active volunteers of The Ambulance for Monuments (Ambulanţa pentru Monumente) or the Association of Wooden Churches (Asociaţia Biserici Înlemnite).

Buildings under restoration, conservation, and construction sites offer plenty of practical knowledge when they are made available to master's, postgraduate, and undergraduate students on study field trips. In recent years, these study trips have been organised every semester, mainly around Cluj-Napoca.

And the future is more promising with the involvement of the youngest generation. I would mention here the visits to Saint Michael's Church (and its roof structure hidden from the average tourist eye), which not only MCC (Mathias Corvinus Collegium – Transilvania) undergraduate students, but also younger middle school students (13-14 years old) could visit. The twinkle in their eyes and their sharp questions show that the virus of love and appreciation for the built heritage could be caught by many of them in the context of such a programme.

As for the articles, theses, books, listing them, together with the indirect links, would amount to hundreds of scientific works. We certainly cannot sit back in this respect either. Sorting out our own and our team's works alone would require thousands of hours of work: the "Guide to the Research, Design and Conservation of Baroque Roof Structures", which I announced in my doctoral thesis completed in 2013 or the publication of the doctoral thesis itself as a book, its translation into Hungarian and English have become a more difficult task with every delay, as a lot of additional material has been accumulated on the subject in the last decade. Additionally, we would also like (would have liked) to publish monographs of the great restoration works presented, as akár gimnazista (13-14 éves) kis tinik is eljuthattak. Szemük csillogása, lényegre törő kérdéseik mutatják, hogy az épített örökség szeretetének, értékelésének vírusát többen elkaphatják egy-egy ilyen program keretében.

Ami pedig a szakcikkeket, doktori dolgozatokat, könyveket illeti, felsorolásuk meghaladja a keretet, ha az indirekt kötődéseket figyelembe vesszük, több száz tudományos műről beszélhetnénk. Természetesen ebben a tekintetben sem dőlhetünk hátra. Csak a saját és csapatunk tartozásainak rendezése több ezer munkaórát igényelne: a 2013-ban befejezett doktori dolgozatom keretében beharangozott „Útmutató a barokk jellegű fedélszerkezetek kutatásához, tervezéséhez, helyreállításához" vagy magának a doktorátusnak könyvformában történő kiadása, fordítása magyar és angol nyelvre – minden halogatással egyre nehezebb feladattá válik, hisz rengeteg kiegészítő anyag gyűlt össze a témában, az elmúlt évtizedben is. Ugyanígy a bemutatott nagy helyreállítások monográfiáit is el szeretnénk (el szerettük volna) készíteni. Nem szeretnénk, ha a helyreállítási dokumentációk elkallódnának a nem túl jól szervezett állami archívumokban, hogy 50 év múlva csak mutatóban találjanak egy-egy cikket a jövőbeni kutatók, az újabb helyreállítási ciklus előkészítésekor, mint ahogyan mi jártunk BÁGYUJ Lajos munkája kapcsán a Szent Mihály-templomról.[51]

6. Zárógondolatok – Ad honorem Magister!

■ A cikkben bemutatott munkákhoz kapcsolódó adatokat (melyeket jegyzet formájában csatoltam) leszűkítettem a tartószerkezeti (és építész mint a beavatkozás karmestere) szakmákra, az információk mennyisége így is tetemes. Nem soroltam fel a kutatásokban részt vevő régészeket, művészettörténészeket, szakrestaurátorokat, épületgépészeket, tervellenőröket. A kivitelezők közül is általánosan a fővállalkozó cég megnevezését, indokolt esetben, kivételesen egy-egy mester, vezetőmérnök vagy az alapító tulajdonosok, akik egyben szakemberek is, nevét adtam meg. Köszönöm mindenki szakmai hozzájárulását ezekhez a helyreállításokhoz, és továbbra is remélem, hogy az egy-egy épülettel vagy épületcsokorral foglalkozó írások el fognak készülni, ahol minden szereplő megjeleníthető lesz.

Legnehezebb döntésem az volt, hogy ne személyeket, csak beruházó intézményeket említsek, mert a sor szinte végtelen volna, hisz annyi szinten, annyi intézmény keretében annyi ember lelkesedése, elhivatottsága és szakértelme, megértése, segítőkészsége és harca számított, hogy a teljességre törekvő felsorolás lehetetlen lenne.

Bízom benne, hogy a bemutatott adatok, történések, szakmai kapcsolatrendszerek eleven képet adtak arról a több ezer embert érintő – de a helyreállított örökségi épületek által egész társadalmunkhoz eljutó – értékvédő hálóról, melynek origóját kívánta ünnepelni ez a cikk.

2022 őszén, a tusnádi konferenciák kezdetének 30. évfordulóján elhangzott előadásom legfontosabb gondolata SZABÓ Bálint inspiráló tevékenységének többszöröző, rendszer-hálózat építő hatásának kiemelése volt. Egy élő előadás előnye a vizualitás. A gondolat megjelenítésére a vízbe hulló csepp egyre messzebb, nagyobb körben terjedő hatását választottam. Egy tudományos igényességű cikkben ez a kép túl banális volna. Ezért hívom inkább újra segítségül a hálózatok kutatóját: Egyetlen személy vagy esemény gyakran képes elindítani egy láncreakciót, amely kihat a hálózat egészére. Egyes csomópontok kiemelkedővé válnak, és egyre több kapcsolatot vonzanak, ami a hálózat szerkezetét alapvetően meghatározza (BARABÁSI Albert-László).

Az erdélyi műemlékvédelemben, a kolozsvári (erdélyi) tartószerkezet-(történeti örökség) helyreállítási iskola így vált hálózattá, és a személy, aki elindította a változást, dr. SZABÓ Bálint volt.

Köszönjük, Bálint bácsi! *Vivant professores! Ad honorem Magister*!

Bibliográfia / Bibliography

- *** *Cod de proiectare seismică – Partea a III-a – Evaluarea seismică a clădirilor existente, indicativ P100-3/2019* [Földrengésvédelmi tervezési előírások – III. rész – Meglévő épületek szeizmikus értékelése. Seismic design requirements – part III – Seismic assessment of existing buildings].
- *** *Principles for the Analysis, Conservation and Structural Restoration of Architectural Heritage*, ratified by the ICOMOS 14th General Assembly in Victoria Falls, Zimbabwe, in 2003 [Az építészeti örökség vizsgálatának, megőrzésének és szerkezeti-helyreállítási elveinek kartája (2003)].
- *** *Recommendations for the Analysis, Conservation and Structural Restoration of Architectural Heritage (ISCARSAH Guidelines)* [Ajánlások az építészeti örökség elemzésére, megóvására és szerkezeti helyreállítására (ISCARSAH irányelvek)].
- BÁGYUJ Lajos. 1957. Beszámoló a kolozsvári Szent Mihály-templom 1956/57. évi helyreállítási munkálatairól. In *Emlékkönyv Kelemen Lajos születésének nyolcvanadik évfordulójára*, eds. BODOR András, CSELÉNYI Béla, JANCSÓ Elemér, JAKÓ Zsigmond & SZABÓ T. Attila, 24–32. Bukarest: Tudományos Könyvkiadó.
- HEGYI Dezső, ARMUTH Miklós, HALMOS Balázs & MARÓTZY Katalin. 2022. The Effect of Wind on Historical Timber Towers Analyzed by Plastic Limit Analysis in the Focus of a Collapse. *Engineering Failure Analysis* 134: 105852.
- KIRIZSÁN Imola & MAKAY Dorottya. 2024. Historic Load-Bearing Structures (Based on Empirical-Intuitive Concepts) – Between the Expectations of Conservators and Standardization Requirements in Romania 2024 – In Memoriam Bálint SZABÓ (1944-2024) [Történeti (empirikus-intuitív koncepció alapján készült) tartószerkezetek a restaurátori, illetve a romániai szabványok elvárásai között 2024-ben. SZABÓ Bálint emlékére (1944–2024†)]. ISCARSAH Historical Structures Worldwide Conference, September 26, Bucharest, Romania.
- MAKAY Dorottya. 2013. Conceptul structural baroc – Contribuţii la cercetarea şarpantelor istorice având caracter baroc [Barokk tartószerkezeti koncepció – Adalékok a barokk jellegű történeti fedélszerkezetek kutatásához / The Baroque Structural Concept – Contributions to the Research of Historic Baroque Roof Structures]. Teză de doctorat, Universitatea Tehnică din Cluj-Napoca, conducător ştiinţific: profesor dr. ing. Balint SZABÓ.
- MAKAY Dorottya. 2014. Şarpante istorice cu caracter baroc de pe strada Mihail Kogălniceanu, Cluj Napoca. Baroque Roof Structures on Mihail Kogălniceanu Street in Cluj-Napoca. *Transsylvania Nostra* 2: 51-61.
- MAKAY Dorottya. 2020. A Puzzle-Piece for Historic Building Conservation in Transylvania, 2003–2017 [Építettörökség-védelem Erdélyben 2003-2017 – a kirakós egy darabja]. In *Restoration in Romania, Theory and Practice*, ed. Stefano D'AVINO, 236-247. Pescara: CARSA Edizioni.
- MAKAY Dorottya, SÁNDOR Boróka, BORDÁS Boglárka & HARI József. 2015. Utilitatea standardelor şi normativelor în vigoare din punctul de vedere al reabilitării structurale. Studiu de caz: studiul, proiectarea şi execuţia bisericilor reformate de pe strada Kogălniceanu din Cluj-Napoca şi comuna Sic. The Utility of Valid Standards and Norms in What Pertains to Structural Rehabilitation. Case Study: The Research, Design, and Implementation of the Calvinist Churches in Kogălniceanu Street, Cluj-Napoca and in the Village of Sic. *Transsylvania Nostra* 4: 20–36.

we would not like the pertaining documentation to be lost in the not very well-organised state archives, since in 50 years future researchers will merely find some scattered articles when preparing for the next restoration cycle, as we did with the work of Lajos BÁGYUJ about St. Michael's church.[51]

6. Closing remarks – Ad honorem Magister!

■ I have narrowed down the data related to the works presented in the article (which are attached as notes) to the structural engineer profession (and the architect as the conductor of the intervention), as the amount of information is considerable. I have not listed the archaeologists, art historians, specialist conservators, building services engineers, and design verifiers involved in the research and design. I have also generally given the name of the main contractor, and in justified cases, exceptionally, the name of a master craftsman, a chief engineer or the founding owners, who are also professionals. I thank everyone for their professional contributions to these conservation works and I continue to hope that the writings on individual buildings or ensembles will eventually be published, where all the contributors will be listed.

My most difficult decision was not to mention individuals, only investing institutions because the list would be almost endless, as in so many institutions, so many people's enthusiasm, dedication and expertise, understanding, helpfulness, and struggle counted at so many levels, that it would be impossible to list them all.

I trust that the data, events, and professional contacts presented here have given a vivid picture of the web of heritage protection that affects thousands of people – but reaches our entire society through the conserved heritage buildings – and whose origins this article was intended to celebrate.

In the autumn of 2022, the most important idea of my presentation at the 30th anniversary of the Tusnad conference series was to highlight the inspiring, multiplying, system- (network-) building impact of Bálint SZABÓ's work. Taking advantage of the live lecture, the visuality, I chose the effect of a drop falling into a body of water and spreading further, to represent the idea. In a scientific article, this image would be too banal. That is why I call on the help of the network researcher again: A single person or event can often set off a chain reaction that affects the whole network. Some nodes become prominent and attract more and more connections, which fundamentally determines the structure of the network (Albert-László BARABÁSI).

In the Transylvanian heritage conservation, this is how the Cluj (Transylvanian) school of load-bearing structure (historical heritage) restoration became a network, and Bálint SZABÓ, PhD, was the person starting the change.

Thank you, Bálint SZABÓ! *Vivant pofessores! Ad honorem Magister*!

Végjegyzetek

1 A cikkben bemutatott anyagok elkészítéséhez az Irod M és ConsolideM Kft.-k munkaközösségének egykori és jelenlegi tagjai valamennyien hozzájárultak, kiemelve elsősorban a jelenlegi csapattagokat: BÁRDI Zoltán, BOHONYI Boglárka, HARI József, SÁNDOR Boróka, SEBESTYÉN Ábel tartószerkezet-tervező mérnökök és SÍPOS Károly egyetemista-gyakornok munkáját, köszönetet mondva egykori mérnök kollégáinknak: (2006–2008) ACZÉL Csaba (1977–2024†); (2008–2014) ANDRÉ (FILEP) Annamária; (2016–2019) BARTALIS Szilárd; (2008–2012) BÉKÉSI (BLÉNESI) Zsuzsanna; (2008–2015) BORDÁS Boglárka; (2006–2009) CSÁKI Rómeó; (2017–2021) TAKÁCS (SZENYES) Julianna; (2016–2017) ZOLTÁN Erzsébet, valamint állandó altervezőnk, a VBS Structure Kft. (2008–2022) és munkatársai: BAYKA Levente, SZALIÓS-KIS Csaba (1970–2022†), VASS László.

2 Személyes szakmai kapcsolatunk az egyetemi alapképzés éveire nyúlik vissza, amikor a vasbeton keretszerkezetek tervezési gyakorlatát vezette dr. SZABÓ Bálint, illetve amikor az 1992-es tusnádfürdői műemlékvédelmi tanfolyam keretében ismerkedhettem meg az akkor még műemlékvédelmi (majd örökségvédelmi) szakmai irányvonallal, későbbi főnökömmel és szakmai mentorommal. 1994 és 2003 között az Utilitas Kft. munkatársaként, első generációs csapattagként közvetlenül SZABÓ Bálint irányításával sajátíthattam el a szakma alapjait. 1995-től (2003-ig) tagja lehettem a tusnádi konferenciasorozat szervezőbizottságának (növekvő felelősségekkel és feladatkörökkel), 1996-ban mind a Transylvania Trust Alapítvány, mind az Erdélyi Műemlék-restaurátorok Egyesületének alapítói között lehettem, az előbbin átfutó feladatkörökben is osztozva. Önálló cégalapításom után (2003) szakmai kapcsolatunk nem szakadt meg, a SZABÓ Bálint neve által fémjelzett konferenciákon sok esetben előadással, illetve a később (2007-ben) alapított Transsylvania Nostra Alapítvány kiadványaiban tudományos cikkekkel lehettem jelen. Kitartóan vezette hosszadalmasan elnyúló (2002–2013) doktori disszertációm előkészítését (MAKAY 2013).

3 A cikk elsősorban dr. SZABÓ Bálint (1944–2024†) hivatásának nagyrabecsülése jeléül készült, ugyanakkor főhajtás BENCZÉDI Sándor (1952–2024†) munkássága előtt is, akivel közösen indították 1992-ben műemlékvédelmi gyorstalpalóként a tusnádi épített örökség felújításának elméleti és gyakorlati kérdései nemzetközi konferenciasorozatot, amely az erdélyi szakma alappillérének, origójának vagy akár inkubátorának is tekinthető.

4 A második európai uniós pályázati szakaszban (2014–2020) a vidéki műemlék-helyreállítások is lehetségessé váltak (PNDR – Programul Naţional de Dezvoltare Rurală/ Országos Vidékfejlesztési Program), a jobbítások olyan pályázatírással foglalkozó szakembereknek is köszönhetők voltak, mint például ILYÉS Szabolcs (Északnyugati és Központi Fejlesztési Régiók), valamint MATUZ Zsolt (elsősorban Partium és Máramaros), akiknek csapataival számos támogatási programban vehettünk részt. Külön köszönet illeti a Hívogató Románia program megálmodóját és kialakítóját, HEGEDÜS Csilla államtitkárt (Európai Beruházások és Projektek Minisztériuma / Ministerul Investiţiilor şi Proiectelor Europene, 2021–2023), akinek köszönhetően a pandémiát követő Országos Helyreállítási Terv (PNRR – Planul Naţional de Redresare şi Reziliență) az épített örökség témakörét is felkarolta, számos várrom, római *castrum*, kastély, kúria, templom, népi építészeti érték helyreállítását téve lehetővé.

5 Természetesen, ahol dr. SZABÓ Bálint ez ellen az érdektelenség ellen személyesen (majd később tanítványai révén) tehetett, tett is, így a Kolozsvári Építészeti és Urbanisztikai Kar keretében meghonosította a Történeti épületek helyreállítása tárgyat.

6 A csíkszeredai Anno Domini Dendrolab (2007) alapító, régész kutatói, dr. BOTÁR István és TÓTH Boglárka, mind egyéni megrendelésekre, helyreállítás-tervezést előkészítő kutatások keretében, mind átfogó, területi vagy faanyagalapú, támogatott kutatások segítségével, a dendrokronológiai datálást meghaladó művészettörténeti, tartószerkezeti, technológiai, műszaki megfigyelésekkel kiegészített dokumentációkat készítenek. Ezek száma mára meghaladja a 400-at, melyek a helyreállításért felelős minden szakág számára jelentős információkkal szolgálnak: https://dendrolab.ro/hu/page/. Bár mára már nem ez az egyetlen dendrokronológiával foglalkozó központ, a többi inkább fatemplomok datálásában aktívabb.

7 MIHÁLY Ferenc farestaurátornak és csapatának, elsősorban SZÁSZ Erzsébetnek a munkásságát emeljük ki.

8 Magyarországi (dr. VÁNDOR András), majd 1999-től nagy-britanniai szakemberek és ácsok munkáját, átadott tudását emeljük ki (a Transylvania Trust Alapítvány és a brit Institute of Historic Building Conservation nemzetközi együttműködéseinek köszönhetően), de az egykori Utilitas csapatán belül más, pl. csehországi, svéd stb. kapcsolatok is kialakultak dr. KIRIZSÁN Imola tevékenységén keresztül.

9 SZABÓ Bálintnak és tanítványainak terminológiája tartószerkezeti működésük alapján, a nemzetközi szakirodalmat figyelembe véve, annak az építészeti stílusnak a nevét használja, nevezi meg a különböző fedélszerkezeteket, amelynek idejében az adott műszaki megoldás először jelent meg, következetesen hozzácsatolva a „jellegű" szócskát. Ilyen értelemben nem számít, hogy pontosan milyen stílusban készült épületben, illetve melyik korban épült az adott szerkezet. A művészettörténeti megközelítés azonban kritikával illeti ezt a megfogalmazást, mondva, hogy egy, például a XVIII. században épített szerkezet nem lehet gótikus, és a német nyelvterületen használt torokgerendás fedélszerkezet elnevezést részelteti előnyben. Fontos tehát, hogy tisztázzuk, iskolánk pontosan ezért használja következetesen a „jellegű" kifejezést, illetve torokgerenda található például a barokk jellegű fedélszerkezetek kialakításában is, tehát tartószerkezeti szempontból pontatlannak, túl általánosnak tartjuk a torokgerendás fedélszerkezet megnevezést, bár elfogadjuk annak is a létjogosultságát. A román kori jellegű fedélszerkezetek is torokgerendás szerkezetek, az elnevezés azonban számunkra azt is egyértelműsíti, hogy az adott szerkezet nem rendelkezik hosszanti merevítéssel, és nem (mindig) lehet mellék- és főállást megkülönböztetni.

10 A kiválasztott példa is szemlélteti, hogy egy olyan történeti fedélszerkezetről beszélünk, mely az erdélyi gótika egyik legkiemelkedőbb templomához tartozik, és a XIX. század hajnalán épült, amikor már rég nem építkeztek barokk építészeti stílusban, mégis kiállunk a terminológia helyessége mellett, hisz a barokk jellegű feszítőmű egyértelműen a XVI–XVII. században vált általános műszaki megoldássá, tehát a barokk jellegű fedélszerkezet elnevezés ezen rendszerre egyértelműsíti, hogy milyen tartószerkezeti koncepcióról beszélük, ellentétben a német szakirodalomból átvett, a művészettörténészek által előnyben részesített: „dőltszékes" kifejezéssel szemben. Tartószerkezeti szempontból egy barokk fedélszerkezet átmenet a szarufás, zárt síkháromszög és a székek által hordozott szelemenes szerkezet között. Dőltszékes az 1. c ábrán megadott, XIX. századi szerkezet is, ilyen értelemben a megnevezés tartószerkezeti szempontból pontatlan, csapatunk kevésbé elfogadható alternatívának tartja, mint az előző, torokgerendás fedélszerkezet elnevezést a gótikus jellegű szerkezetek megnevezésére.

11 Tekintettel arra, hogy a XIX. századi, elő- vagy korai mérnöki fedélszerkezetek még sokkal változatosabb tartószerkezeti kialakítást foglalnak magukban, ebben az esetben is SZABÓ Bálint terminológiáját tartjuk tartószerkezeti szempontból a legprecízebbnek, hisz bármely más megfogalmazás teljesen más tartószerkezeti koncepcióra is utalhat, így például a szelemenes fedélszerkezetek akár a mediterrán szerkezeteket is takarhatják, az állószékes fedélszerkezet kifejezés ellen pedig határozottan küzdünk, mert ez nyomott oszlopos, szelemenes szerkezeteket feltételez, míg a XIX. századi tetőzetek meghatározó része egyes, kettes vagy hármas függesztő- és feszítőműves szerkezetek.

12 A szemléletet mindkét oldalról érik támadások. Egyfelől a P100-3/2019 szerint a fedélszerkezet, a földrengési terhelés szempontjából „másodlagos tartószerkezeti elem", ami kétszeresen is helytelen: nem elem, hanem egy összetett tartószerkezeti alegység, mely ráadásul, bizonyítottan, a falak szempontjából merevítő, terheléselosztó szereppel is rendelkezik. Ennek a szemléletnek az egyenes következménye, hogy sok mérnök nem tulajdonít fontosságot a tetőszerkezetek ellenőrzésének, tervezésének, így a beavatkozásokat az építészekre, restaurátorokra vagy sok esetben akár a (képzetlen) szakmunkásokra, zsaluzatkészítéshez értő ácsokra bízzák. Másfelől a restaurátori szemlélet is hasonlóan negatív eredményekkel járhat a történeti tartószerkezeti koncepció és működési mód szempontjából. Az anyagot, a felszínt, a technológiát tartva védendőnek, nem tekinti fontosnak a működési mód, a működő csomópontok helyreállítását az erőjáték biztosítása céljából.

13 A templom helyreállításához két különálló dokumentáció készült. A teljes helyreállítást célzó megvalósíthatósági tanulmányt az INP Institutul Naţional al Patrimoniului, azaz Országos Örökségi Hivatal a Timbrul Monumentelor / Műemléki Bélyeg támogatási programból finanszírozta. Másfelől az évente kisebb lépésekben haladó, az Ambulanţa pentru Monumente (azaz Műemlékek Mentőszolgálata, melynek kapcsán itt TÂRNĂVAN Camelia, VAIDA Eugen építészek és VAIDA Ştefan ácsmester nevét kell megemlítenünk) által vezetett sürgősségi beavatkozásokra készült kiviteli terv (ennek keretében a szentély fedélszerkezetét, a hajó déli falkoronáját és a keleti részen megmaradt fedélszerkezetet állították helyre, 2024 őszéig). Az Irod M

csapata részéről a tervet SÁNDOR Boróka készítette, tartószerkezeti szakértő BENKE István, akivel mindazokban a továbbiakban felsorolt esetekben is együttműködtünk, ahol nem nevesítettünk tartószerkezeti szakértőt.

14 A beavatkozást a marosvásárhelyi Asociaţia Arcus Egyesület (KISS Lóránd falkép-restaurátor) kezdeményezésére, BIRTHLER Klaus építész bevonásával, GÁLFI Attila csapata végezte 2022-ben, a beruházó a Consistoriul Districtual Evanghelic – azaz az Evangélikus Kerületi Konzisztórium – volt, a finanszírozás az INP – Timbrul Monumentelor / Műemléki Bélyeg támogatási program keretében történt (az Irod M csapata részéről a tervet HARI József készítette).

15 Az Asociaţia Biserici Înlemnite (Fába Oltott Templomok Egyesület) szakembereinek köszönhetően egyfelől tudjuk azt, hogy Dél-Erdély (Arad, Hunyad, Temes megye) is annyira gazdag fatemplomokban, mint a sokkal ismertebb észak-erdélyi régió (Máramaros, Szilágy, Bihar, valamint Maros megye is), de az építészeti és szerkezeti kialakításuk egészen más. Sőt, ami még kevésbé ismert, hogy az Ókirályság, Olténia és Moldva is Erdéllyel összemérhető fatemplomörökséggel rendelkezik. https://biserici-inlemnite.ro/ro/despre.

16 A 2015-ben leégett porzsoni ortodox fatemplom tölgyből készült gerendavázas és zsilipelt falazatú szerkezete a belső felületen elszenesedett, dr. OBRADOVICI Vladimir építész csapata kidolgozta a fatemplomok részletes építészeti és tartószerkezeti felmérésének módját, minden gerendán több helyen mérte az elszenesedés mélységét (mely nem haladta meg a 1,5–2 cm-t). A temesvári INCERC keretében GRUIN Aurelian mérnök szilárdsági vizsgálatokat végzett, a jó eredmények megengedték a szerkezet megtartását, az Irod M csapata részéről a tervet TAKÁCS (SZENYES) Julianna készítette.

17 A 2017-es vihar következtében, éppen a helyreállítási kivitelezés elkezdése előtt, ledőlt az igazfalvi (Temes megye) református templom tornyának fachwerkes (fa rácsszerkezetes) toronyszerkezete és sisakja, a Teleki László Alapítvány segítségével, magyar állami támogatással, 2018-ban került helyére a rekonstruált, ugyanakkor megerősített szerkezet (építész: BÂLDEA Maja, a kivitelezést CSAPÓ Ferenc csapata: a Titinel Com Kft. végezte, az Irod M részéről a tervet HARI József készítette).

18 Az EMŐDI Tamás építész által koordinált helyreállítási terv 2016-ban készült el, azonban EU-s pályázatot nem nyert, a kivitelezést, melyet magyarországi állami támogatás tett lehetővé, a nagyváradi Abed Nego nevű cég végezte a IONAŞCU család vezetésével, az épület átadására 2021-ben került sor, az Irod M csapata részéről szinte mindenki részt vett a kutatás-tervezés folyamatában, kiemelve HARI József, SÁNDOR Boróka és BOHONYI Boglárka munkáját.

19 A bemutatott esettanulmányok a jelen, valamint a következő fejezetben is, az Irod M csapatának 15. évfordulójára 2018-ban, illetve a 2024-ben tartott 20 éves (ConsolideM 10) születésnapjára készített kiállításokra előválogatott tervekből kerültek ki, a munkáink mintegy 10%-át mutatva be.

20 A templom történetének érdekessége, hogy 1924-ben a római katolikus egyház 25 évre (1949-ig) bérbe adta azt a görögkatolikus egyháznak, amit azonban a kommunista országvezetés 1948-ban betiltott, megszüntetett, így az a görögkeletiek (ortodoxok) használatába került. A politikai változásokkal, a római katolikus egyház tulajdonjogát elismerve, 1991–94 között a két felekezet közösen használta az épületet, ezután 1994-ben kezdődhetett az a felújítás, amelyet 1998-ban *Europa Nostra* díjjal értékelt a szakma, az országból első magyar vonatkozású díjazott emlékként. A helyreállítás szíve és motorja KÁDÁR István (1953–2017†) plébános volt, köszönettel állít neki is emléket ez a bejegyzés, ez a cikk.

21 Ebben a fejezetben kizárólagosan a teljes felújításon átesett, a műemléki jegyzékben szereplő épületeket idézzük fel, a folyó helyreállításokat nem említjük, holott a székelydályai református templom első szakvéleményét és helyreállítási tervét dr. GUTTMANN Szabolcs építésszel dr. SZABÓ Bálint és az Utilitas Kft. csapata készítette, tehát a szakmai összefüggés még egyértelműbb volna, bemutatását nem választottuk. KÖLLŐ Miklós építésszel csapatunk 2010-től foglalkozik a tervvel, melynek jelenleg zajló munkálatait a Hívogató Románia Terv finanszírozza. Az esettanulmány szerepel az angol nyelvű *Építettörökség-védelem Erdélyben 2003–2017 – a kirakós egy darabja* (MAKAY 2020) cikkben.

22 Dr. FURU Árpád építészeti és műemlékvédelmi feladatkörökben FURU Xénia építésszel közösen (építészeti és műszaki témákban) a kolozsvári Magyar Unitárius Egyház tanácsadói. FURU Árpád SZABÓ Bálint tiszteletére írt cikkében bemutatják az általam felsorolt munkákat is, melyekben a mi csapatunk a tartószerkezeti kutatást és tervezést végezte, Székelyföldön MÁTHÉ Zsolt, míg Kolozs megyében KOZMA Zsolt építészekkel. Ugyanezen okból illusztrációt sem választottunk ezekből a munkákból.

23 A fentebb említett angol nyelvű cikk (MAKAY 2020) mellett, a széki templom esettanulmánya egyfelől a Transylvania Trust által a bonchidai Bánffy-kastélyban szervezett BHCT oktatási programok, a Gyulafehérvári Egyetem (UAB) műemlékvédelmi mesteri képzésén és a Transylvania Trust szervezésében a kolozsvári Babeş–Bolyai Tudományegyetem (UBB) keretében zajló posztgraduális képzés tananyagát is képezi. Másfelől a *Transsylvania Nostra* folyóiratban is feldolgozták (MAKAY et al. 2015), a cikk címe magyar fordításban: „A hatályos szabványok és előírások hasznossága a tartószerkezeti helyreállítás szempontjából. Esettanulmány: a kolozsvári Farkas utcai és széki református templomok vizsgálata, tervezése és kivitelezése". A terv építésze IMECS Diana, tartószerkezeti szakértője dr. POPA Augustin professzor volt, az Irod M csapata részéről a tervet SÁNDOR Boróka koordinálta a Harbau Kft. által vezetett kivitelezés alatt. A jegyzet egyben megemlékezés HALÁSZ Annamária (1966–2019†) műszaki ellenőrről (közös munkáink sorát a csíkkarcfalvi templommal nyitotta, de jelen volt a kolozsvári Farkas utcai templom helyreállításánál is), aki műemlékvédelmi munkásságát szintén SZABÓ Bálint csapatában kezdte. A bekezdésben szereplő évszámok az építkezés befejezését jelzik.

24 Az ebben a bekezdésben felsorolt református templomok esetében az építészeti tervezést EMŐDI Tamás (Szatmár és Bihar megye), MÁTHÉ Zoltán (Hargita), JAKAB Rita (Máramaros), valamint TÓTHFALUSI Gábor (Fehér megye) készítették, ahol szükség volt rá, a pályázati lebonyolítást a Partiumban és Máramarosban MATUZ Zsolt és csapata, Erdélyben ILYÉS Szabolcs és csapata biztosították. Az Irod M statikusai: SÁNDOR Boróka, BOHONYI Boglárka, BÁRDI Zoltán (Fehér megye, valamint a következő bekezdésben említett Csíkszentmihály) mellett ebben a fejezetben a VBS Structure munkáját (Csombord) és az azt folytató VASS Lászlót (Pér) is meg kell említenünk.

25 Bár a kezdeti szakasz után (2003–2008) csapatunk egyre ritkábban vállalt főtervezői feladatkört, a csíkkarcfalvi terv esetében a nagy távolság ellenére vállaltuk a karmester szerepét is a statikai kutatás-tervezés mellett. A munka szűk határidejére való tekintettel két építészcsapattal dolgoztunk, a templom esetében TÖVISSI Zsolt (aki a csobotfalvi templom építésze is volt), a torony és kerítőfal esetében KÖLLŐ Miklós voltak a vezető építészek. A kivitelezést a csíkszeredai Aurora Impex Kft. végezte, ahol több olyan szakmunkás, ács is dolgozott, akik az ACTT 2000 nemzetközi szakmunkásképzésen részt vettek. Ez alkalommal megjegyezzük, hogy az általunk koordinált tervekben, illetve a legtöbb erdélyi, európai uniós támogatással rendelkező terv esetében a villamossági tervezést a kolozsvári Pieme Kft. végezte, melyet SZABÓ Erzsébet alapított és vezetett visszavonulásáig. Az Irod M csapata részéről többen vettek részt ezekben a tervekben, BORDÁS Boglárka és SÁNDOR Boróka mellett ANDRÉ Annamária (aki a csobotfalvi templom statikusa is volt). A csíkszentmihályi templom építésze BOGOS Ernő (aki maga is az első tusnádi gyorstalpaló hallgatója volt).

26 VAIDA Eugen építész és köre hatására megalakult több szervezet, például a ILIEŞ Bogdan vezette szilágysági csoport, tevékenységük nagyszámú önkéntes fiatal, sok esetben egyetemi hallgató bevonásával történik, *hands-on* (gyakorlati) képzést biztosítva, ugyanazt az utat követve, amelyet a Transylvania Trust Alapítvány már 1999 óta folytat. SZABÓ Bálint gondolatát, mely a szakma és a társadalom közeledését elengedhetetlennek tartotta (a Tusnád 2000 konferencia témája), sikerült közelebb hozniuk a megvalósuláshoz, mindenhol, ahol beavatkozást szerveznek, bevonják a helyi közösséget is (szállás, étkezés biztosítása stb.).

27 Asociaţia R.O.S.T. Reabilitarea Organică a Satului Tradiţional / H.F.O.H. Egyesület a Hagyományos Falu Organikus Helyreállításáért, vezetője ZAHARIA Laura építész (valamint ZAHARIA Gelu mérnök), maga is a kolozsvári műemlékvédelmi szakmérnöki korábbi végzettje.

28 Ebben a fejezetben is kizárólagosan a teljes felújításon átesett, a műemléki jegyzékben szereplő épületekről emlékezünk meg.

29 Mindkét épület esetében a fő- és építész tervező TÓTHFALUSI Gábor és csapata, az Irod M részéről a statikus HARI József volt, a templom esetében a kivitelezést a székelyudvarhelyi Kvadrum Axis Kft. a kolozsvári Decorint Kft.-vel közösen végezte, a kápolna a kolozsvári Weberbau Kft. munkája.

30 A helyreállítás főtervezője az M&M Design MAKSAY Ádám által vezetett csapata, építész tervezői MAKSAY Katalin és LÁZÁR Zoltán, a kivitelezést a Decorint és a Libra Kft.-k konzorciuma végezte, rekordidő, 16 hónap alatt. Az Irod M csapata részéről mindenki, de elsősorban SÁNDOR Boróka és ANDRÉ Annamária vettek részt a tervezésben, a tartószerkezeti szakértő dr. RUS Petru volt. A kő művészeti elemek restaurálását NAGY Benjámin

koordinálta. Az 1800–1801-ben kivágott fákból készült, barokk jellegű fedélszerkezet a szerző doktori dolgozatában (MAKAY 2013), valamint számos egyéb cikkében szerepel, nem utalunk itt rájuk külön.

31 A Szent Mihály-plébániatemplom és a Farkas utcai templom történetét összeköti, hogy az 1950–60-as években ugyanaz a csapat dolgozott mindkét épület felújításán, melyeket BÁGYUJ Lajos vezetett. Érdekesség, hogy a XXI. századi felújításokban is a tervezőcsapatok sok szempontból azonosak, a főtervező mellett a tartószerkezet-tervező vagy éppen a tartószerkezeti szakértő is azonos. A torony fémszerkezeteit a NAGY Zsolt egyetemi oktató (aki 1994–95 között maga is volt Utilitas-tag) vezette csapat végezte. Az építészek ebben az esetben EMŐDI Tamás, PÁKAI Eszter, illetve GUTTMANN Szabolcs. A kivitelezést a KÉSZ Románia Kft. vezette és fogta össze, a gigantikus kőrestaurátori munkát a KOLOZSI kőrestaurátor-család koordinálta. A műszaki minőségi ellenőrzést MÁRTON Judit (szintén SZABÓ Bálint utilitasos kezdőcsapatának egykori tagja) végezte, de részt vállalt a liturgikus tér koncepciójának kialakításában is. Az Irod M csapatból újfent mindenki, de elsősorban HARI József, valamint SÁNDOR Boróka és BÁRDI Zoltán vettek részt a munkában. A bemutatott kutatási-tervezési munkákat egy másik, dr. MEZŐS Tamás és a Budapesti Műszaki és Gazdaságtudományi Egyetem által koordinált kutatási szakasz előzte meg, ennek eredményeit a hivatkozott munka részlegesen átvette. A már említett, 2003–2017-es eredményeket bemutató angol nyelvű cikk (MAKAY 2020) és annak szerkesztés alatt levő frissítése részletesebb beszámolót tartalmaz a Szent Mihály-templom helyreállításáról.

32 Ahogyan a cikkhez a széki templomról vagy az unitárius templomokról sem választottunk képet, hisz sokszor voltak publikálva, az alfejezet illusztrálásánál a Farkas utcai templomról is lemondtunk, a 6. ábrát teljesen a Szent Mihály-templomnak szenteltük, igyekezve minimalizálni az ismétlést más publikációkhoz képest.

33 Fő- és építészeti tervezés FODOR Bogdan és csapata (Atelier FKM Műhely, Kolozsvár), a tartószerkezeti tervezéshez mind NAGY Zsolt Gordias Kft.-s, mind a VBS Structure csapatai hozzájárultak. A kivitelező a szatmári Euras Kft. Kiemelendő az Erdélyi Történelmi Múzeum, a régészeti feltárás: dr. MARCU Felix, valamint dr. CSÓK Zsolt és további régészek szerepe.

34 Vonatkozó adatok a 18-as jegyzetben.

35 Fő- és építészeti tervező TÓTFALUSI Gábor csapata, PÉTER Eszter és SZŐCS István építészek. A kivitelezést az ADD Concept és az Kvadrum Axis Kft.-k konzorciuma fogta össze, műszaki ellenőr OPREA Ovidiu volt. Az Irod M csapata minden tagja részt vett a tervezésben, kiemelendő BÁRDI Zoltán és SÁNDOR Boróka mellett SZALIÓS-KIS Csaba (1970–2022†) tervezési tevékenysége.

36 A kastély-helyreállítás története már máig is nagyon összetett, annak bemutatására leginkább a HEGEDÜS Csilla elnökségével vezetett, oktatási tevékenységért már 2008-ban Europa Nostra nagydíjban részesült alapítvány hivatott.

37 A beruházás által az épület az enyészet pereméről tért vissza. A főtervezői feladatkört is elvállaltuk, a kivitelezés lehetőséget adott a Harbau Kft. szakmunkásai és mérnökei számára, hogy a bonchidai BHCT 2002 program keretében végzett falazó-kőműves (és ács)mesterektől a falszövések, repedéskezelések technikáját a helyszínen tanulhassák meg, és később más építőtelepeken kamatoztathassák a tudásukat. Mégsem nevezhetjük a megvalósítást egyértelműen sikertörténetnek, a helyreállítás befejezése (2008) után több mint egy évtizeddel sem kapta meg az épület a tűzoltósági működési engedélyt, ami leginkább a szabványok ellentmondásosságát példázza.

38 Tekintettel arra, hogy mind a fő-, illetve építészeti tervezők, sőt a tartószerkezeti szakértő is, mind pedig a kivitelező csapatok cserélődtek, nem részletezzük az állandóan változó tervezési témát is magában foglaló történetet, sem pedig a különböző források bevonását, a kisebb-nagyobb lépések, rövidebb és hosszabb megtorpanások eseménysorát. Két személy nevét azonban meg kell említenünk, akik nélkül nem lehetett volna lezárni ezt az elnyúló szakaszt: MAKSAY Ádám, valamint SZABÓ Lóránt (szintén a posztgraduális képzés végzettje) mérnökökét, akik a kronológia egy-egy szakaszában a beruházó püspökség műszaki képviselői is voltak, de tervezői, illetve műszaki ellenőri feladatkört is betöltöttek.

39 SZABÓ Bálint átfogó *(en gros)* megközelítését minden területen alapos, analizáló, a részletek fontosságára, de ugyanakkor a törvények alapos ismeretére támaszkodó szakemberek segítették. Az 1990-es években a tartószerkezeti tervellenőrzés területén ez a szakember id. MAKSAY Ádám (1937–2001†) volt, akinek a figyelmét a legapróbb hiba sem kerülte el. Akiknek szerencsénk volt ifjú mérnökként vele dolgozni, rengeteget tanulhattunk tőle, nemcsak szakmát, de felelősségvállalást is. Az időszak szakmai tudása a történeti fedélszerkezetek területén számottevően kisebb volt a mainál, a nagyenyedi Bethlen Gábor Kollégium főépületének eklektikus fedélszerkezeteinek megerősítései a kor megközelítésének beszédes példái (acél vonórudak, -elemek, csomópont-megerősítések használata), ellentétben a kollégiumhoz tartozó Bagolyvár (fiúinternátus) barokk fedélszerkezetével, ahol 2000-ben, a nagy-britanniai IHBC és a Transylvania Trust Alapítvány szervezésében lebonyolított ACTT 2000 oktatási program keretében angliai ácsoktól sajátíthattuk el a minimális beavatkozás elvén alapuló történeti fedélszerkezeti restaurálás, helyreállítás technológiáit. A 2007 után kezdődő beavatkozásban nagy számban vettek részt az Utilitas egykori munkatársai, közülük itt BAYKA Leventét említenénk meg, aki ezáltal egykori *alma materének* felújításában vehetett részt.

40 Gyakorlatunkban a történeti fedélszerkezetek alaprajzát a kötőgerendák felső síkján futó, vízszintes metszetként mutatjuk be, mely az elmetszett ferde és függőleges tartószerkezeti elemek differenciált megjelenítését is lehetővé teszi. Hibásnak tekintjük az alapképzésekben máig tanított kötőgerenda-rácsra és szarufakiosztás-felülnézeti rajzára bontani a tetőt, ezek nem mondanak el eleget az elemek kapcsolódásairól. Ugyanakkor elengedhetetlennek tartjuk minden karakterisztikus főállás és mellékállás kirajzolását a szerkezeti elemek azonosításával. Sajnos, ezeknek a rajztechnikáknak a diffúziója az általános felmérési-tervezési folyamatba nem elég hatékony, amíg legalább útmutató formájában ezek nem emelkednek előírás vagy országos ajánlás szintjére.

41 POR 3.4. (2007-2013) – Programului Operaţional Regional, Axa Prioritară 3: Îmbunătăţirea infrastructurii sociale; Domeniul Major de Intervenţie 3.4 dedicat reabilitării, modernizării, dezvoltării şi echipării infrastructurii educaţionale, azaz magyarul: Regionális Operatív Program, 3. Prioritási tengely: A szociális infrastruktúra javítása; 3.4. fő beavatkozási terület: az oktatási infrastruktúra rehabilitációja, modernizálása, fejlesztése és felszerelése.

42 Főtervező MAKSAY Ádám csapata (mint Nagyenyeden is a vázolt szakaszban), egyes épületeknél a tartószerkezeti és építészeti feladatkört is ellátták, a Református Kollégium épületének építészei MAKSAY Katalin és LÁZÁR Zoltán, míg a főépület építésze TULOGDY László csapata, ezen épületeknél a tartószerkezeti tervezést az Irod M csapata részéről BOHONYI Boglárka és TAKÁCS (SZENYES) Julianna, illetve HARI József, ZOLTÁN Erzsébet (és BÁRDI Zoltán) látták el. A kivitelezést a székelyudvarhelyi Lukacs Alpin Kft. végezte, az utolsó szakaszt rekordidő alatt. BENKE István szakértő nagy örömmel vett részt *alma matere* helyreállítási folyamatában: „SZABÓ Bálintra kegyelettel, tisztelettel és hálával gondolok. Már elmúltam 50 éves, amikor »úri passzióból« jelentkeztem a műemlékvédelmi szakmérnökire, aminek elvégzése fordulatot hozott az életembe. Azelőtt főleg a magas házak dinamikája foglalkoztatta a fantáziámat. A vásárhelyi tervezőcsapat hozzám hasonlóan gondolkozik Bálintról".

43 Tekintettel arra, hogy az épületet az 1960-as években az udvar felé egy teremsorral bővítették, az eredetileg egytraktusos-folyosós épület eklektikus fedélszerkezete és a bővítés karakter nélküli struktúrája nem lett volna manzárdosítható. Meghatározó volt, hogy az Országos Műemléki Bizottság Építészeti és Mérnöki Szakbizottságában (CNMI-STAI) SZABÓ Bálint személyében olyan szakértő vett részt a terv elbírálásakor, aki meg tudta ítélni, hogy a XIX. századi fedélszerkezet nem testesít meg kiemelkedő értéket, és az épület fenntartható felhasználásához szükséges új, acélszerkezetű tetőzet inkább hozzáadott értéket hordoz, mintsem hogy értéket tüntetne el. Egy eredeti főállás bemutatása az épület fontos építészettörténeti szakaszának mementója.

44 Az Utilitas Kft. vezető szakértője, dr. KIRIZSÁN Imola megfogalmazásában ugyanez a gondolat, az ISCARSAH Historical Structures Worldwide (Történeti Szerkezetek Világszerte) nemzetközi konferencia keretében bemutatott közös előadásunkban (KIRIZSÁN & MAKAY 2024) így hangzott el: „Real problems arise with *minor heritage*, or buildings that are not listed or protected by law. They often fall victim to excessive intervention or demolition." („A valódi problémák a kisebb jelentőségű örökséggel vagy olyan épületekkel kapcsolatban merülnek fel, amelyek nincsenek nyilvántartva vagy törvény által védve. Ezek gyakran túlzott beavatkozás vagy bontás áldozataivá válnak.") A frappáns megnevezés (*minor heritage* / *patrimoniul minor* / apró-cseprő vagy átlagos örökség) ugyanezt a kérdéskört tematizálja.

45 A 2.2-es fejezetben utaltunk erre az esetre, a kutatásra, tervezésre, kivitelezésre vonatkozó adatokat (lásd 17-es jegyzet) itt nem ismételjük meg. A szintén már többször idézett, az erdélyi épített örökség helyreállításáról szóló angol nyelvű cikk ebben az épületkategóriában a középlaki (Szilágy megye) református templom, valamint a telegdi általános iskola (Bihar megye) esettanulmányát mutatja be, ezért itt nem ezeket az eseteket választottuk.

46 A fő- és építészeti tervezést a szatmárnémeti MIHĂIŢEAN Livia végezte. A telekegyesítéseket is igénylő beruházás urbanisztikai dokumentációk készítését is feltételezte, így az nagyon elhúzódott. A romániai szabályozási instabilitás következtében a kezdeti nagyvonalú (az alagsorban uszodát is szerettek volna) elképzelések egy sokkal visszafogottabb beruházást eredményeztek. A tűzvédelmi előírások ellehetetlenítették, hogy az óvodának a régi épületben is legyenek működő csoportjai – egy újabb körülmény, amely a védelemben nem részesülő történeti épületek fenntarthatóságát nehezíti. A kivitelezést újabb drágulások és a pandémia is nehezítették, így azt végül a Regio Construct Infrastructura Kft. fejezte be. Az Irod M csapatának sok tagja vett részt a kutatásban-tervezésben, akik közül BOHONYI Boglárka szerepét emeljük ki, mellette VIRÁG Jácint csapatának munkáját kell megemlíteni, akik az új, nagy fesztávú (utófeszített) vasbeton födémeket tartalmazó épület tartószerkezeti tervezését végezték. Megemlítendő, hogy az utca másik oldalán található plébániatemplom épülete az Utilitas Kft. munkája, a teljes helyreállításra forráshiány miatt a cikk megírásáig még nem került sor.

47 Tekintettel arra, hogy sok építésszel, több tartószerkezeti szakértővel, az iroda különböző periódusaiban különböző csapattagok bevonásával készültek a tervek, különböző kivitelezőkkel a beavatkozások (bár idősebb és később ifjabb SZÉKELY István Policonstructii nevű cégét, de a KISS Júlia és Sándor vezette épületgépész-csapatot is mindenképp ki kell emelnünk), nem soroljuk fel részletesen és tételesen az eseményeket és az érintetteket. A kezdeti időszakból azonban egy személy tevékenységét mégis hangsúlyoznunk kell: az angliai dr. WHITE David támogatását, akinek köszönhetően indultak el a változások a főépület biztonságossá és otthonossá tételében is. Holott először az interaktív tananyagok, a szép és vidám, belső oktatási környezet megteremtésében akart segíteni, látva, hogy a főépület felújításra szorul, megértette, hogy nagyobb arányú segítségnyújtásra volt szükség. Ez indította el a megyei önkormányzati beruházásokhoz történő hozzáférést. Végigizgulta a tervezőkkel és az iskola vezetőségével a közbeszerzési procedúrákat, hogy sikerüljön a tisztességtelenül alacsony árajánlatot tevő kivitelezőket távol tartani.

48 A romániai építésügyi törvények szellemében az úgynevezett „fő ellenőrzési fázis" (fază determinantă) – amely az építési folyamat olyan szakaszát jelöli, amely során az építésügyi hatósági képviselő jelenléte is szükséges a minőség ellenőrzésére – pillanatában az eredeti tervező jelenléte kötelező. A munkálatokat csak akkor lehet folytatni, ha azt a minőség-ellenőrzésben érintett valamennyi szakember ellenjegyzi. Az abszurditás abból adódik, hogy ha a köztes fázisok helyességét nem az ellenőrzi, aki tervezte, hanem egy másik személy, aki viszont nem maga tervezte a beruházást, akkor az azt vonja maga után, hogy ha utólag bármilyen gond adódik, kezdődhet a hosszas jogi, műszaki vizsgálat, hogy tulajdonképpen kit is terhel a felelősség.

49 BUCŞA Tiberiu építész és HARI József tartószerkezet-tervező mérnök.

50 Universitatea „1 Decembrie 1918" din Alba Iulia, Facultatea de Istorie şi Filologie, Departamentul de Istorie, Arheologie şi Muzeologie. Master: Cercetarea, conservarea şi valorificarea patrimoniului istoric – azaz a Gyulafehérvári Egyetem Történelem és Filológia Karán, a Történelem, Régészet és Muzeológia Tanszék keretében szervezett kétéves mesteri képzés, Történelmi örökség kutatása, megőrzése és hasznosítása címmel, ahol dr. BURNICHIOIU Ileana művészettörténész, docens meghívására 2018 óta veszek részt az oktatásban: A műemlékek fából (I. félév, illetve kőből, II. félév) készült szerkezeti és díszítőelemeinek helyreállítása és megőrzése tantárgy előadása révén.

51 Sajnos a hatalmas beavatkozás publikált dokumentálása egy cikkből ismert (az archívumokban fellelhető anyagok mellett), BÁGYUJ 1957.

Endnotes

1 All former and current members of the Irod M and ConsolideM Ltd. have contributed to the material presented in this article, with particular emphasis on the current team members: structural engineers Zoltán BÁRDI, Boglárka BOHONYI, József HARI, Boróka SÁNDOR, Ábel SEBESTYÉN, and undergraduate trainee Károly SÍPOS, thanking our former engineer colleagues: (2006-2008) Csaba ACZÉL (1977-2024†); (2008-2014) Annamária ANDRÉ (FILEP); (2016-2019) Szilárd BARTALIS; (2008-2012) Zsuzsanna BÉKÉSI (BLÉNESI); (2008-2015) Boglárka BORDÁS; (2006-2009) **Rómeó CSÁKI; (2017-2021)** Julianna TAKÁCS (SZENYES); (2016-2017) Erzsébet ZOLTÁN, and the employees of our permanent subcontractor, VBS Structure Ltd. (2008-2022): Levente BAYKA, Csaba SZALLÓS-KIS (1970-2022†), László VASS.

2 Our personal professional relationship goes back to my undergraduate studies, when Bálint SZABÓ, PhD, was leading the design practice of reinforced concrete frame structures, and I had the opportunity to get acquainted with the then still historic building (and later heritage) conservation professional line, with my future boss and professional mentor, during the 1992 course in Băile Tuşnad. Between 1994 and 2003, I worked for Utilitas Ltd. as a first-generation team member under the direct supervision of Bálint SZABÓ. From 1995 (until 2003), I was a member of the organising committee of the Tusnad conference series (with increasing responsibilities and tasks), and in 1996 I was among the founders of both the Transylvania Trust Foundation and the Transylvanian Historic Building Conservationists Society, sharing responsibilities within the Foundation. After establishing my own company (2003), our professional relationship was not interrupted, I was often present at conferences marked by Bálint SZABÓ's name, and I was also present with scientific articles in the publications of the Transsylvania Nostra Foundation, founded later (in 2007). He was the persistent leader in the extended (2002-2013) preparation of my doctoral thesis (MAKAY 2013).

3 The article is primarily a tribute to Bálint SZABÓ's work (1944-2024†), but also a tribute to the work of Sándor BENCZÉDI (1952-2024†), with whom he jointly launched the International Conference Series on Theoretical and Practical Issues of Built Heritage Conservation – TUSNAD as a crash course in 1992, which can be considered the cornerstone, origin, or even incubator of the Transylvanian profession.

4 In the second phase of EU funding (2014-2020), the conservation of historic buildings in rural areas has also become possible (PNDR – Programul Naţional de Dezvoltare Rurală / National Rural Development Programme), thanks to the improvements made by experts in the field of application writing, such as Szabolcs ILYÉS (North-West and Central Development Regions) and Zsolt MATUZ (mainly Partium and Maramureş historical regions), whose teams have participated in the application for several funding programmes. Special thanks go to Csilla HEGEDÜS, Secretary of State of the Ministry of European Investments and Projects / Ministerul Investiţiilor şi Proiectelor Europene (2021-2023) for the idea and the development of the Attractive Romania programme. Thanks to her, the post-pandemic National Recovery and Resilience Plan (PNRR – Planul Naţional de Redresare şi Rezilienţă) has also addressed the issue of built heritage, allowing the conservation of numerous castle ruins, Roman legionary fortresses, manor houses, mansions, churches, and values pertaining to vernacular architecture.

5 Of course, wherever Bálint SZABÓ, PhD, could personally (and later through his students) do something about this lack of interest, he did, so he introduced the course Conservation of Historical Buildings at the Faculty of Architecture and Urban Planning, Technical University in Cluj-Napoca.

6 István BOTÁR, PhD, and Boglárka TÓTH, the founding archaeological researchers of the Anno Domini Dendrolab (2007) in Miercurea Ciuc, prepare documentations that go beyond dendrochronological dating, complete with art history, load-bearing structural, technological, and technical observations, both for individual orders, as preliminary research for conservation design work and with the help of comprehensive, area- or wood-based, supported research. Today there are over 400 such researches, providing important information for all sectors responsible for conservation: https://dendrolab.ro/hu/page/. Although it is no longer the only centre for dendrochronology, the others are more active in dating wooden churches.

7 We highlight the work of wood restorer Ferenc MIHÁLY and his team, especially Erzsébet SZÁSZ.

8 We emphasise the work and knowledge transferred by experts and carpenters, both from Hungary (András VÁNDOR, PhD) and from 1999 onwards from Great Britain (thanks to the international cooperation of the Transylvania Trust Foundation and the British Institute of Historic Building Conservation), but other contacts within the former Utilitas team, e.g. from the Czech Republic, Sweden, etc., were also established through the activities of Imola KIRIZSÁN, PhD.

9 The terminology used by Bálint SZABÓ and his students, based on the way in which the load-bearing structures function and taking into account the international literature, uses the name of the architectural style in which the technical solution (concept) first appeared, consistently adding the term "of … character". In this sense, the style of the building or the period in which the structure was built are inconsequential. However, the art historical approach criticises this formulation, saying that a structure built in the 18th century, for example, cannot be Gothic and prefers the German term "roof structure on collar beams". It is therefore important to clarify that this is precisely why our school consistently uses the term "of … character" and that the use of a collar beam is also found in the design of Baroque roof structures, for example, so we consider the term "roof structure on collar beams" to be imprecise from a structural point of view, too general, although we accept its validity. Roof structures of Romanesque character are also structures on collar beams, but the designation also makes it clear to us that the structure in question does not have longitudinal bracing and that it is not (always) possible to distinguish between secondary and main trusses.

10 The chosen example illustrates that we are talking about a historical roof structure belonging to one of the most outstanding churches of the Transylvanian Gothic period and that it was built in the early 19th century when Baroque architecture set long ago. Nevertheless, we insist on the correctness of the terminology, since the straining truss of Baroque character clearly became a common technical solution in the 16th and 17th centuries, so the term "of Baroque character" for this solution makes it clear what kind of load-bearing structural concept we are talking about, as opposed to the term "with leaning trestles" adopted from German literature and preferred by art historians. From a structural point of view, a roof structure with Baroque character is a transition between a raftered, closed plane triangle and a purlin structure supported by trestles. The 19th-century structure given in Figure 1.c is also a structure with leaning trestles, in this sense the designation is, from a structural point of view, inaccurate and our team considers it a less acceptable alternative than the previous name of a structure on collar beam to designate structures of Gothic character.

11 Given that the early engineered roof structures of the 19th century comprise much more varied load-bearing structural designs, we consider Bálint SZABÓ's terminology to be the most accurate from a structural point of view, since any other wording could refer to a completely different structural concept, for example roof structures on purlins could also refer to Mediterranean structures, and we strongly object to the term "roof structure with vertical trestles" since it means roof structures on purlins with compressed posts, while most 19th century roof structures have simple, double or triple straining-hanging trusses.

12 The approach is challenged from both sides. On the one hand, according to P100-3/2019, the roof structure is a "secondary structural element" in terms of earthquake loads, which is wrong from two perspectives: it is not an element, but a complex structural sub-unit, which, in addition, has a proven stiffening and load-distributing role from the point of view of the walls. The direct consequence of this approach is that many engineers do not attach importance to the inspection and design of roof structures, leaving the interventions to architects, restorers, or in many cases even to (non)specialized workers or carpenters skilled in formwork. On the other hand, a restorer's approach can have similarly negative results in terms of the concept and functioning of the historic load-bearing structure. Considering the material, the surface, the technology to be protected, they do not regard it important to restore the way of operation or the functioning joints to ensure distribution of loads.

13 Two separate documents were prepared for the conservation of the church. The feasibility study for the complete conservation was financed by the National Heritage Institute (INP) through the Timbrul Monumentelor / Historic Monuments Stamp grant programme. On the other hand, Ambulanța pentru Monumente (The Ambulance for Monuments), which is progressing in small steps every year (we must mention here the names of architects Camelia TÂRNĂVAN, Eugen VAIDA, and carpenter Ştefan VAIDA) prepared an implementation design for the emergency intervention (this involved the restoration of the choir roof, the nave's southern wall and the remaining roof structure on the eastern side, until autumn 2024. On behalf of the Irod M team, the design was prepared by Boróka SÁNDOR, the structural expert was István BENKE, with whom we also cooperated in all the cases listed below, where no structural expert is named.

14 The intervention was carried out by Attila GÁLFI's team upon the initiative of the Arcus Association from Târgu Mureş (Lóránd KISS mural painting restorer) involving architect Klaus BIRTHLER, in 2022; the investor was Consistoriul Districtual Evanghelic i.e. the Evangelical (Lutheran) District Consistory, financed by the INP – Timbrul Monumentelor / Historic Monuments Stamp grant programme (József HARI prepared the design on behalf of Irod M).

15 Thanks to the experts of the Asociaţia Biserici Înlemnite (Association of Wooden Churches), we are aware that Southern Transylvania (Arad, Hunedoara, and Timiş counties) is as rich in wooden churches as the more well-known Northern Transylvanian region (Maramureş, Sălaj, Bihor, and Mureş counties), but their architectural and structural design is quite different. What is even less known is that the so-called Romanian Old Kingdom, i.e. Oltenia and Moldavia, have a wooden church heritage comparable to that of Transylvania. https://biserici-inlemnite.ro/ro/despre.

16 The oak boarded timber-framed and log walls of the Orthodox wooden church of Povergina, which burnt down in 2015, were charred on the inside, and the team of architect Vladimir OBRADOVICI, PhD, developed a detailed method of architectural and structural survey of wooden churches, measuring the depth of charring (not exceeding 1.5-2cm) in several places on each beam / log. In the framework of INCERC (Institute for Building Research and Construction Economics) in Timişoara, engineer Aurelian GRUIN carried out strength tests, the good outcome allowed the preservation of the structure, the design was prepared by Julianna TAKÁCS (SZENYES) of the Irod M team.

17 As a result of a storm in 2017, just before the start of the conservation works, the Fachwerk (wooden framed) tower and the steeple of the Calvinist Church in Dumbrava (Timiş County) collapsed. With the help of the Teleki László Foundation and with the support of the Hungarian state, the reconstructed but reinforced structure was replaced in 2018 (architect Maja BÂLDEA, construction by Ferenc CSAPÓ's team: Titinel Com Ltd., the structural design was made by József HARI on behalf of the Irod M team).

18 The conservation project, coordinated by architect Tamás EMŐDI, was completed in 2016, but it did not get an EU grant. The construction was carried out by the Oradea-based company Abed Nego, led by the IONAŞCU family, with the support of the Hungarian state. The building was inaugurated in 2021 and almost everyone from the Irod M team was involved in the research and design process, highlighting the work done by József HARI, Boróka SÁNDOR, and Boglárka BOHONYI.

19 The case studies presented here and in the following chapter were selected from the designs of the exhibitions prepared for the 15th anniversary of the Irod M team in 2018 and its 20th (ConsolideM's 10th) anniversary in 2024, presenting about 10% of our work.

20 The interesting thing about the history of the church is that in 1924 the Roman Catholic Church leased it to the Greek Catholic Church for 25 years (until 1949), but the communist government banned and dissolved the latter in 1948, so it came to be used by the Greek Orthodox Church. With the political changes, acknowledging the ownership of the Roman Catholic Church, the building was used jointly by the two denominations between 1991 and 1994, after which the renovation began in 1994 and received the *Europa Nostra* Award in 1998, as the first Hungarian-related historic building in the country to receive the award. The heart and driving force behind the conservation was the parish priest István KÁDÁR (1953-2017†), this note and the article being a tribute to him, too.

21 In this chapter we only mention the buildings that have undergone a complete renovation and are listed historic buildings, we do not mention the ongoing conservations. Although the first expert opinion and conservation design for the Calvinist Church of Daia was prepared by architect Szabolcs GUTTMANN, PhD, Bálint SZABÓ, and the Utilitas team, so including it would have clarified the professional context even more, we did not choose to present it. Together with architect Miklós KÖLLŐ, our team has been working on the project since 2010, and the ongoing works are financed by the Attractive Romania Project. The case study is featured in MAKAY 2020.

22 Árpád FURU, PhD, together with architect Xénia FURU, are advisors to the Hungarian Unitarian Church of Cluj-Napoca in the fields of architecture and historic building conservation (architectural and technical). In the article written by Árpád FURU to honour Bálint SZABÓ, the works I have listed are also presented. Our team carried out the structural research and design in these projects, with Zsolt MÁTHÉ from the Székelyland historical region and Zsolt KOZMA in Cluj County. For the same reason, we have not chosen illustrations from these works.

23 In addition to the above-mentioned article (MAKAY 2020), the case study of the church in Sic is also part of the curriculum of the BHCT educational programmes organised by the Transylvania Trust at the Bánffy Castle in Bonţida, the master's programme on heritage conservation at the University of Alba Iulia (UAB), and the postgraduate course organised by the Transylvania Trust at Babeş-Bolyai University in Cluj-Napoca (UBB). On the other hand, it has been detailed in MAKAY et al. 2015. The architect of the project was Diana IMECS, the load-bearing structure expert prof. Augustin POPA, PhD, on behalf of the Irod M team, the design was coordinated by Boróka SÁNDOR during the implementation led by Harbau Ltd. The note is also a memorial to Annamária HALÁSZ (1966-2019†), technical inspector (she started our joint work with the church in Cârţa (Harghita County), but was also present at the conservation of the church in Kogălniceanu (Farkas) Street in Cluj-Napoca. She had also started her work in the field of historic building conservation in Bálint SZABÓ's team. The dates in the paragraph indicate the completion of the construction.

24 In the case of the Calvinist churches listed in this paragraph, the architectural design was prepared by Tamás EMŐDI (Satu Mare and Bihor Counties), Zoltán MÁTHÉ (Harghita County), Rita JAKAB (Maramureş County), and Gábor TÓTHFALUSI (Alba County), and where necessary, the tendering procedure was carried out by Zsolt MATUZ and his team in Partium and Maramureş historical regions, as well as Szabolcs ILYÉS and his team in Transylvania. In addition to Boróka SÁNDOR, Boglárka BOHONYI, Zoltán BÁRDI (Alba County and Mihăileni mentioned in the following paragraph), the structural engineers of Irod M, the work of VBS Structure (Cimbrud) and László VASS (Pir) should also be mentioned in this chapter.

25 Although, after the initial phase (2003-2008), our team took on less and less of the role of lead designer, in the case of the Cârţa (Harghita County) project, we took on the coordination in addition to structural research and design, despite the long distance. Due to the tight deadlines, we worked with two teams of architects, Zsolt TÖVISSI (who was also the architect of the church in Cioboteni) for the church and Miklós KÖLLŐ for the tower and the enclosure walls. The construction was carried out by Aurora Impex Ltd. from Miercurea Ciuc, where several skilled workers, carpenters who had participated in the ACTT 2000 international training for skilled craftsmen, also contributed. On this occasion we note that in the projects coordinated by us and in most of the EU-funded projects around Transylvania, the electrical design was made by Pieme Ltd. of Cluj-Napoca, founded and managed by Erzsébet SZABÓ until her retirement. Several members of the Irod M team were involved in these projects, besides Boglárka BORDÁS and Boróka SÁNDOR, Annamária ANDRÉ (who was also the structural engineer of the church in Cioboteni) and Ernő BOGOS (who was also a student of the first Tusnad crash course), the architect of the church in Mihăileni.

26 The architect Eugen VAIDA and his circle effected the establishment of several organisations, such as the Sălaj group led by Bogdan ILIEŞ, their activity involved a large number of young volunteers, often university students, providing hands-on training, following the same path as the Transylvania Trust Foundation since 1999. Bálint SZABÓ's idea of bringing the profession and society closer together (the theme of the Tusnad 2000 conference) has been brought closer to reality, involving the local community wherever interventions are organised (accommodation, meals, etc.).

27 Asociaţia R.O.S.T. Reabilitarea Organică a Satului Tradiţional / O.R.T.V. Association for the Organic Restoration of Traditional Villages, led by architect Laura ZAHARIA (and engineer Gelu ZAHARIA), herself a former graduate of the Cluj-Napoca historic building conservation postgraduate studies.

28 In this chapter, we will continue to focus exclusively on listed buildings that have undergone complete conservation.

29 The lead and architectural designer for both buildings was Gábor TÓTHFALUSI and his team, the structural engineer for Irod M was József HARI, the implementation was carried out by Kvadrum Axis Ltd. of Odorheiu Secuiesc together with Decorint Ltd. of Cluj-Napoca, the works on the chapel were carried out by Weberbau Ltd. of Cluj-Napoca.

30 The lead designer of the work was the team of M&M Design led by Ádám MAKSAY, the architectural designers were Katalin MAKSAY and Zoltán LÁZÁR, the implementation was carried out by a consortium of Decorint and Libra Ltd. in a record time of 16 months. The Irod M team was all involved in the design, but first and foremost Boróka SÁNDOR and Annamária ANDRÉ, and the structural expert was Petru RUS, PhD. The conservation of the stone elements was coordinated by Benjámin NAGY. The Baroque roof structure, made of trees cut in 1800-1801, is mentioned in the author's doctoral thesis (MAKAY 2013), as well as in a large number of her published articles, which are not specifically mentioned here.

31 The history of St Michael's parish church and the church in Kogălniceanu Street is linked by the fact that in the 1950s and 1960s the same team led by Lajos BÁGYUJ worked on the conservation of both buildings. It is interesting to note that the design teams of the 21st century interventions are identical in many aspects, with the chief designer, the structural designer, or the structural expert being the same. The metalwork of the tower was carried out by a team led by Zsolt NAGY, university lecturer (who was himself a Utilitas member in 1994-95). The architects in this case were Tamás EMŐDI, Eszter PÁKAI, and Szabolcs GUTTMANN. The contractor was KÉSZ Romania Ltd., while the gigantic stone conservation work was coordinated by the KOLOZSI stone restorer family. Judit MÁRTON (also a former member of Bálint SZABÓ's Utilitas team) was in charge of the technical quality control, but she also participated in the conceptual design of the liturgical space. Once again,

everyone from the Irod M team was involved, but first and foremost József HARI, Boróka SÁNDOR, and Zoltán BÁRDI. The presented research and design work was preceded by another research phase coordinated by Tamás MEZŐS, PhD, and the Budapest University of Technology and Economics, the results of which are partially presented by the referenced work. The English-language article already cited, presenting the results for 2003-2017 (MAKAY 2020), and its update, which is currently being edited, contain a more detailed account of the conservation of St. Michael's Church.

32 Just as we did not choose a picture of the church of Sic or the Unitarian churches for the article, as they have been published many times, we have also omitted the church on Kogălniceanu Street for the illustration of the sub-chapter and have devoted Figure 6 entirely to St Michael's church, trying to minimise the repetition that might appear in other publications.

33 The lead and architectural designer were Bogdan FODOR and his team (Atelier FKM Workshop, Cluj-Napoca), the structural design was done by both the team of Zsolt NAGY, Gordias Ltd., and the VBS Structure team. The contractor was Euras Ltd. The role of the National Museum of Transylvanian History, the archaeological excavation by Felix MARCU, PhD, and Zsolt CSÓK, PhD, and other archaeologists, should be highlighted here.

34 Relevant data in note 18.

35 The lead and architectural designer were Gábor TÓTFALUSI's team, architects Eszter PÉTER and István SZŐCS. The implementation was carried out by a consortium of ADD Concept and Kvadrum Axis Ltd., with Ovidiu OPREA as technical supervisor. All members of the Irod M team were involved in the design, with Zoltán BÁRDI and Boróka SÁNDOR, as well as Csaba SZALIÓS-KIS (1970-2022†).

36 The conservation history of the castle is very complex to this day. The foundation, chaired by Csilla HEGEDÜS, which was awarded the Europa Nostra Grand Prize for its educational activities already in 2008, can best present it.

37 The investment has brought the building back from the brink of ruin. We also took on the role of lead designer and the project gave the skilled workers and engineers of Harbau Ltd. the opportunity to learn on site from the master masons (and carpenters) of the BHCT 2002 programme in Bonţida the techniques of crack repair and treatment and to use their skills on other construction sites. Yet the project is not a clear success story, as the building has still not been granted the fire safety operating licence for more than a decade after the intervention was completed (2008), which is a clear example of the inconsistency of standards.

38 Given that both the lead and architectural designer, moreover, the structural expert, as well as the implementation teams have changed, we will not detail the ever-changing design, nor the involvement of different sources, the sequence of events involving larger and smaller steps, and shorter or longer stoppages. We must, however, mention the names of two persons without whom it would not have been possible to complete this long phase: engineers Ádám MAKSAY and Lóránt SZABÓ (also a graduate of the postgraduate course), who were technical representatives of the investor Bishopric at certain stages of the investment, but also had design (first) and technical supervision (latter) tasks.

39 Bálint SZABÓ's comprehensive (*en gros*) approach was supported in all areas by thorough, analytical experts who relied on the importance of details, but also on a thorough knowledge of the legislation. In the 1990s, in the field of structural design control, this specialist was Ádám MAKSAY sr. (1937-2001†), whose attention was always focused on the slightest error. For those of us who were lucky enough to work with him as young engineers, he taught us a lot, not only about the profession, but also about responsibility. The professional knowledge of the time in the field of historic roof structures was considerably scarcer than today. The reinforcements of the Eclectic roof structures of the main building of Bethlen Gábor Boarding School in Aiud are a telling example of the approach of the period (use of steel tension rods, elements, joint reinforcements), in contrast to the Baroque roof structure of the Bagolyvár (boys' boarding house) belonging to the school, where we were able to learn from English carpenters the techniques of historic roof conservation and restoration based on the principle of minimal intervention, in the framework of the ACTT 2000 training programme organised in 2000 by the IHBC of Great Britain and the Transylvania Trust Foundation. The intervention, which started after 2007, involved a large number of former Utilitas staff, including Levente BAYKA, who was involved in the rehabilitation of his former *alma mater*.

40 In our practice, we present the plans of historic roof structures as horizontal sections running along the upper plane of the tie-beams, which allows for a differentiated representation of the sectioned inclined and vertical supporting elements. We consider it incorrect to break down the roof into a tie-beam grid and a common rafter distribution plan, which are still taught in undergraduate studies, as they do not tell enough about the connections of the elements. At the same time, we consider it essential to represent all characteristic main and secondary trusses by identifying the structural elements. Unfortunately, the diffusion of these drawing techniques into the general survey-design process is not efficient enough until they are at least upgraded to the level of a prescriptive or national recommendation in the form of guidelines.

41 POR 3.4. (2007-2013) – Programului Operaţional Regional, Axa Prioritară 3: Îmbunătăţirea infrastructurii sociale; Domeniul Major de Intervenţie 3.4 dedicat reabilitării, modernizării, dezvoltării şi echipării infrastructurii educaţionale, i.e. Regional Operational Programme, Priority Axis 3: Improvement of social infrastructure; Major Field of Intervention 3.4 dedicated to the rehabilitation, modernization, development and equipping of educational infrastructure.

42 The lead designer was Ádám MAKSAY's team (as in Aiud, in the outlined phase), and in some buildings they also dealt with the structural and architectural tasks, the architects of the Calvinist School building being Katalin MAKSAY and Zoltán LÁZÁR, while the architect of the main building was László TULOGDY's team, and the structural design of these buildings was carried out by Boglárka BOHONYI and Julianna TAKÁCS (SZENYES), József HARI, Erzsébet ZOLTÁN (and Zoltán BÁRDI) of the Irod M team. The construction was carried out by Lukacs Alpin Ltd. from Odorheiu Secuiesc, the last phase was completed in record time. Expert István BENKE was delighted to be involved in the conservation process of his *alma mater*: "I think of Bálint SZABÓ with grace, respect, and gratitude. I was over 50 years old when I applied for a degree in historic building conservation as a 'gentlemanly recreation', which turned my life around. Before that, I was mainly interested in the dynamics of high-rise buildings. The design team in Târgu Mureş thinks about Bálint just like me".

43 Given that a row of halls was added to the courtyard in the 1960s, the Eclectic roof structure of the original one-bay corridor building and of the characterless structure of the extension could not have been transformed into a loft. It was decisive that Bálint SZABÓ, an expert in the Architecture and Engineering Technical Section of the National Commission for Historic Monuments (CNMI-STAI), participated in the evaluation of the project and he was able to judge that the 19th-century roof structure did not represent an outstanding heritage element and that the new steel roof structure, necessary for the sustainable use of the building, would add rather than discard value. The presentation of an original main truss is a memento of an important architectural phase in the building's history.

44 The very same idea was worded in our joint presentation by the lead expert of Utilitas, Imola KIRIZSÁN, PhD, delivered at the ISCARSAH Historical Structures Worldwide international conference (KIRIZSÁN & MAKAY 2024), namely: "Real problems arise with *minor heritage*, or buildings that are not listed or protected by law. They often fall victim to excessive intervention or demolition." The catchy denomination (*minor heritage*) tackles the same issue.

45 This case was referred to in chapter 2.2, but the data on research, design, and implementation (see note 17) will not be repeated here. The English article on the conservation of Transylvania's architectural heritage, also cited several times, deal with the case studies of the Calvinist Church in Cuzăplac (Sălaj County) and the primary school in Tileagd (Bihor County) in this building category, so we have chosen not to present these cases here.

46 The lead and architectural design was carried out by Livia MIHĂIŢEAN from Satu Mare. The project, which also involved conjoining plots, required the preparation of urban planning documents and was therefore very protracted. Due to the legislative instability in Romania, the initial generous vision (including a swimming pool in the basement) resulted in a much smaller investment. Fire safety regulations have made it impossible for the kindergarten to have groups in the old building – another event that makes the sustainability of unprotected historical buildings difficult. Construction was made more difficult by further cost increases and the pandemic and was finally completed by Regio Construct Infrastructura Ltd. Many members of Irod M team were involved in the research and design; Boglárka BOHONYI's role is worth mentioning, alongside the work of Jácint VIRÁG's team, who carried out the structural design of the new building with large span (post-tensioned) reinforced concrete slabs. It should be noted that the parish church building across the street is the work of Utilitas, but due to lack of funds, the full conservation had not yet taken place at the time of writing.

47 Considering the fact that many architects, several structural experts, different team members were involved in the projects at different times, different contractors were involved in the interventions (although we must mention István SZÉKELY Sr. and later István SZÉKELY Jr.'s company Policonstructii, but also the team of building services engineers led by Júlia KISS and Sándor KISS), we will not list the events and the people involved in detail. However, one person's work from the early days should be highlighted: the support of David WHITE, doctor, from England, who also helped to initiate changes to render the main building safe and welcoming. Although he initially wanted to help create interactive teaching materials and a beautiful and cheerful classroom environment, he understood that the main building needed renovation and realised that his help was needed even more. This triggered the access to County Municipal Investments. He, the designers, as well as the head of the school were all stressed and anxious throughout the procurement process to keep out unfairly underbidding contractors.

48 In the spirit of the Romanian construction legislation, the presence of the original designer is mandatory at the moment of the so-called "main control phase" (*fază determinantă)*, which is the stage of the construction process during which the presence of the representative of the building authority is required to check the quality. The work can only proceed if it is countersigned by all the professionals involved in quality control. The absurdity is that if the correctness of the interim phases is not checked by the project designer, but by another person who did not design it, if any problems arise afterwards, a lengthy legal and technical investigation can begin about liability.

49 Architect Tiberiu BUCŞA and structural engineer József HARI.

50 Universitatea "1 Decembrie 1918" din Alba Iulia, Facultatea de Istorie şi Filologie, Departamentul de Istorie, Arheologie şi Muzeologie. Master: Cercetarea, conservarea şi valorificarea patrimoniului istoric, i.e. 1 December 1918 University of Alba Iulia, Faculty of History and Letters, Department of History, Archaeology and Museology, 2-year Master's programme: Research, Conservation and Valorisation of Historical Heritage, where I have been teaching since 2018, at the invitation of university lecturer art historian Ileana BURNICHIOIU, PhD, on the conservation and preservation of structural and decorative wooden elements of historic buildings (first semester, and stone elements in the second semester).

51 Unfortunately, the published documentation of the massive intervention is known only from one article (alongside archival material), BÁGYUJ 1957.

■ FURU Árpád[1] ■ FURU Xénia[2]

Műemlék- és építészeti örökségvédelem a Magyar Unitárius Egyházban 2009–2024 között

Historic Building Preservation in the Hungarian Unitarian Church between 2009 and 2024

■ **Kivonat:** *A mintegy 130 műemléki értékű templomépülettel és több tucat polgári épülettel rendelkező Magyar Unitárius Egyház műemlékvédelmi és építészeti tevékenysége az elmúlt évtizedben igen jelentős megvalósításokat eredményezett. Több mint 110 templomon végeztek el javítási munkát, 70 befejezett, 28 megszakított munka mellett 13 még mindig folyamatban van. Ezenkívül Kolozsváron két iskolaépületen, öt bérházon végeztek helyreállítási munkálatokat, és megvalósult egy kiemelt jelentőségű, középkori eredetű polgárház teljes helyreállítása és felújítása is. Székelykeresztúron szintén két iskolaépület igényel állandó figyelmet.*

Az elvégzett munkálatok jelentősen javították az unitárius építészeti örökség műszaki és építészeti állapotát. Szerkezeti, épületfizikai, burkolatelemekre vonatkozó károsodások sorának kiküszöbölése valósult meg, az épületek esztétikai megjelenése is sokat javult. A megfelelő kutatás és felkészülés után elkészült munkálatok esetében jelentős történeti és építészettörténeti többletérték bemutatása volt lehetséges. Feltártak és helyreállítottak középkori és kora újkori falképeket, faragottkő elemeket, korábban lemázolt, festett felületek váltak láthatóvá, vagy elhanyagolt, megkopott festettfa elemeknek, mennyezeteknek, karzatoknak sikerült eredeti pompáját visszaállítani. A régészeti kutatások az egyes egyházközségek történetére vonatkozó adatok sorával gazdagították a tudományt. Fontos szempont, hogy a munkálatok sikere hozzájárult az egyes közösségek önbecsülésének növeléséhez, identitásuk megerősítéséhez, a közösségi cselekvőerő növekedéséhez.

A cikk az egyház építészeti és örökségvédelmi tanácsadóinak 15 évre visszatekintő összefoglalója, egyszerre számvetés és a jövőbeli kihívások körvonalazása.

■ **Kulcsszavak:** Magyar Unitárius Egyház, szakképzés, helyreállítási menedzsment, templom, egyházi műemlékek, inventarizáció, tervezés, helyreállítás, karbantartás, restaurálás

■ A Magyar Unitárius Egyház Erdély, Partium, Bánság és Magyarország unitárius közösségeit tömöríti. Hozzávetőlegesen 60.000 hívének többsége Erdély Kolozsvár környéki és székelyföldi településein él. A hat erdélyi egyházkörbe és egy magyarországi egyházkerületbe szervezett

■ **Abstract:** *The Hungarian Unitarian Church, with its approximately 130 historical church buildings and several dozen civil buildings, has achieved significant accomplishments in heritage protection and architectural activities in the past decade. Repair work has been completed on more than 110 churches, out of which 70 finished, 28 interrupted, and 13 still in progress. In addition, restoration work has been carried out on two large school buildings and five apartment buildings in Cluj-Napoca (Kolozsvár)[3], and a full restoration and renovation of a medieval-origin town-house of significant importance has also been completed. In Cristuru Secuiesc (Székelykeresztúr), two school buildings also require constant attention.*

The work done has significantly improved the technical and architectural condition of the Unitarian architectural heritage. Damages related to structural and cladding elements have been addressed, and the aesthetic appearance of the buildings has greatly improved. After appropriate research and preparation, it was possible to present significant historical and architectural value in completed works. Medieval and early modern frescoes, carved stone elements, previously painted-over wood surfaces, neglected and worn painted wood elements, ceilings, and galleries have been restored to their original splendour. Archaeological research has enriched scientific knowledge with data regarding the history of individual congregations. An important aspect is that the success of the works has contributed to the increase of self-esteem in these communities, strengthening their identity and growing community confidence.

The article is a 15-year summary of the church's architectural and heritage protection consultants, both an assessment and an outline of future challenges.

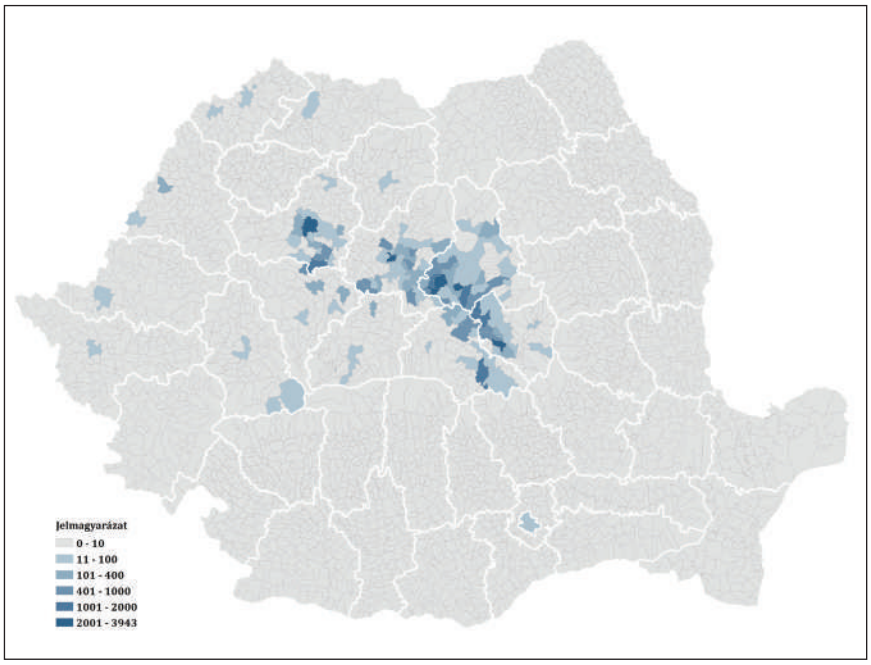
1 Dr., mérnök, műemlékvédelmi szakmérnök, néprajzkutató, a Magyar Unitárius Egyház műemlékvédelmi tanácsadója, Kolozsvár, Románia.

2 Építész, műemlékvédelmi szakmérnök, a Magyar Unitárius Egyház építészeti tanácsadója, Kolozsvár, Románia.

1 PhD, engineer, historic building conservation specialist, ethnographer, historic building conservation consultant for the Hungarian Unitarian Church, Cluj-Napoca, Romania.

2 Architect, historic building conservation specialist, architectural consultant for the Hungarian Unitarian Church, Cluj-Napoca, Romania.

3 The names in brackets are the Hungarian names of the settlements



■ ***1. ábra.*** *A romániai unitárius népesség területi megoszlása. © BÁLINT Róbert Zoltán, VERESS Ilka*
■ ***Fig. 1.*** *Territorial distribution of the Unitarian population in Romania. © Róbert Zoltán BÁLINT, Ilka VERESS*

egyházközségeket Kolozsvár székhellyel irányítják. Az egyház legfőbb vezetői a püspök és két főgondnok, akiknek munkáját egyházi testületek és a Püspöki Hivatal segíti. A mintegy 140 egyházközség túlnyomó többsége rendelkezik templommal és parókiával. Ezekből mintegy 60 épület műemléki jegyzéken szerepel, és még mintegy 70 épület jelentős örökségi értékkel bír. Számos településen egyházi tulajdonban maradtak iskolák és kántortanítói lakóházak vagy más közösségi épületek. Kolozsváron és Székelykeresztúron két-két jelentős kollégiumépület szolgálja az egyházi oktatás ügyét. Kolozsvár központjában történeti értékű bérházak és lakóépületek maradtak vagy kerültek vissza a rendszerváltás után egyházi tulajdonba. Az egyházi vagyon adminisztrálását az egyes egyházközségek és a Püspöki Hivatal illetékes szakemberei közösen végzik. A rendszerváltást követően az egyház építészeti tanácsadói munkakört létesített, melynek feladatkörébe az egyházi műemlékvédelem és kapcsolódó beruházások ügyeinek felügyelete és intézése tartozik.

Az egyházi műemlékvédelem helyzete 2009 előtt

■ A műemlékvédelem magyarországi intézményesítésének kezdeti időszakában, a 19. század végén az új eszmerendszer közvetítését az egyház felé KELEMEN Lajos képviselte, aki egyházi levéltárosként, az unitárius kollégium tanáraként és különböző egyházi testületek tagjaként felhívta a figyelmet az egyes épületek értékére, intézkedett azok jegyzékbevételéről, felméréséről, dokumentálásáról, a műtárgyak múzeumba szállításáról, levelezett a Műemlékek Országos Bizottságával. A helyreállítások gyakorlata természetesen az adott kor szemléletéhez igazodott. Ugyanezt a feladatot, az immár megváltozott államhatalmi viszonyok között, megpróbálta képviselni az első, majd a második világháború után is. Az egyházi helyreállítások kapcsán az első világháború utáni korszakban DEBRECZENI László építész, művészettörténész nevével is találkozunk, ám ő leginkább átépítések, bővítések tervezését vezette. A helyreállítási gyakorlat a második világháború után az akkori román állami műemléki

■ **Keywords:** Unitarian Church, professional training, restoration management, churches, ecclesiastical monuments, inventory, planning, restoration, maintenance, conservation

■ The Hungarian Unitarian Church consists of the Unitarian communities of Transylvania, Partium and Hungary. Its approximately 50,000 members live mainly in the Szeklerland and Transylvanian settlements around Cluj-Napoca. The Unitarian Bishopric of Cluj-Napoca supervises the parishes, which form seven archpriestships. The bishop and two curators-general administer the whole Church, assisted by various ecclesiastical bodies and the Office of the General Authority. Most of the 140 parishes have churches and manses. Around 60 of these buildings are listed as historic buildings, and approximately 70 others present significant value as built heritage elements. In many settlements schools, cantor residences and other community buildings were owned by the Church even during the Communist period. For instance, in both Cluj-Napoca and Cristuru Secuiesc, two important college buildings served the purpose of denominational education. Furthermore, in the centre of Cluj-Napoca, tenement houses and residential buildings of historical value were owned by the Church even during the Communist regime or have been returned to the Church after 1989. The administration of church property is carried out jointly by the individual parishes and the General Authority. After the transition to democracy, the Economic Department of the General Authority created the job of architectural adviser. The architectural adviser oversees ecclesiastical monument protection and deals with issues concerning investments. Her/his duties and monthly working hours may vary.

Protection of Ecclesiastical Built Heritage before 2009

■ At the beginning of the institutionalisation of monument protection in Hungary, by the end of the 19th century, the new principles were communicated to the Church by Lajos KELEMEN. As a church archivist, a teacher at the Unitarian High School and a member of various ecclesiastical bodies, he drew attention to the values of certain buildings, undertook measures for their listing as monuments, for their survey and documentation as well as for the transportation of artefacts to museums, corresponding with the National Commission of Monuments (Műemlékek Országos Bizottsága) too. The restoration practices reflected, naturally, contemporary visions. He tried to assume the same task and represent the same ideas, even after Transylvania became part of Romania according to the peace treaties concluding the two world wars. Documents also mention László DEBRECZENI in the context of restorations of ecclesiastical buildings in the interwar era; however, he was mainly in charge of planning refurbishments and

extensions. After the Second World War, the Romanian state authority in charge of historical monuments in the respective era supervised restoration practices. In consequence, lengthy preparation and authorisation processes preceded restoration works. One signatory of the submitted designs was Károly KÓS, commissioned by the Reformed Diocese of Transylvania to elaborate and approve various designs. The scientific analysis of conservation activities and results of this period is a task for the future and would imply primarily the comparison of results from research in archives with the traces and the consequences of interventions on various sites.

The political transition of 1989 gave a new impetus to the architectural activities of the Unitarian Church as well. Undertaking action meant primarily initiating new investments, and the fact that church building was limited during the Communist era signalled that the 'newly found freedom' would entail mainly responses to the needs of growing urban congregations. New churches were built in Sfântu Gheorghe (Sepsiszentgyörgy), Târgu Mureş (Marosvásárhely), Odorheiu Secuiesc (Székelyudvarhely), Baraolt (Barót), Sovata (Szováta), Sângeorgiu de Pădure (Erdőszentgyörgy)[4], Miercurea Nirajului (Nyárádszereda), Sângeorgiu de Mureş (Marosszentgyörgy), Miercurea Ciuc (Csíkszereda) and Albeşti (Fehéregyháza).

Previously nationalised property that has been returned to the Church also required investment. The renovation of the Unitarian High School in Cluj-Napoca, built according to designs elaborated by Lajos PÁKEY, started intensively. Considering the new educational tasks to be performed by the Church, a boarding house was configured in the attic, and a modern kitchen with a refectory in the basement.

In this period, Viola PASKUCZ-SZATHMÁRY [5] was in charge of ecclesiastical architecture and historic building preservation at the Unitarian Bishopric. She was a part-time employee. She supervised the restoration of historic buildings with funds allocated as part of the Romanian Government's newly envisaged central investment project targeting this area. Thus, the churches in Sânvăsii (Nyárádszentlászló), Chilieni (Sepsikilyén) and in downtown Cluj-Napoca have been completely restored, the structure of the church tower was consolidated in Sânbenedic (Magyarszentbenedek) and the designs for restoring the church in Dârjiu (Székelyderzs), which became a UNESCO World Heritage Site, have been elaborated. Furthermore, Viola PASKUCZ-SZATHMÁRY supervised several minor interventions carried out under the authority of various parishes or with financial support from the

4 The Romanian state subsidised the construction of a church in Sângeorgiu de Pădure (Mureş/Maros County) for the parishioners who had moved there from Bezidu Nou (Bözödújfalu), in an attempt to compensate them for the loss of their church in Bezidu Nou.

5 Viola PASKUCZ-SZATHMÁRY (1938-2018) civil engineer.

hatóság ellenőrzése alatt állt, az egyes munkálatokat hosszas előkészület és engedélyeztetési folyamat előzte meg. A beadott tervek aláírói között ott találjuk KÓS Károlyt is, aki az Erdélyi Református Egyház megbízásából végzett tervezési vagy tervezés-jóváhagyási munkát. E korszak műemlékvédelmi tevékenységének, eredményeinek tudományos feldolgozása jövőbeni feladat, mely elsősorban levéltári kutatásból és a beavatkozások nyomának, helyszíni eredményeinek összevetéséből állna.

Az 1989-es rendszerváltás új lendületet hozott az Unitárius Egyház építészeti tevékenységébe is. Elsősorban új beruházások kezdeményezésére nyílt cselekvési tér, a kommunista időben végbement urbanizáció és a visszaszorított templomépítés egyértelműen előrevetítette, hogy az „új szabadság" elsősorban a számbelileg megnövekedett városi gyülekezetek igényére történő válaszadást fogja hozni. Új templomok épültek Sepsiszentgyörgyön, Marosvásárhelyen, Székelyudvarhelyen, Baróton, Szovátán, Erdőszentgyörgyön,[3] Nyárádszeredában, Marosszentgyörgyön, Csíkszeredában és Fehéregyházán.

A visszaszerzett államosított ingatlanok szintén beruházásokat igényeltek. Legerőteljesebben a PÁKEY Lajos által tervezett kolozsvári unitárius kollégium felújítása indult be, az egyház új oktatási feladatainak megfelelően a tetőtérben bentlakást, az alagsorban korszerű konyhát, konviktust hoztak létre.

Az Unitárius Püspökség alkalmazásában ekkor SZATHMÁRI PASKUCZ Viola[4] szolgálta az egyházi építészet és műemlékvédelem ügyét, részmunkaidős állásban. Az ő nevéhez köthetők az ekkor román állami műemlékvédelmi beruházásból végzett műemlék-helyreállítások is, a nyárádszentlászlói, sepsikilyéni és kolozsvári belvárosi templomok teljes helyreállítása, a magyarszentbenedeki torony statikai megerősítése, a székelyderzsi UNESCO világörökségi listára felkerült templom helyreállítási tervének előkészítése és néhány egyházközségi hatáskörben vagy magyarországi támogatással végzett kisebb beavatkozás menedzselése.[5] Ebben a korszakban valósult meg néhány igen jelentős, festett berendezési tárgy és középkori falfestmény restaurálása is. Legjelentősebb eredmény a homoródkarácsonyfalvi templom északi falán található Szent László-legenda-ábrázolás feltárása és konzerválása, valamint ugyanitt a festett mennyezet, karzatok, szószékkorona és úrasztala restaurálása. Homoródszentpéteren a templom festett mennyezetét állították helyre.

A román állami forrásokból támogatott javítások mellett jelentős volt az észak-amerikai testvérgyülekezetektől érkező támogatások hatása is, melyek egy része szintén templomjavítást szolgált. [6]

Minőségi szempontból ennek a korszaknak a legsikerültebb munkálata a kolozsvári belvárosi unitárius templom helyreállítása volt, ahol mind a dr. SZABÓ Bálint által vezetett tervezés, mind a kivitelezés szintjén az akkori szakmai minőség kiemelkedő teljesítményével találkozhatunk. Szintén kiemelkedően jó minőségben valósult meg Sepsikilyén középkori falfestményekben és faragott részletekben gazdag műemlék templomának MÁTÉ László és BENCZÉDI Sándor építészek nevéhez köthető helyreállítása is.

3 Az erdőszentgyörgyi templom építésére a Bözödújfaluból ide átköltöztetett hívek számára a román állam anyagi támogatást biztosított, ezzel próbálták kárpótolni a bözödújfalvi templom elvesztését.

4 PASKUCZ-SZATHMÁRI Viola (1938–2018) építőmérnök.

5 PASKUCZ-SZATHMÁRY Viola: Építményfelújítások az Erdélyi Unitárius Egyházban. Keresztény Magvető 113. évf. (2007.) 2. sz. 173–180. és a PASKUCZ-SZATHMÁRI Viola: Történelmi örökségünk tárgyi emlékeinek megőrzése és védelme. Keresztény Magvető 114. évf. (2008.) 2. sz. 242–253.

6 E korszak részletes bemutatása sem képezi jelen munka tárgyát, feltárására szintén levéltári és helyszíni kutatás volna szükséges. Bemutatása jelen munka keretein túlnyúlna.

Helyzetkép 2009-ben

■ 2009-től, a megbízatás[7] átvételét követően, elkezdődött az egyházi épületállomány megismerése, fokozatos bejárása, a gyülekezeti igények megértése, összesítése. A teljes bejárás sok évig tartó folyamat volt, de már az első hónapokban körvonalazódott a helyzetkép, diagnosztizálni lehetett az egyházi műemlékvédelmi gyakorlatot.

Az egyházi építési gyakorlat hivatalosan egyházközségi hatáskörben volt. Az egyes egyházközségek a lelkész, gondnok vagy keblitanács[8] által döntöttek arról, miként avatkoznak be épületeik állapotába. A kilencvenes évek tévesen értelmezett szabadságának megélése mellett számos beavatkozás, mely leginkább részleges javításokat jelentett, engedélyezés, tervezés vagy egyéb szakmai előkészítés nélkül zajlott, az egyházközség tagjai által vagy az általuk megbízott kivitelező vállalkozók bevonásával. Az egyház építészeti tanácsadójának tájékoztatása vagy véleményének kikérése megtörtént egyes egyházközségek részéről, mások viszont ettől eltekintettek. Ebből fakadóan a háztáji építési gyakorlat megoldásai, anyaghasználata egyre gyakoribbá vált, a műemlékvédelmi elvek és technológiai módszerek háttérbe szorultak. Általános volt a cementes vakolatok, habarcsok használata, a betonaljzatok megöntése, a mosható festékek alkalmazása, és nagy igény volt a hőszigetelő ablakok és új nyílászárók beépítésére. Ekkor már lecsengőben volt ugyan a „gyermekbetegségként" terjedő vasbeton támpillérek építése,[9] de nagy divatnak örvendett az amúgy elviekben helyes, de műszaki szempontból igen gyakran hibásan alkalmazott, házilag kivitelezett drénrendszerek kialakítása. Megkezdődött a különböző szigetelőanyagok beépítése, elsősorban födémek szigetelésére. Az egyes egyházközségi döntéshozók némelykor arról sem vettek tudomást, hogy épületeik hivatalosan védettek vagy védett övezetben vannak, a műemléki listán nem szereplő épületek esetében pedig gyakran természetesnek vették, hogy önálló módon, saját módszertan szerint járjanak el.

A fent leírt helyzet kialakulását elősegítette az egyházközségek számára elérhető helyreállítási, építési feladatokat is finanszírozó támogatási rendszerek felhasználóbarát módszertana. A legjelentősebb forrás a romániai kormányzati finanszírozás volt, melynek három fő csatornája létezett, a kiírt összegek szempontjából csökkenő sorrendben: központi forrás a Vallásügyi Államtitkárság lebonyolításában, megyei önkormányzati támogatási lehetőségek és helyi önkormányzati támogatások. Mindhárom rendszer egyszerűsített kérelmek benyújtását követően tette lehetővé munkálatok elvégzését, kezdetben az engedélyezési folyamat betartását sem kellett igazolni, csupán egy hivatalos formában leadott költségvetést igényeltek. A szakmai felelősség egyetlen garanciáját a költségvetés és az elszámolás leadásakor benyújtott tételes elszámolás ellenmérnök (diriginte de şantier) általi ellenjegyzése jelentette. Ezáltal a 2010-es évek elején akár műszaki tervezés hiányában és megkérdőjelezhető szakmaiság mellett is lehetett közpénz felhasználásával beavatkozást végrehajtani az egyházi épületeken. A rendszer az eltelt években számos változáson ment keresztül, egyrészt megszületett egy mindhárom támogatási formára egységesen alkalmazandó módszertan, de ami fontosabb, hogy előírta az építkezési engedélyek benyújtását, műemlék

7 2009-ben FURU Xénia műépítész és FURU Árpád építőmérnök közösen, külső szolgáltatókként nyertek építészeti tanácsadói megbízást napi négy óra munkaidővel. Fél év elteltével FURU Xénia immár az egyház alkalmazottjaként folytatta 2012-ig, szintén napi négy órás munkaidővel. 2012–2014 között ugyanezt a munkakört FURU Árpád látta el, majd az egyház mindkét szakembert napi nyolc órában alkalmazta.

8 Az egyházközség vezetését ellátó választmány, mely a református egyházban ismert presbitériumnak vagy az evangélikus konzisztóriumnak felel meg.

9 Részben PASKUCZ-SZATHMÁRI Viola munkássága is hozzájárult a szakmai felkészülés és tervezés hiányában inkább kontraproduktív pillérezéssel való felhagyáshoz.

Hungarian Government.[6] The restoration of some exquisite painted furnishings and medieval wall paintings was carried out during this period. The most significant achievement was the uncovering and conservation of the mural presenting the legend of King Saint Ladislaus I, applied to the north wall of the church in Crăciunel (Homoródkarácsonyfalva) as well as the restoration of the painted ceiling, the gallery, the sounding board and the altar. In Petreni (Homoródszentpéter), the painted ceiling was restored.

Complementing governmental funds obtained for renovations, financial aid received from sister congregations in the United States also had a significant impact. These sums were used partly for church restorations as well.[7]

Regarding the quality of these interventions, the most successful work of this period was the restoration of the Unitarian Church in the downtown of Cluj-Napoca, where both the design and the execution, supervised by Professor Bálint SZABÓ PhD, were of the highest standard, considering those years. The restoration of the church of Chilieni – listed among the historic buildings of the country, supervised by architects László MÁTÉ and Sándor BENCZÉDI – was also a considerable achievement.

The situation in 2009

■ After being commissioned in 2009, architect Xénia FURU and civil engineer Árpád FURU[8] started to inventory and asses church buildings, and gradually understand and summarise the needs of the congregations too. The survey lasted several years, but it took only a few months to outline the situation and diagnose the Church's preservation practices regarding historic buildings.

Church restoration practice was officially under parish jurisdiction. The pastor, the curator or the presbytery[9] decided on behalf of the individual parishes regarding the interventions on their churches. Thus, enjoying the misconceived freedom of the 1990s, many interventions, mostly partial repairs, were carried out without authorisation, designs or other professional preparations by parishioners or contractors commissioned by them. Some parishes informed

6 Viola PASKUCZ-SZATHMÁRY: Building renovations in the Unitarian Church of Transylvania, *Keresztény Magvető*, Vol. 113 (2007) No. 2, pp. 173–180 and Viola PASKUCZ-SZATHMÁRY: Preservation and protection of the material elements of our historical heritage, *Keresztény Magvető*, Vol. 114 (2008) No. 2, pp. 242–253.

7 A detailed description of this period is not the subject of the present work and would also require archival and field research. A description of the period would be beyond the scope of this paper.

8 In 2009, architect Xénia FURU and civil engineer Árpád FURU were jointly commissioned as part-time external service providers. After six months, Xénia FURU continued this work as part-time employee of the church until 2012. From 2012 to 2014, the same job was held by Árpád FURU, but afterwards both became full-time employees of the church.

9 The congregation's governing body, equivalent to the presbytery in the Reformed Church or to the consistory of the Lutheran Church.

épület esetén a műemlékvédelmi szakhatóság jóváhagyását, engedélykötelezettség mentessége esetén pedig önkormányzati urbanisztikai jóváhagyással kellett ezt a körülményt a hatóság felé igazolni. Tervek, leírások benyújtása sajnos továbbra sem kötelező, mint ahogy annak ellenőrzése sem történik meg, hogy a megvalósult munkálat az építkezési engedély, illetve az ennek alapjául szolgáló tervek szerint készült el.

Hasonló vagy még nagyobb könnyedséggel lehetett magyarországi forrásokat felhasználni. Leggyakrabban a pályázatoknál sem kérték az építkezési engedélyek, tervek bemutatását, megelégedtek költségvetési keretszámok közlésével. Kivételt képezett a Teleki László Alapítvány által lebonyolított műemlék-helyreállítást célzó támogatások szakmai kritériumokra alapozó rendszere, melynek mintájára fokozatosan írták elő más anyaországi támogató testületek is az engedélyezett tervek meglétét és az ezek alapján történő munkavégzést és elszámolást. Magánforrásból vagy testvérgyülekezeti támogatással elvégzett munkálatnál a támogató részéről jogi megkötés természetesen nem létezett.

Jobb volt a helyzet a román műemlékvédelmi alapból elvégzett munkálatok esetében. Ezeknél az egyházközség tulajdonképpen nem kezelt pénzt, csak részese, haszonélvezője volt az állami beruházásnak. A minisztérium saját hatáskörben végeztette el a tervezést, hirdette meg a kivitelezési tendert és bonyolította le a helyreállítást, saját maga intézve a szakmai és pénzügyi ellenőrzési feladatokat is. Az állami közbeszerzési és műszaki törvények betartása természetesen kötelező volt.[10] Ez a lehetőség 2012 után fokozatosan megszűnt. Némiképpen hasonló, de jóval bonyolultabb módszertannal találkozhattunk az európai uniós forrásokból finanszírozott, nagyságrendekkel nagyobb beruházások és a közelmúltban az állami műemlékvédelmi hivatal (INP) által kiírt kisebb vagy jelentősebb beruházások esetében is.

Megállapíthatjuk, hogy a megfelelő tervezéssel és előkészítéssel indított munkálatok jó eredményeket hoztak: ott, ahol a központi szakmai figyelem teret kaphatott, a tervezés nélkül elvégzett beavatkozások is hasznosnak bizonyultak. A fent jelzett szakmai szempontból helytelen beavatkozások azokat a helyzeteket jellemezték, ahol nem adtak lehetőséget az építészeti tanácsadónak részt venni a folyamatokban.

A fenti általános helyzet következtében építészeti tanácsadóként az első években kezdeményeztük egy egyházi építésügyi szabályzat megalkotását és elfogadását, valamint az egyes lelkészek és egyházközségi tisztségviselők szakirányú képzésének megkezdését. Örömmel és megelégedéssel tapasztalhattuk, hogy mind az egyház vezető tisztségviselői, mind az egyes vezetőtestületek és bizottságok tagjai a hiányosságok feltárását őszinte megértéssel fogadták és kezelték, lehetőséget teremtve az egyházi műemlékvédelem terén foganatosítandó intézkedések meghozására.

Egyházi építési szabályzat

■ Az új egyházi jogszabályt az építészeti tanácsadó tervezete alapján az Unitárius Egyház elnöksége megvitatta, majd az egyház kormányzó szerve, az Egyházi Képviselő Tanács 2012-ben elfogadta. A jogszabály kimondta, hogy az egyes egyházközségek saját hatáskörben, azaz főható-

10 Ennek a rendszernek a fő hibája az egyházközségi véleménynyilvánítás, ellenőrzés teljes mellőzése volt. Általában zavarta a közösséget, hogy nem tájékoztatták őket a beavatkozások mértékéről, folyamatáról, nem értették a műemlékvédelmi tudományos szempontokat, és nem láthattak rá a felhasznált anyagi források ellenőrzésére sem. Amennyiben hanyag munkavégzést észleltek, véleményüket nem vették figyelembe. A rendszer gyanakvást szült, a helyiek között könnyen elterjedhettek olyan téves nézetek, melyek az anyagiak felhasználásának helytelen jellegével gyanúsították meg a helyreállításban részt vevő szereplőket.

or consulted with the Church's architectural adviser, while others did not. As a result, "home-made" solutions and materials used for building purposes became common, while the principles and technologies of monument protection were completely ignored. The use of cement-based plasters and mortars, the application of washable paints and the laying of concrete floors were usual practices, while the demand for installing insulated glass and new windows and doors was very high. At that time, the practice of building reinforced concrete buttresses[10] – which earlier spread like some childhood disease – was already disappearing, but the construction of home-made drainage systems, which were employed in principle correctly but very often executed technically in a faulty manner, was still in vogue. Parishes started to use various insulating materials, mainly for insulating slabs. Parish councils were sometimes unaware that their buildings were officially listed as historic buildings or located in conservation areas, whereas, in the case of buildings not listed as monuments, it was quite natural for them to proceed independently, according to their own methodology.

The situation described above occurred partly because of the user-friendly methodology of grant schemes available to parishes for financing restoration and construction works. The most important funding sources were Romanian governmental grants, obtained using three main channels, listed here in descending order of the allocated sums: central funding distributed by the State Secretariat for Religious Affairs, grants offered by county councils and municipalities. All three systems required only the submission of simplified applications, initially without even checking the compliance with the authorisation process and requiring only an officially submitted budget. Only stamping the itemised budget by an independent expert engineer before submitting the final budget and settling the accounts ensured some professional responsibility. Thus, in the early 2010s, parishes spent public money in an unprofessional manner. In the meantime, the system underwent several changes. The Romanian authorities adopted a uniform methodology applicable to all three types of grants, but more importantly, introduced the requirement to submit building permits and, in the case of historic buildings, an authorisation of the heritage protection authority, too. In the case of interventions exempted from the obligation to obtain a building permit, the opinion of the local urban planning department had to be submitted. Unfortunately, the submission of designs and specifications is still not compulsory. Similarly, nobody checks whether one carried out the work according to the building permit or the plans submitted for obtaining it.

10 Partly, the work of Viola PASKUCZ-SZATHMÁRY contributed to the abandonment of the rather counterproductive use of pillars due to lack of professional preparation and planning.



■ ***2. ábra.*** *Műemlékvédelmi képzés gondnok-presbiteri találkozón Mészkőn, 2013. © BÁLINT Róbert Zoltán*
■ ***Fig. 2.*** *Historic building preservation training at a curator meeting in Cheia (Mészkő), 2013. © Róbert Zoltán BÁLINT*

sági engedélyezés nélkül csak karbantartási munkálatokat végezhetnek el, ezek elvégzése azonban kötelező érvényű. Ide elsősorban a héjazati meghibásodások és a csapadékvíz-elvezető csatornarendszer hibáinak elhárítása, javítása tartozik. Kisebb meszelés, vakolatjavítás szintén karbantartás jellegű. Minden egyéb beavatkozás, legyen az részleges vagy teljes javítás, átalakítás, bontás, építés főhatósági engedélyt igényel, azaz az egyházközség köteles a főhatóság építészeti tanácsadóját tájékoztatni a munkálat szándékáról, tudomásul venni az építési tanácsadó válaszát, amely kötelezően tartalmazza a munkálat jogi besorolását (engedélykötelezettség, tervezési kötelezettség, régészeti, művészettörténeti előkutatási kötelezettség stb.), majd a válaszban meghatározott feltételek és kötelezettségek alapján lesz köteles az egyházközség eljárni. Az építési szabályzat alkalmazásának gyakorlata legutóbb 2020-ban került számos ponton korrigálásra, kiegészítésre. Új és fontos szempontként került be a szabályzatba, hogy az egyház építészeti örökségként határoz meg minden 1950 előtt épült egyházi ingatlant, és ennek értelmében a beavatkozás előtt ugyanolyan módszertant szükséges alkalmazni, mint a hivatalos jegyzékbe felvett műemlék épületek esetében. Szintén új kitétel volt, hogy amennyiben az építészeti előadó előírásai és az egyházközség akarata, lehetőségei, szándéka között eltérés, ellentmondás van, (másodfokon) egyházvezetői részvétellel egyeztetést szükséges tartani, mely egyeztetés során hozott döntések lesznek az irányadóak. Módszertani szempontból újdonság a jelenlegi szabályzatban, hogy nagyobb horderejű kérdések esetében független szakértőket tartalmazó elbírálóbizottságok létrehozását is előírja, növelve ezzel az egyházi döntések szakmai megalapozottságát. A szabályzat emlékművek, emléktáblák állítására is vonatkozik. A korábbi változatához képest a kiegészített szabályzat pontosítja azokat a szankciókat is, melyeket egyházi szinten a szabályzat megszegése esetén alkalmazni kívánnak, ezt a kérdést ugyanis a korábbi változat nem érintette.

Természetesen egy szabályzat annyit ér, amennyit betartanak belőle. Szabályalkotóként és főhatósági képviselőként nyilván a teljes betartást szeretnénk elérni, de tudomásul kell venni, hogy a szervezeti kultúrá-

One could use Hungarian governmental funding with similar or even greater ease. In most cases, applicants did not have to submit building permits or designs, as they had to provide only budget amounts. The exception was the system of grants for restoring historic buildings run by the Teleki László Foundation, based on professional criteria. Later, other funding organisations of the Hungarian state followed suit and gradually required the existence of approved designs as well as the construction work and the settlement of accounts based on these designs. However, in the case of restorations financed from private funds or with the support of sister congregations, the sponsor imposed no legal constraints.

Works financed by the Romanian historic building protection fund represented a better situation. In these cases, the parish did not receive the funds but was only a participant and the beneficiary of the public investment. The ministry itself commissioned the designs, published the execution tender for the works and supervised the restoration, including both technical and financial oversight. Compliance with legislation on public procurement and construction works was naturally mandatory.[11] This opportunity was gradually phased out after 2012. The methodologies employed for far larger-scale projects financed by the European Union and – more recently – for smaller and larger projects funded by the National Institute of Built Heritage (Institutul Naţional al Patrimoniului) were somewhat similar but considerably more complex.

We found that work that has been properly planned and prepared produced good results, and where central professional oversight could play a role, even unplanned interventions proved to be useful. The professionally inappropriate interventions enumerated above were carried out in situations where the architectural advisor could not participate in the planning process.

In our first years as architectural advisors, we proposed that the Church drafted and adopted an ecclesiastical building code and introduced training courses for certain pastors and parish officials to address the general situation depicted in this section. We were happy and content to see that both church leaders and the members of the various governing bodies and committees were rather sincere when accepting and understanding the existence of shortcomings, thus creating an opportunity to implement some measures of ecclesiastical heritage protection.

11 The main flaw of this system was the complete absence of parish consultation and control. In general, the community was disturbed by the fact that they were not informed about the extent and process of the interventions, did not understand the scientific aspects of heritage conservation, and could not see the control of the materials used. If they observed sloppy work, their opinions were not taken into account. The system created suspicion and misconceptions among local people that the restoration operators were using the funds inappropriately.

ból és az országos építésügyi és műemlékvédelmi hatósági helyzetből kiindulva a szabályzat részleges betartása is fontos eredmény. Tapasztalataink szerint előfordul, hogy egyes lelkészek és gondnokok továbbra is a korábbi gyakorlat szerint járnak el, és nem minden esetben veszik figyelembe az új jogszabályi kereteket. Emellett sajnálatosan akadnak olyanok is, akik tudatosan kerülik a főhatósági ellenőrzést. Ugyanakkor örvendetes, hogy egyre többen tartják be, illetve törekszenek betartani a szabályzatot, ezzel is hozzájárulva az átlátható és jogszerű működéshez. A kérdés sarkalatos pontja a munkálatról való időbeni tájékoztatás. A szabályzat hat hónappal a tervezett munkálat előtti határidőt határozza meg, ami elég időt biztosítana a felkészülésre. Ennek a határidőnek a betartása tulajdonképpen azt jelentené, hogy az egyházközség már év elején döntsön a folyó évi tervekről, ami általában meg is történik, csupán az marad el, hogy a döntést megosszák az egyházi központ műszaki tanácsadójával. A néhány hónappal korábbi bejelentés is sokban segíti a műszaki ügyintézést, viszont a munkálat előtti napokban történő informálás már szinte lehetetlenné teszi a proaktív részvételt, a megfelelő felkészülést. Az egyházi központ részéről javasoljuk a hosszú és középtávú beavatkozási ütemtervek összeállítását.

Természetesen akkor sikeres egy szabályzat, ha az egyházi tisztségviselők nem normatiszteletből, hanem meggyőződésből tartják be azt, ismerve a szabályzat műszaki és örökségvédelmi céljait, tudomásul véve, hogy ezzel a közösség morális és anyagi érdekeit egyaránt szolgálják. Ez utóbbi szempont érvényesítését célozta meg az örökségvédelmi és műszaki helyreállítási szempontok széles körben történő ismertetése.

Műemlékvédelmi és örökségvédelmi oktatás

■ Örökségvédelmi témájú előadásokat 2010-től sikerült megszervezni.[11] Azért, hogy minél több lelkész hallgathassa az előadásokat, az egyházi vezetés úgy döntött, hogy a lelkészek számára kötelező, negyedévi lelkészi értekezletek szakmai témái között kerüljön sor a bemutatásukra. Az egyik fő témacsoport a műemléki érték jelentőségét, kulturális és közösségi szerepét boncolgatta, egy másik, ennél nagyobb népszerűségnek örvendő kérdéskör, az épületek karbantartásának fontosságát, az egyes, nem megfelelő módszerek káros és anyagi szempontból megterhelő hatását tárgyalta. Sor került az egyes templomok javításakor tapasztalt hibák és eredmények bemutatására is. A több mint három éven átívelő előadássorozatot hasonló tematikával, ám a hallgatóság felkészültségéhez hangolt előadásmóddal megtartottuk az egyházközségek világi vezetőinek, a gondnokoknak is. Ez utóbbi előadások az éves rendszerességgel megszervezett gondnoki értekezleteken kaptak helyet. A gondnokok kérésére az előadásokat írott formában megjelentettük az *Unitárius Közlöny* című egyházi havilapban,[12] majd különálló zsebkönyv formájában is.[13] Ezt követően időről időre a teológiai képzés során, rövidített formában a lelkészjelöltek is betekintést nyertek a témába. Sajnos a rendszerszerűség kialakítását a teológiai hallgatók számára eddig még nem sikerült előírni, ezért nem minden évfolyam hallgatói találkoztak a tematikával.

Az előadások kétségtelenül sokat változtattak az egyházközségi képviselők hozzáállásán. Sikerült tudatosítani az egyes templomok műemlékértékét, és sikerült felismertetni néhány széles körben elterjedt hibás

Ecclesiastical building code

■ The Presidium of the Unitarian Church debated the new ecclesiastical regulation drafted by the architectural advisors, and later, in 2012, the Council of Church Representatives adopted it. The regulation stipulated that individual congregations may carry out only maintenance work at their discretion. Hence, without the approval of the General Authority, one may only perform maintenance operations, but these are mandatory. Such operations include repairs of roof coverings and defective rainwater drainage systems. Minor whitewashing and plaster repairs are also considered maintenance work. All other interventions, whether partial or total repairs, alterations, demolitions or construction, require a permit from the General Authority. Thus, the parish must inform the General Authority's architectural advisor of the intention to carry out the work and consider the reply they receive from her/him. The reply shall include the legal classification of the work (obligation to obtain a permit, elaborate a design, carry out archaeological or art history research etc.), and the parish shall proceed according to the conditions and obligations set out in the reply. The practice of applying the building regulations was amended in certain respects for the last time in 2020. A newly adopted important aspect is that the Church defines as architectural heritage all ecclesiastical properties built before 1950; hence, one must apply the methodology valid for historic buildings listed before any intervention. Another new provision was that, in the event of discrepancies or conflicts between the architectural rapporteur's specifications and the will, possibilities and intentions of the parish, a consultation with the participation of the church leadership shall be held (in the second instance), and the decisions made during this consultation shall be considered relevant. From a methodological point of view, a new feature of the current regulation is the establishment of evaluation committees with invited independent experts. These committees shall decide on major issues, thus increasing the professional soundness of church decisions. The new set of rules covers the erection of monuments and the placement of commemorative plaques. Compared to the previous version, the amended regulation specifies the sanctions applicable at the Church level in the event of a breach of the regulation, an issue not addressed in the previous version.

Of course, the value of a set of rules is given by its inforcement. As persons who have put forward the regulation and as representatives of the General Authority, we want to achieve full compliance, but – given the organisational culture and the situation of the national building and heritage authorities – one must admit that partial compliance with the regulation is already a significant achievement. Our experience is that, unfortunately, some pastors and curators continue to manage their affairs according to previous practices, failing to acknowledge the new regulation, or some even deliberate-

11 Az előadás-sorozat szervezését a Nemzeti Kulturális Alap (NKA) támogatta.

12 FURU Árpád: Az egyházi épületek karbantartásáról 1–11., *Unitárius Közlöny* 22.(82.) 2012 4.sz. 13–14., 5. sz. 15–16., 6.sz. 15–16., 7.sz. 15–16., 8.sz. 15–16., 9.sz. 14–15.,10. sz. 17–18., 11.sz. 15–16., *Unitárius Közlöny* 23.(83). 2013. 1. sz. 14–15., 2.sz. 17–18., 4.sz. 15–16.

13 FURU Árpád: *Útmutató az unitárius egyházi épületek karbantartásához.* Magyar Unitárius Egyház, Kolozsvár 2015.



■ ***3. ábra.*** *Bágyon, az unitárius templom helyreállítása után. © FURU Árpád*
■ ***Fig. 3.*** *Bădeni (Bágyon), Unitarian church after restoration. © Árpád FURU*

módszer káros hatását. Az előadások is hozzájárultak ahhoz, hogy gyakrabban és könnyebb érvelési folyamat után vállalták az egyházközségek szaktervező, majd később szakkivitelező igénybevételét. 2014 után az egyházi figyelem a közelgő évfordulós előkészületek felé fordult, így az előadásokat szüneteltettük. Meggyőződésünk, hogy a lelkészi és gondnoki körben azóta megtörtént fiatalítás és frissítés szükségessé teszi a találkozók újbóli rendszeresítését.

Egyházközségi templomokon végzett munkálatok

■ Kétségtelenül az egyházi élet egyik legfontosabb közösségépítő és egyben műemlékvédelmi tevékenysége az egyes templomok javítása, helyreállítása. Ezek a nagy anyagi ráfordítással és sok figyelemmel járó munkálatok időről időre minden templom esetében szükségesek, minőségük, mértékük sok szempontból meghatározó. Sikeres munkálat lezárulása esetén hatásuk a közösség kohéziójára, az egyházi életre pozitív. Megállapítható, hogy a műszakilag helyes, értéket megőrző munkálat műemlékvédelmi jelentősége mellett a teljes közösség lendületét emeli, identitásukat, egyházukhoz, őseikhez való lelki viszonyukat, önbecsülésüket erősíti. Ezzel szemben az elhúzódó, a templom használatát hosszú időre lehetetlenné tevő, esetleg anyagi kárral vagy gyanakvással járó munkálatok a közösséget bomlasztják, az egyháztól a híveket eltávolítják.

A számszerű eredmények meglehetősen nagy munkamennyiségről árulkodnak, természetesen ehhez hozzájárult a 2018-as évfordulós évre[14] való felkészülés lendülete is. Az alábbiakban a különböző munkamódszerrel és viszonyulással végzett beavatkozásokat megpróbáljuk csoportokba sorolni és ezek alapján összeszámolni. Teljes helyreállításról akkor beszélünk, ha a templom javítását átfogó kutatás, tervezés és

14 2018-ban ünnepelte az egyház intézményes fennállásának 450. évfordulóját, melynek létrejöttét az 1568-as tordai országgyűlés vallásügyi határozata tette lehetővé.

ly evade oversight by the General Authority; but, of course, the number of those who observe or try to observe the rules is increasing. The cornerstone of the issue is timely information on the work. The regulation stipulates a six-month deadline before the planned work to have enough time to prepare. Meeting this deadline would mean that the parishes decided on their yearly plans at the beginning of each year. This situation occurs regularly; however, parishes generally fail to internalise the duty to communicate their decisions to the technical adviser of the General Authority. Of course, announcing the works a few months in advance can help regarding technical management, but informing on the project only a few days before commencing the work renders proactive participation and proper preparation almost impossible. From the point of view of the General Authority, we recommend the elaboration of long and medium-term intervention schedules and encourage all presbyteries to do so.

Of course, the success of any regulation depends on how church officials enforce it, not because of the norms that have to be respected but out of conviction, being aware of its technical and heritage protection objectives, and acknowledging that by observing the rules, they are serving the moral and material interests of the community. Presenting the heritage protection and technical restoration aspects to a wide ecclesiastic public served the latter goal.

Education in heritage conservation and protection

■ We have held lectures on heritage conservation since 2010.[12] To make them accessible to as many pastors as possible, we decided – together with the church leadership – to include them in the professional topics of the quarterly pastors' meetings, which are mandatory for them. A major group of subjects explored the significance of the value presented by buildings as monuments and their cultural and community role. Another one – more popular among the audience – discussed the importance of building maintenance and argued that inappropriate methods might exert a damaging and financially burdensome impact. We also dealt with the failures and results of several church repairs. For more than three years, we have delivered a lecture series to lay leaders of parishes and curators, touching upon similar topics and adapting the presentation style to the schooling level of the audience. We gave these lectures at the annual meetings of curators, which are also compulsory according to church regulations. Upon request from the curators, we published the presentations in written form in the Official Unitarian Journal (Unitárius Közlöny)[13] – a

12 The series of lectures was once again supported by the National Cultural Fund (NKA).
13 Árpád FURU: On the Maintenance of Church Buildings 1–11, *Unitarian Journal* 22. (82.) 2012 no. 4. 13–14., no. 5. 15–16., no. 6. 15–16., no. 7. 15–16., no. 8. 15–16., no. 9.14–15., no. 10. 17–18., no. 11.15–16., *Unitarian Journal* 23. (83). 2013. no. 1.14–15., no. 2.17–18., no. 4. 15–16.

monthly journal issued by the Church – and later in a separate pocket guide, too.[14] Afterwards, we held similar lectures in abridged form from time to time to theology students. Unfortunately, systematic attendance is still not mandatory for theology students; thus, not all undergraduate students in all years encountered these topics.

The presentations have undoubtedly changed the attitude of parishes. We managed to make them perceive the historical value of individual churches correctly and recognise the harmful effects of some widespread misguided practices. As a result of these lectures, being presented with far less sophisticated reasoning, parishes agreed more frequently to commission professionals for planning and, later, carrying out the interventions. After 2014, the attention of the Church turned to the upcoming anniversary preparations, and we had to put the lectures on hold. We are convinced that the rejuvenation and replacement, which occurred among pastors and curatorial circles since then, calls for reintroducing these regular meetings.

Works on parish churches

■ Undoubtedly, the repair and restoration of individual churches represent one of the most relevant community-building and heritage conservation activities of church life. These works, which require considerable financial investments and much attention, are sometimes necessary for all churches, and their quality and extent are decisive in many respects. When completed successfully, they impact community cohesion and church life positively. One can state that – in addition to their importance for the preservation of historic buildings – technically appropriate works, which preserve the value of buildings, also boost the enthusiasm of the whole community while strengthening its identity, self-esteem and spiritual relationship with the church and the ancestors. In contrast, prolonged works that render the use of the church impossible for a long time and possibly provoke damages to the building, or incite suspicions, undermine the community and alienate the faithful from the church.

The figures show a considerable amount of completed work, supported of course by the momentum of the preparations for the 2018 anniversary year.[15] In what follows, we try to group the interventions employing different work methods and attitudes as well as count the numbers of interventions in each group. By full restoration, we mean cases when extensive research, planning and obtaining of permits preceded the repair of the church, and the works meant the repair of major structural defects in addition to

14 Árpád FURU: A Guide to the Maintenance of Unitarian Church Buildings. Hungarian Unitarian Church, Kolozsvár 2015.

15 In 2018, the Church celebrated the 450th anniversary of adopting the Freedom of Religion Act. 13 January 1568 is also regarded as the founding date of the Hungarian Unitarian Church, as it was the date from which it could officially function as a recognised separate denomination.

engedélyezés előzte meg, és a munkálatok a felületi burkolórétegek javításán túl jelentős szerkezeti hiányosságok orvoslását is vállalták, vagy esetenként a képzőművészeti tartozékok helyreállítását is jelentették. A részleges helyreállításokhoz soroltuk az olyan munkálatokat, ahol a templomnak csak egy bizonyos építészeti elemét javították vagy állították helyre. Ezek legtöbbje cserépátrakás, tetőjavítás vagy homlokzatjavítás, meszelés volt. Ritkábban jól körülhatárolható, ám kisebb szerkezeti beavatkozásokat is idesoroltunk. A munkálatok egy része kutatást, tervezést, engedélyeztetést, más része csak egyszerűsített jóváhagyási és felkészülési eljárást tartalmazott. Javításokhoz, illetve nagy javításokhoz az olyan munkálatokat soroltuk, amelyeket történeti értéket nem hordozó, azaz 1950 után emelt épületeken végeztek, vagy amennyiben történeti épületről volt szó, nem rendelkeztek megfelelő kutatási, tervezési előzményekkel, vagy nem ezek szerint végezték el őket. Ez utóbbi csoporthoz sorolt épületek egy részénél a megfelelő szakmai művezetésre sem volt lehetőség.

Vegyük előbb számba az egyházközségi templomokon elvégzett munkálatokat.[15] Ide soroljuk az egyes egyházközségek jelentősebb beruházásait is.[16]

Befejezett teljes helyreállítások[17]

■ Az elmúlt 15 évben 25 befejezett, teljes helyreállítás valósult meg. Idesoroljuk az alábbi munkálatokat: Ádámos, Bágyon, Kőrispatak, Csehétfalva (közösségi központ), Déva, Fiatfalva, Firtosváralja, Kálnok (harangláb), Kede, Korond, Kolozs (parókia), Kökös, Mészkő, Nagyajta, Nyárádszentlászló, Okland, Sepsiszentkirály, Szentábrahám, Szentgerice, Székelyderzs, Tarcsafalva, Tarcsafalva (harangláb), Torda, Várfalva, Városfalva.

A teljes helyreállítások sorából kiemelkedik az öt, Európai Unió által finanszírozott helyreállítás, mely átfogó tervezést, kutatást, előkészítést követően valósult meg.

Nagyajta szabályos négyszög alakú, átlósan elhelyezett, két saroktoronnyal és egy kaputoronnyal védett várfallal övezett, középkori eredetű templomának teljes helyreállítása számos látványos eredményt hozott. A templom északi falán feltárták a Szent László-legenda képsorának néhány töredékét. A tetőszerkezet, boltozatok és a falak megerősítése mellett természetesen elkészült a tetőszerkezet javítása és a héjazat cseréje. Jelentős mennyiségű munkát jelentett a várfalak helyreállítása. A részben rekonstruált gyilokjárók lehetővé teszik a teljes várfalrendszer bejárását és a bástyákban elhelyezett interaktív, tematikus kiállítások megtekintését. A várudvaron kialakított színpad számos rendezvény és közösségi esemény színterévé vált.

Bágyon középkori előzményekkel rendelkező, 18–19. század fordulóján épült, fallal védett temploma teljes helyreállítását a barokk jellegű fedélszerkezet és födém válságos állapota indokolta. A gazdag régészeti eredményeket hozó beavatkozást követően a megújult templom építészeti megjelenése sokat javult, az impozáns belső tér visszanyerte egykori magasztosságát, fényét, a beavatkozás sikeresen integrálta a korábbi korszakokból és római épületekből származó faragott köveket,

15 Szándékunk, hogy minden munkálat esetében a tervező és kivitelező csapatokat névlegesen felsoroljuk, jelen tanulmány szerkesztési keretei között nem valósítható meg. Minden részt vevő csapatnak és kollégának megértésére számítva, ezúton is köszönetünket tolmácsoljuk feléjük.

16 A kolozsi parókia és iskola teljes felújítási projektje, a csehétfalvi közösségi központ építése.

17 Templomokon végzett munkálatok.



■ **4. ábra.** *A bágyoni templom tetőszerkezete helyreállítás* **a.** *közben és* **b.** *után. © FURU Árpád*
■ ***Fig. 4.*** *Bădeni (Bágyon), roof structure of the church* **a.** *during and* **b.** *after restoration. © Árpád FURU*

és a kortárs építészeti megoldásokat. A tetőszerkezet kiváló minőségű, hagyományos ácskötéseket alkalmazó helyreállítása igazi szakmai bravúrnak minősül.

Várfalva temploma, mely az egykori Torda vára alatti falu második temploma volt, a középkori előzmények felhasználásával több szakaszban bővült, falaiba számos faragott római követ, román kori faragott kapukeretet és egyéb faragott részletet beépítettek. Impozáns, 17–18. századi festett mennyezete, a szószék 17. századi festett hangvetője és a papi szék – sajnálatos módon – a 20. század elejétől a kolozsvári múzeumok raktáraiban porosodik, azonban látványos a feltárt, festett nyugati karzat és szószékfeljáró mellvédje. Teljes helyreállítása sokat javított a keskeny és szokatlanul hosszú templombelső építészeti megjelenésén, előnyös változás az eredetit idéző kazettás famennyezet beépítése, a korábbi hosszházat disszonánsan terhelő népies faragványok eltávolítása, a padok restaurálása és a korszerű világítástechnika fényeinek használata, valamint kőfelületek, lábazatok, emléktáblák, ajtókeretek restaurálása. A templom felújítása kiegészült a várfal belső oldalához épült közösségi épület helyreállításával és a cinteremben található sírkövek restaurálásával.

the repair of the cladding, or in some cases involved the restoration of artistic accessories, too. We treat works where only a specific architectural element of the church was repaired or restored as partial restorations. Most of these were tile replacements, roof or façade repairs, and whitewashing. In some cases, we added to this category well-defined, but minor structural interventions, too. Some operations involved research, design and obtaining permits, while others only simplified approval and preparation procedures. We classified works carried out on buildings of no historical value or, in the case of historic buildings, works not preceded by appropriate research and design activities or carried out ignoring previous research and planning as repairs or major repairs. For some of the buildings included in this latter group, proper professional supervision was not possible either.

We will inventory first works carried out on parish churches,[16] including the major investments made by individual parishes,[17] too.

Completed full restorations[18]

In the last 15 years, 25 full restorations have been carried out. These include the works done in: Adămuş (Ádámos) (Mureş County), Bădeni (Bágyon) (Cluj/Kolozs County), Crişeni (Körispatak) (Harghita/ Hargita County), Ceheţel (Csehétfalva) (Harghita County – on the community centre), Deva (Déva) (Hunedoara/Hunyad County), Filiaş (Fiatfalva) (Harghita County), Firtuşu (Firtosváralja) (Harghita County), Calnic (Kálnok) (Covasna/Kovászna County – on the belfry), Chedia (Kede) (Harghita County), Corund (Korond) (Harghita County), Cojocna (Kolozs) (Cluj County – on the parish), Chichiş (Kökös) (Covasna County), Cheia (Mészkő) (Cluj County), Aita Mare (Nagyajta) (Covasna County), Sânvăsii (Mureş County), Ocland (Okland) (Harghita County), Sâncraiu (Sepsiszentkirály) (Covasna County), Avrămeşti (Szentábrahám) (Harghita County), Gălăţeni (Szentgerice) (Mureş County), Dârjiu (Harghita County), Tărceşti (Tarcsafalva) (Harghita County), Tărceşti (Harghita County – the belfry), Turda (Torda) (Cluj County), Moldoveneşti (Várfalva) (Cluj County) and Orăşeni (Városfalva) (Harghita County).

In this category, five restorations funded by the European Union stand out, as they were completed following extensive planning, research and preparation.

The complete restoration of the regular rectangular-shaped medieval church of Aita Mare with two diagonally placed corner towers and a gate tower, combined with a defensive wall, produced numerous spectacular results. In this church, some frag-

16 Our intention to list the design and construction teams for each project by name is beyond the scope of this article. We thank all the teams and colleagues involved for their understanding.
17 A complete restoration project of the parish and school in Cojocna, and the construction of the community centre in Ceheţel.
18 Works on churches.

ments of the mural presenting the legend of King Saint Ladislaus I have been uncovered on the northern wall. The roof structure, the arches and walls were strengthened; of course, the roof structure was repaired, and the roof covering was replaced. The restoration of the defensive walls involved a considerable amount of work. The partially reconstructed wall-walks allow access to the entire defensive wall system and the viewing of the interactive thematic exhibitions in the bastions. A stage configured in the castle's courtyard has become the venue for numerous events and community activities.

The church in Bădeni – built at the turn of the 18th and 19th centuries but with medieval origins and protected by a wall – had to be fully restored because of the critical condition of the baroque roof structure and of the slab. Following the intervention, which yielded significant archaeological results, the overall architectural appearance of the renovated church improved considerably, the imposing interior regained its former grandeur and splendour, while the intervention successfully integrated carved stones from earlier periods and Roman buildings with contemporary architectural solutions. The restoration of the roof structure, using traditional carpentry techniques of the highest quality, is an outstanding professional achievement.

The church of Moldoveneşti, which was the second church in the village situated below the former Turda Castle, was extended in several stages using medieval elements. Numerous carved Roman stones, Romanesque carved doorframes and other carved details were built in its walls. Its impressive 17–18th century painted ceiling, the 17th century painted sounding board of the pulpit and the priest's chair are in the storerooms



■ ***5. ábra.*** *Várfalva, unitárius templom helyreállítás után. © FURU Árpád*
■ ***Fig. 5.*** *Moldoveneşti (Várfalva), the Unitarian church after restoration. © Árpád FURU*



■ ***6. ábra.*** *Várfalva, templombelső helyreállítás után. © FURU Árpád*
■ ***Fig. 6.*** *Moldoveneşti (Várfalva), church interior after restoration. © Árpád FURU*

Okland középkori eredetű templomának sorsa érdekes fordulatot vett 1937–38-ban, amikor bővítési céllal szentélyét lebontották, és helyette, DEBRECZENI László tervei szerint, tágasabb épületrészt és két portikuszt emeltek. A szecessziós stílusú új rész koporsóidomos födémében elhelyezték az egykori szentély festett kazettás mennyezetét. E munkálat során fedezték fel a hajó középkori freskóit, melyeket ekkor újra lemeszeltek. A jelenlegi helyreállítás során a Szent László-legenda jeleneteit, az utolsó ítélet töredékét, valamint a Péter és Pál apostolokat ábrázoló freskókat feltárták, helyreállították, szintén restaurálták a festett mennyezeteket és karzatokat. Leleményes megoldás a restaurált nyugati karzat és a takarásában levő Szent László-legenda együttes bemutatása,



■ ***7. ábra.*** *Okland, unitárius templom helyreállítás után. © FURU Árpád*
■ ***Fig. 7.*** *Ocland (Okland), the Unitarian church after restoration. © Árpád FURU*



■ ***8. ábra.*** *Okland, helyreállított templombelső. © FURU Árpád*
■ ***Fig. 8.*** *Ocland (Okland), restored church interior. © Árpád FURU*



■ ***9. ábra.*** *Okland, helyreállított falképek az északi falon. © FURU Árpád*
■ ***Fig. 9.*** *Ocland (Okland), restored wall paintings on the northern wall. © Árpád FURU*

de igényes a külső történeti falfelületek, az ezeken látható falképtöredékek és a torony 17. századi feliratainak restaurálása is. A beavatkozás legnagyobb érdeme, hogy jó érzékkel alkalmazott építészeti megoldásai által sikerült összehangolni különböző korokban keletkezett, részben nehezen összeillő megoldásokat, felületeket, színeket.

Városfalván teljes tervezési folyamatot és sikeres európai uniós pályázatot követően a 18–19. század fordulóján épült, látványos barokk boltozatokkal lefedett templom szerkezeti és építészeti javítása valósult meg.

Kiemelkedő erőfeszítést jelentett a román állami műemlékvédelmi alapból finanszírozott székelyderzsi és nyárádszentlászlói templomhelyreállítás.

Székelyderzs 14. századi eredetű vártemploma világörökségi státusnak örvend. Ennek hatására a nemzeti műemlékvédelmi alapból állami finanszírozáshoz jutott, a helyreállítást is az állami szervek menedzselték. Ezáltal sikerült helyreállítani a várfalakat, bástyákat, harangtornyot, ezek tetőszerkezetét és héjazatát, megvalósítani a templom tetőszerkezetének megerősítését, falának külső javítását, valamint ablakainak helyreállítását. A Norvég Alap finanszírozása tette lehetővé a festett falképek kiváló minőségű restaurálását. A Teleki László Alapítvány támogatásával a szentély padlójában keletkezett gombakárokat sikerült elhárítani. A hosszan elnyúló helyreállítás és a finanszírozás körüli adminisztratív bonyodalmak a gyülekezeti élet szempontjából is megpróbáltatásokkal jártak. A rendszeres egyházi élet újrakezdése érdekében a gyülekezet a belső felújításról egyelőre lemondott.

Nyárádszentlászló régészeti kutatása két korábbi templomépület emlékanyagát tárta fel. Megvalósult a teljes külső és belső homlokzat-helyreállítás, de a leglátványosabb eredmény a szentély középkori festett falképanyagának feltárása és méltó bemutatása.

A Teleki László Alapítvány által működtetett Rómer Flóris Terv részeként került sor Kökös középkori templomának teljes helyreállítására. A templombelső nyugati falfelületén feltárt Szent László-legenda képsorai itt is jelentős és látványos eredményt jelentenek. A Rómer Flóris Program indulásakor a feladat jól behatárolható mértéke miatt kiválasztott kökösi templom – mint teljes helyreállítás – a támogatási program egyik első megvalósítása volt. Szintén a Rómer Flóris Program tette lehetővé a sepsi-

of museums in Cluj-Napoca since the beginning of the 20th century, but the uncovered painted western gallery and the parapet of the pulpit's stairs are spectacular. Its full restoration represents a major improvement to the architectural appearance of the narrow and unusually long interior. The installation of a coffered wooden ceiling, which reminds of the original one; the removal of the carvings inspired by folk art which were like a dissonant burden on the former main nave; the restoration of the pews and the use of modern lighting technology, as well as the restoration of stone surfaces, plinths, memorial plaques and door frames are changes benefitting the building. The restoration of the church was complemented by the restoration of the community building attached to the inner side of the defensive wall and of the tombstones in the graveyard surrounding the church.

The fate of Ocland's church, with medieval origins, took an interesting turn in 1937–38, when its sanctuary was demolished for expansion purposes and replaced by a more spacious area and two porticoes designed by László DEBRECZENI. The painted coffered ceiling of the former sanctuary was inserted in the coffin ceiling of the new Art Nouveau-style part. As part of this intervention, the medieval frescoes of the nave were discovered and re-washed. During the current restoration, the scenes of the legend of King Saint Ladislaus I, a fragment of the mural depicting the Last Judgement and the frescoes of the Apostles Peter and Paul were uncovered and restored, as were the painted ceilings and galleries, too. The combined presentation of the restored western gallery and of King Saint Ladislaus I's legend – situated behind the former – is



■ ***10. ábra.*** *Székelyderzs, középkori mérműves ablak rekonstruált üvegszemének behelyezése. © FURU Árpád*
■ ***Fig. 10.*** *Dârjiu (Székelyderzs), insertion of a reconstructed glass eye into the medieval window. © Árpád FURU*

an ingenious solution. The restoration of the exterior historical wall surfaces, of the fragments of murals covering them and of the 17th century inscriptions on the tower are also of exquisite quality. The greatest merit of the intervention is that its sensitively applied architectural solutions succeeded in harmonising methods, surfaces and colours from different periods, some of which are difficult to match.

Following a complete design process and a successful application for EU funding, the structural and architectural repair of the church – built at the turn of the 18th and 19th centuries and covered with spectacular baroque vaultings – was completed in Orăşeni.

Outstanding efforts were the restoration of churches in Dârjiu and Sânvăsii, which were financed by the Romanian state fund for historic building protection.

The 14th century fortified church of Dârjiu is a UNESCO World Heritage Site. Consequently, the state fund for historic building protection subsidised its restoration, which was supervised by state institutions, too. This context facilitated the restoration of the church's defensive walls and bastions; the renovation of the bell-tower and of the roofs and roof coverings on the former, the consolidation of the roof structure, the external repair of the church walls and the restoration of the windows. Funding from the Norway Grants allowed the high-quality restoration of the murals. Financial support from the Teleki László Foundation helped to repel the fungal attack on the sanctuary floor. The lengthy restoration and the administrative complications regarding the funding represented challenges in the life of the congregation. Wishing to resume regular church life, the congregation gave up interior renovation for the time being.

Archaeological research in the church of Sânvăsii revealed the vestiges of two earlier church buildings. The exterior and interior façade were fully restored, but the most spectacular result was the uncovering and dignified presentation of the sanctuary's medieval murals.

The full restoration of the medieval church of Chichiş was carried out as part of the Rómer Flóris Programme, run by the Teleki László Foundation. The discovery of the images of King Saint Ladislaus I's legend on the interior of the western church wall is a significant and spectacular result. At the launch of the Rómer Flóris Programme, the church of Chichiş was chosen among the first ones to be fully restored, mainly because of the clearly defined scale of the task. The Rómer Flóris Programme allowed also to finish the restoration of the church in Sâncraiu, which started before 2009 and was initially subsidised by the Romanian state fund for restorations but was later interrupted.

Similarly, the Rómer Flóris Programme supported the restoration of the church in Gălăţeni. The step-by-step intervention to eliminate the initial frost damages at the plinth and physical damage to the building allowed for the complete restoration of the 17th century carpentry of the roof, the replacement of the tiles, the repair and research of

szentkirályi templom 2009 előtt román állami helyreállítási alapból megkezdett, majd megszakadt helyreállításának befejezését is.

A Rómer Flóris Program támogatta Szentgerice templomának helyreállítását. A kezdeti lábazati kifagyás és épületfizikai károsodások elhárítását szolgáló beavatkozás lépésről lépésre valósította meg a tető 17. századi ácsszerkezetének teljes helyreállítását és cserepezését, a templom falainak javítását, kutatását, vakolatainak helyreállítását, majd a torony külső-belső javítását is. Hátravan a kiemelten értékes kazettás mennyezet és a faberendezés restaurálása. Megjegyezzük, hogy a tatarozás, feljavítás céljára készült, minimális beavatkozásra készített tervdokumentáció határait feszegetve sikerült középkori elfalazott nyílásokat bemutatni, valamint az ereszpárkány frízmintázatát rekonstruálni.

Tarcsafalva 19. századi templomát repedései miatt a közösség bontásra ítélte, és erre a célra 2009 előtt a felsőbb egyházi hatóság jóváhagyását is megkapta. A cél új templom építése volt. A kérdésben megosztott gyülekezettel folytatott, hosszú, évekig húzódó párbeszédet követően sikerült – elsősorban anyagi megfontolásokra hivatkozva – a templom lebontását elkerülni és helyreállítását kieszközölni. 2018-ban a régészeti kutatást, aláfalazást, falszövéseket, majd a vakolást követően sikerült átadni a kívül-belül felújított templomot. Időközben megvalósult a templom mellett álló harangláb zsindelyezése és lábazatának helyreállítása is.

Firtosváralján az 1801–1804 között épült templom padlásán linóleumszőnyeggel történő „szigetelés" következtében keletkezett biológiai károsodás, ami miatt a templom piaca fölött a mennyezetfödém omlásveszélyessé vált. A mennyezet alátámasztását követően elkészült a tervezési dokumentáció, majd a tetőszerkezet és a födém teljes helyreállítása. Ezt követte a templom aláfalazása, drénrendszerrel való ellátása, végül a falak külső és belső javítása. Legvégül a padok és a karzatok helyreállítása valósult meg. További tennivalót jelent a szószékkorona és a födém központi medalionjának a helyreállítása.

Kálnok 1781-ben épült haranglába sajátos ácskötéseivel, kör alakú, szempárokra emlékeztető kitekintőnyílásaival vonja magára figyelmét. Szerkezeti helyreállítását egy harangtúlhúzásból adódó látványos kilen-



■ ***11. ábra.*** *Szentgerice, unitárius templom helyreállítás után. © FURU Árpád*
■ ***Fig. 11.*** *Gălăţeni (Szentgerice), the Unitarian church after restoration. © Árpád FURU*



■ **12. ábra.** *Szentgerice, helyreállított templombelső. © FURU Árpád*
■ **Fig. 12.** *Gălăţeni (Szentgerice), restored church interior. © Árpád FURU*



■ **13. ábra.** *Kálnok, harangláb zsindelyezése. © SZABÓ Adél*
■ **Fig. 13.** *Calnic (Kálnok), shingling the bell tower. © Adél SZABÓ*

gés előzte meg, mely a harangfelfüggesztő keret nem megfelelő szerkezeti lefogásából adódott. Szerkezeti csomópontjainak megerősítésén, a faszegek pótlásán és néhány korhadt csomópont javításán túl megvalósult a harangláb teljes újrazsindelyezése is.

Kőrispatak 1805–1825 között épült templomát a közeli patak elárasztotta, aminek következtében könnyező házigombatelepek kezdték a faberendezést károsítani. Az egyházközség helyi vállalkozókkal a templom teljes tetőszerkezetét lebontatta, és helyette tervezés és engedélyezés nélkül nem megfelelő formájú és kialakítású tetőt építtetett. Az elkezdett munkálat során bekapcsolódó egyházi tanácsadó közvetítésével szakszerűen valósult meg a teljes biológiai kárelhárítás, majd a tetőszerkezet részleges átalakítása, vízvetőjének kialakítása és a történeti előzményeknek vizuálisan megfelelő eresz–tetősík kapcsolat rekonstrukciója. Ezt követően a falak szerkezeti javítása, a repedések összeszövése, majd a külső és belső vakolás is megvalósult. A munkálatok utolsó szakaszaként folyamatban van a 19. század elejéről származó festett karzat és egyéb bútorok igényes restaurálása.

Fiatfalva 17. században már álló templomát az unitárius és református hívek a 18. század elejétől közösen használják. Teljes – a külső és belső falfelületeket, a tető cseréptetejét, a bútorzatot érintő – felújítása az Erdélyi Református Egyházkerület megbízásából valósult meg. Látványos a két karzat és mennyezet néhány festett kazettájának szakszerű feltárása és restaurálása.

Kede 1723-ban már biztosan álló fatemplomát 1804-ben szintén fából újjáépítették. A Kiskede és Nagykede közötti dombon álló templom mindkét falu közösségét szolgálja. Déli oldalára 1828-ban felépítették az 1773-ban Firtosmartonoson készült és onnan megvásárolt fa haranglábat. A templom faszerkezetét az ennek megerősítését szolgáló betonlábazat mögött súlyos gombatámadás érte. A sürgősségi rendszerben végzett látványos munkálat a templom elkorhadt gerendáinak részleges cseréjét és gondos vegyszeres kezelését jelentette. A templom fapadlóját téglára cserélték. A külső tapasztást a 2012–13-ban végzett munkálat óta másodszor is simították, meszelték. 2023–24-ben a harangláb zsindelyezése valósult meg.

the church walls, the restoration of the plasterwork and the external and internal repairs to the tower. The conservation of the highly valuable coffered ceiling and woodwork needs to be completed. It is worth noting that, by pushing the limits of the design documentation elaborated for minimal interventions of renovation and repair, it became possible to uncover walled-up medieval openings and to reconstruct the frieze pattern of the eaves.

Because of the cracks in the walls, the community decided to demolish the 19th century church of Tărceşti and received the approval of the Bishopric before 2009. The goal was to build a new church. After a lengthy dialogue lasting several years with the divided congregation, we managed to avoid the demolition of the church and to obtain consent for its restoration. We invoked mainly financial reasons. In 2018, after archaeological research, underpinning, wall weaving and plastering, both the exterior and the interior of the church were restored and the building 'delivered' to its owners. In the meantime, the shingling and restoration of the plinth of the belfry next to the church has been completed, too.

The "insulation" with a linoleum carpet of the attic in the church of Firtuşu – built between 1801 and 1804 – caused biological damage; and consequently, the slab above the church's nave could have collapsed. After consolidating the slab with stanchions, the design documentation was elaborated, followed by the full restoration of the roof structure and slab. The next step was to underpin the church, install a drainage system and finally repair the exterior and interior walls. As a last step, the team renovated the pews and the galleries. The restoration of the sounding board and the central medallion of the slab are now in progress.

Calnic`s belfry, built in 1781, attracts attention with its unique carpentry and circular openings that resemble pairs of eyes. Its structural restoration was preceded by a spectacular swing caused by an excessive ringing of the bell, which resulted from an inadequate structural fastening of the bell suspension. In addition to reinforcing structural joints, replacing wooden pegs and repairing some rotten joints, the belfry was completely re-shingled.

The church of Crişeni, built between 1805 and 1825, was flooded by a nearby stream. After this unfortunate event, colonies of the species of fungus called *Serpula lacrimans* began to damage the wooden structure. The parish commissioned local contractors to demolish the entire roof structure and replace it with a roof of inappropriate shape and design – without planning or permission. After the work started, the architectural adviser of the church became involved and mediated between the parties. In this manner, a complete biological damage control was professionally carried out, the roof structure partially remodelled, a water drainage system built, and the eaves-roof connection remade in a visually consistent manner with the historical context. This was followed by structural repairs to the walls, crack repair and external and internal plastering. The final phase involves the high-quality

renovation of the painted gallery stemming from the beginning of the 19th century and of other pieces of furniture.

Filiaş's church dating back to the 17th century has been used jointly by Unitarian and Calvinist congregations since the early 18th century. The complete restoration of the church – including the exterior and the interior walls, the roof tiling and the furniture – was commissioned by the Reformed Diocese of Transylvania. The professional uncovering and restoration of some painted coffers in the ceiling and of the two galleries is spectacular.

The wooden church of Chedia, which was securely standing in 1723 already, was rebuilt using wood again in 1804. Located on the hill between Chedia Mică (Kiskede) and Chedia Mare (Nagykede), the church is used by the communities of both villages. A wooden belfry, built in 1773 in Firtănuş (Firtosmartonos) and purchased from there, was erected on the south side in 1828. The wooden structure of the church was ferociously attacked by fungi behind the concrete plinth that reinforced it. A spectacular emergency intervention meant the partial replacement and careful chemical treatment of the church's decayed beams. The wooden floor of the church was replaced with a brick floor. The exterior wall patching has been whitewashed for the second time since the 2012–13 intervention. In 2023–24, the shingling of the belfry was completed.

Earlier unprofessional structural interventions to Corund's church – carried out without preparation, research and planning – failed to produce the results expected by the community. The southwest corner of the church continued to crack and move away along the slope of the hill. This time a plan was made. Although the agreement with the first contractor had to be terminated due to non-compliance with the design, the second contractor was able to complete the structural restoration of the church and the associated panelling works.

The tower of the church in Avrămeşti gradually tilted towards the west. The ever-widening cracks required urgent intervention. A brilliant structural engineering plan was executed with Szekler ingenuity: the holes for the tall piles, which would support the tower, were dug using a well-digging technique; thus, saving the community large amounts of money. In addition, the external and the internal cladding were renovated.

The church in Turda was restored for the 2018 anniversary year after a long preparatory dialogue and professional planning, despite strong opposition from the congregation. The cracks in the church have been repaired by underpinning the walls. However, during the renovation of the interior and exterior cladding, the team did not manage to remove the lacquered woodwork embellished with carvings inspired by folk art, which destroyed the homogeneous appearance of the interior decoration designed by Lajos PÁKEY.[19]

19 The wooden tiles, reminiscent of the fashions of the seventies and eighties, are the work of József PATAKI, a folk artist from Turda, and were commissioned by the members of the congregation to be kept as family mementos.

Korond templomának korábbi szakszerűtlen, előkészítés, kutatás és tervezés nélkül végrehajtott szerkezeti beavatkozásai nem hozták meg a közösség részéről várt eredményt, a templom délnyugati sarka tovább repedt és távolodott a domb lejtője mentén. Az újabb javítási folyamat előkészítéseként terv készült. Bár a kivitelezés során a terv be nem tartása miatt az első kivitelezőcsapattal szerződést kellett bontani, az új kivitelezővel sikerült befejezni a templom szerkezeti helyreállítását és az ezzel kapcsolatos burkolati munkákat.

Szentábrahám templomának tornya fokozatosan dőlt nyugati irányba. Az egyre csak nyíló repedések szükségessé tették a mielőbbi beavatkozást. A bravúros statikai terv „székely találékonysággal" került kivitelezésre – a torony megtámasztását szolgáló mély cölöpöket kútásó technikával ásták, jelentős költségmegtakarítást biztosítva a közösségnek. Ezenkívül külső-belső burkolatfelújítást is végeztek.

A tordai templom helyreállítása a 2018-as jubileumi év apropóján, hosszú előkészítő párbeszéd és a gyülekezet nagy fokú ellenállása dacára szakszerű tervezést követően valósult meg. A templom repedéseit alápalazással sikerült orvosolni. A külső és belső burkolatfelújítás során azonban nem sikerült elérni a PÁKEY Lajos-féle belső díszítés egységességét terhelő, népies faragásokkal díszített, lakkozott fafelületek elmozdítását.[18]

Mészkő templomának mai formáját a DEBRECZENI László által tervezett helyreállítás, az új torony és templomtető, valamint a templom hangsúlyos belső szecessziós berendezése és festett födémszerkezete határozza meg. A közeli kőbányában történő felszíni fejtési munkálatok miatt mozgó domboldal által gerjesztett falrepedéseknek támfal és alápalazás próbál gátat szabni. A burkolatok felújítása itt is megvalósult.

Ádámos középkori előzményekkel rendelkező, 16. századi templomának belső és külső helyreállítása valósult meg. A templomba téglapadlót raktak le. Restaurálták a kő és fa berendezési tárgyakat és tetőszerkezetet is. Sajnos a külső helyreállítás időtállósága nem megfelelő, tíz év elteltével újra figyelmet igényel.

Különleges figyelmet kapott a dévai Dávid Ferenc Zarándok- és Szórványközpont épülete. Műemléki védettségű utcában, a 20. század elején épült lakóházat az Unitárius Egyház 2003-ban vásárolta meg, azzal a céllal, hogy a dévai unitáriusoknak temploma, az évenkénti egyházi zarándoklatoknak fogadóépülete legyen. A felújítás során a házban lelkészi lakást, imatermet, a tetőtérben a zarándokok részére vendégszobákat alakítottak ki.

Folyamatban levő teljes helyreállítások

■ Nyolc teljes helyreállítás van folyamatban a következő településeken: Alsóboldogfalva, Bethlenszentmiklós, Kolozs (iskola), Kökös (Serester-ház), Magyarszovát, Nagymedesér, Nyárádszentmárton, Szind.

Alsóboldogfalván a templomtorony dőlése miatt volt szükséges a felújítást kezdeményezni. Bethlenszentmiklóson a templom toronysisakja égett le, majd ezt követően indult a teljes helyreállítás, amely kiterjedt kutatást és a torony dőlésének megállítása céljából hosszadalmas szakmai párbeszédet eredményezett. Súlyos szerkezeti károsodások tették szükségessé a kolozsi iskola és a kökösi Serester-ház helyreállítását is. Nagymedeséren és Szinden szintén az aktív szerkezeti repedések miatt kezdődött el a helyreállítás. Mindkét helyen támfalazás és alápalazás, falszövés, tetőjavítás és a burkolatok javítása lesz szükségszerű. A szindi

18 A hetvenes–nyolcvanas évek divatját idéző fa burkolólapok PATAKI József tordai népművész alkotásai, melyeket a gyülekezet tagjai családi emlékezetápolás céljára rendeltek meg.

templom esetében értékes kutatási eredmény a római kváderkövek és téglaanyag azonosítása, valamint a szószékkorona szakszerű helyreállítása.

Magyarszovát és Nyárádszentmárton templomain kiemelt építészeti és műemléki értékük miatt a Rómer Flóris-terv keretében több éve folyamatosan támogatott helyreállítások folynak. Mindkét esetben engedélyezési terv készült, majd megindult a kivitelezés. Nyárádszentmártonban eddig a tetőszerkezet, a torony és a szentély külső helyreállítása, valamint a 17. századi cinteremkerítés helyreállítása és zsindelyezése valósult meg. Magyarszováton, ahol aktív statikai repedések, valamint a szakszerű tervezés nélkül elvégzett, többszörös, helytelen beavatkozás következményei is súlyosbították a helyzetet, a templom külső aláfalazása, a vasbeton köpenyezés eltávolítása, a falak külső összeszövése, injektálása és kanálhátas vakolattal történő vakolása valósult meg. Tudományos szempontból kiemelkedő eredmény a középkori boltozat faragott köveinek a portikusz falaiban és alapjaiban történő azonosítása és részben kiemelése, majd a templom faragottkő pilléreinek és egyéb kőelemeinek szakszerű helyreállítása.



■ ***14. ábra.*** *Magyarszovát, unitárius templom helyreállítás közben. © FURU Árpád*
■ ***Fig. 14.*** *Suatu (Magyarszovát), the Unitarian church during the restoration. © Árpád FURU*



■ ***15. ábra.*** *Magyarszovát, a középkori boltozat feliratos zárókövének feltárása a portikusz alapjában. © FURU Árpád*
■ ***Fig. 15.*** *Suatu (Magyarszovát), discovery of the inscribed keystone of the medieval vault in the portico's foundation. © Árpád FURU*



■ ***16. ábra.*** *Magyarszovát, támpillér kváderköveinek restaurálása. © FURU Árpád*
■ ***Fig. 16.*** *Suatu (Magyarszovát), restoration of the buttress's ashlar stones. © Árpád FURU*

The church in Cheia obtained its present form after the restoration designed by László DEBRECZENI; that is, its main defining features are: the new tower and the roof, the dominant Art Nouveau style of the interior furnishings and the painted slab. Mining activities are performed in the village, and these make the hillside move, causing the walls to crack. The retaining walls and the underpinning try to prevent further cracks. The cladding has also been renovated.

The interior and exterior of the church in Adămuş – built in the 16th century and having medieval origins – were restored. A brick floor was laid in the church. The stone and wooden furnishings and the roof structure have also been renovated. Unfortunately, the exterior restoration is not long-lasting and needs to be checked after 10 years.

Special attention was paid to the building of the internal diaspora – or ethnospora – centre in Deva. In 2003, the Unitarian Bishopric purchased the residential building erected at the beginning of the 20th century in a protected historical area/street. It was meant to serve as church for the Unitarians of Deva and to host people during the annual pilgrimages of the church. The renovation included the creation of a pastor's apartment, a prayer room and guest rooms for pilgrims in the attic.

Full restorations in progress

■ Eight complete site restorations are still in progress: Bodogaia (Alsóboldogfalva) (Harghita County), Sânmiclăuş (Bethlenszentmiklós) (Alba/Fehér County), Cojocna (Cluj County – the school), Chichiş (Covasna County – the Serester house), Suatu (Magyarszovát) (Cluj County), Medişoru Mare (Nagymedesér) (Harghita County), Mitreşti (Nyárádszentmárton) (Mureş County) and Sănduleşti (Szind) (Cluj County).

The tilting of the church tower made the restoration necessary in Bodogaia, too. In Sânmiclăuş, the church steeple burnt down, and a full restoration was initiated, which resulted in extensive research and a lengthy professional dialogue to stop the tower from leaning. Severe structural damage also necessitated the restoration of the school in Cojocna and the Serester House in Chichiş. Renovations in Medişoru Mare and Sănduleşti had to be undertaken also because of active structural cracks. Both sites will require retaining and underpinning walls, wall weaving, roof and cladding repairs. In Sănduleşti, the identification of Roman ashlars and brick material and the professional restoration of the sounding board are valuable research results.

The restoration of the churches in Suatu and Mitreşti has been continuously supported for several years as part of the Rómer Flóris Programme, because they present exceptional architectural and historical value. In both cases, a permit plan was prepared and the works started afterwards. In Mitreşti, the external restoration of the roof structure, the tower and the sanctuary, as well as the renovation and shingling of the

17th century wall of the graveyard surrounding the church have been completed thus far. In Suatu, where active static cracks and the consequences of multiple inappropriate interventions carried out without professional planning aggravated the situation, the external underpinning of the church, the removal of the reinforced concrete sheathing, the external weaving of the walls, grouting and plastering with trowels were carried out. The identification and partial excavation of the carved stones of the medieval vault inserted in the walls and foundations of the portico and the professional restoration of the carved stone pillars and other stone elements of the church are outstanding scientific results.

Finished partial restorations

■ 31 partial restorations were finished: Vălenii de Arieş (Aranyosrákos) (Cluj County), Bezid (Bözöd) (Mureş County), Ceheţel (Harghita County), Ceţcheşti (Csekefalva) (Harghita County), Pietroasa (Csegez) (Cluj County), Dâmbău (Kököllődombó) (Mureş County), Inlăceni (Énlaka) (Harghita County), Hărănglab (Harangláb) (Mureş County), Sânpaul (Homoródszentpál) (Harghita County), Cobăteşti (Kobátfalva) (Harghita County), Cojocna (Cluj County), Locodeni (Lókod) (Harghita County), Deleni (Magyarsáros) (Cluj County – the belfry), Târgu Mureş (Mureş County – the church the Bolyai Square), Căduciu Mare (Nagykadács) (Harghita County), Găleşti (Nyárádgálfalva) (Mureş County), Maiad (Nyomát) (Mureş County – the belfry), Rareş (Recsenyéd) (Harghita County), Simionești (Siménfalva) (Harghita County), Corneşti (Sinfalva) (Cluj County), Săbed (Szabéd) (Mureş County), Sântionlunca (Szentivánlaborfalva) (Covasna County), Cristuru Secuiesc (Harghita County), Mujna (Székelymuzsna) (Harghita County), Nicoleni (Székelyszentmiklós) (Harghita County), Odorheiu Secuiesc (Harghita County – the downtown church), Turdeni (Tordátfalva) (Harghita County), Rimetea (Torockó) (Alba County), Secuieni (Újszékely) (Harghita County), Vârghiş (Vargyas) (Covasna County) and Roşia Montană (Verespatak) (Alba County).

Almost all these works consisted of external and/or internal whitewashing, plaster repairs, tile repointing, possibly with the application of new tile roof covering. In addition, structural cracks in the vaulting were repaired in Rimetea, a major operation of eliminating the damage caused by the *Serpula lacrimans* fungus was carried out in Căduciu Mare, while in Sânpaul and Hărănglab some structural elements of the roof were repaired. In Cobăteşti, the defective internal insulation was removed, thus greatly reducing the dampness in the walls. In Inlăceni, the professional and complete restoration of the coffered ceiling and the partial reconstruction and restoration of the external and internal frieze of the church's wall coping were major achievements. The belfries of Maiad and Deleni have been re-shingled, while the latter has been equipped with a lightning rod.

Befejezett részleges helyreállítások

■ 31 befejezett részleges helyreállításról adhatunk számot az alábbi településeken: Aranyosrákos, Bözöd, Csehétfalva, Csekefalva, Csegez, Küküllődombó, Énlaka, Harangláb, Homoródszentpál, Kobátfalva, Kolozs, Lókod, Magyarsáros (harangláb), Marosvásárhely (Bolyai téri templom), Nagykadács, Nyárádgálfalva, Nyomát (harangláb), Recsenyéd, Siménfalva, Sinfalva, Szabéd, Szentivánlaborfalva, Székelykeresztúr, Székelymuzsna, Székelyszentmiklós, Székelyudvarhely belvárosi templom, Tordátfalva, Torockó, Újszékely, Vargyas és Verespatak. Ezek a munkálatok szinte mindenhol külső és/vagy belső meszelést, vakolatjavítást, illetve cserépátrakást, esetleg új cseréphéjazat felvitelét jelentették. Ezeken kívül Torockón a boltozat szerkezeti repedéseit is lehetett orvosolni, Nagykadácson pedig egy jelentős könnyezőházigomba-kárelhárítás is megtörtént, Homoródszentpálon és Haranglábon javították a tetőszerkezeti elemek egyes csomópontjait. Kobátfalván eltávolították a hibás belső szigetelőburkolatot, ezzel a falak vizesedése is nagymértékben csökkent. Énlakán kiemelt eredmény a kazettás mennyezet szakszerű és teljes felújítása, valamint a templom falkoronáján a külső és belső fríz részleges rekonstrukciója és helyreállítása. Nyomát és Magyarsáros haranglábát újrazsindelyezték, ez utóbbit villámhárítóval is felszerelték.

Folyamatban levő részleges helyreállítások

■ 27 részleges helyreállítás van folyamatban vagy megszakítva (nagyobb részük hosszabb távú célkitűzések része), a fentiekhez hasonlóan ezek esetében is leginkább héjazatjavítás és meszelési munkálatok készülnek a felsorolt települések templomaiban: Abásfalva, Árkos, Bölön, Brassó, Csókfalva, Datk, Désfalva, Felsőrákos, Firtosmartonos, Fogaras, Gagy, Gyepes, Gyergyószentmiklós, Homoródkarácsonyfalva, Homoródalmás, Homoródkeményfalva, Homoródszentmárton, Homoródszentpéter, Homoródújfalu, Kálnok, Kénos, Kőhalom, Kövend, Medgyes, Rava, Székelyszentmihály, Torockószentgyörgy. Brassó modernista templomának belső kimeszelése és villanyhálózatának felújítása, valamint téglapadlójának cseréje valósult meg. Homoródújfaluban könnyezőházigomba-kárelhárítás előzte meg a belső meszelést. Árkoson elsősorban a várfal koronázópárkányának és szuroköntőinek restaurálása a jelentős eredmény.

Javítások, nagy javítások

■ 14 nagy javítást, illetve javítást sikerült befejezni: Alsófelsőszentmihály, Bencéd, Erdőszentgyörgy, Ikland, Kissolymos, Magyarzsákod, Magyarsáros, Nagyvárad, Nyárádszereda, Sepsikilyén, Szováta, Vadad. Négy nagyjavítás, javítás nem fejeződött be: Kide, Magyarszentbenedek, Marosvásárhely (Kövesdomb) és Pipe.

Alsófelsőszentmihály temploma teljes tatarozáson esett át: héjazat, toronybádogozás, külső-belső vakolatjavítás. A munkálat lehetővé tette, legalábbis lábazati szinten, a római kőanyag azonosítását, részleges bemutatását és egy szellőztetőlábazat készíttetését. A kissolymosi templom külső és belső tatarozását a héjazat cseréje is követte. Padlófűtés készült, mely – sajnálatos módon – elősegítette a könnyező házigomba újbóli felbukkanását. Sepsikilyénben a korábbi teljes helyreállítás utóélete zajlik, azaz időről időre a megfelelő karbantartási műveletek valósulnak meg. Ezekre a jövőben is szükség lesz. Nyárádszereda új templomának ablakait kellett jobb minőségűre cserélni, Erdőszentgyörgyön szintén az új



■ ***17. ábra.*** *Sepsikilyén, középkori falfestmény retusálása. © KISS Lóránt*
■ ***Fig. 17.*** *Chilieni (Sepsikilyén), retouching medieval wall paintings. © Lóránt KISS*

templom tervezési és kivitelezési hibáiból fakadó károkat volt szükséges elhárítani, Szováta új templomának rövid szavatossági idejű, palazsindely héjazatát kellett cserélni. Ugyanez a feladat a marosvásárhelyi kövesdombi templomnál is, ahol a tűzvédelmi engedélyeztetés is további építési és engedélyeztetési kötelezettséget ró a hívekre. Magyarsáros PÁKEY Lajos által tervezett temploma szerkezeti repedéseinek orvoslására engedélyezett tervdokumentáció készült. Sajnálatosan, az előírt támfalépítést és aláalapozást a gyülekezet ellenállása nem tette lehetővé, csak a burkolatok felújítása és a tervben előírtakkal szemben az eredeti (felújítható) ablakok teljes cseréje valósult meg. Magyarzsákod középkori elemeket tartalmazó templomának javítása a lelkész nyugdíjba vonulása miatti sietség következtében szintén nem a szakszerűség jegyében valósult meg. Terv itt sem készült, csupán egy utólagos művészettörténeti kutatást tett lehetővé a helyzet. A templom belső padlóját vastagon lebetonozták, a jó minőségű, különleges formájú, hódfarkúcserép-héjazatot lecserélték, a falakat újravakolták. A harangláb még mindig jó minőségű bádogtetejére zsindelyhéjazatot is felvertek, és a harangláb oldalaira kívülről, leveles technikával vízszintes, új, a történeti megoldásoktól teljességgel idegen deszkázatot szegeztek. Magyarszentbenedeken a 2000-es években elvégzett toronyjavítást a festett kazettás mennyezet helyreállítása követte. 2009–10-ben a hajó déli oldala és a torony vakolatának javítása készült el. A torony újrazsindelyezése a toronysisak szerkezetének indokolatlan szétszedését és nagymértékű elemcseréjét hozta. A munkálat forráshiány miatt megszakadt, tegyük hozzá, talán túl későn. A hívek nélküli templom karbantartásának feladata számos erőfeszítés ellenére továbbra sincs megoldva.

Megállapítható, hogy 2009–2024 között 111 helyreállítási, javítási munkálatból 70 befejezett, 28 megszakított állapotban van, 13 esetben tovább folynak a munkálatok. 60 munkálat esetében volt megfelelő kutatás, tervezés, engedélyeztetés, a többi beavatkozás esetében csupán az építészeti tanácsadó biztosított műszaki felügyeletet, vagy a tulajdonos erre sem nyújtott lehetőséget. Az is látható, hogy nem mindenhol lehetett elkerülni a beavatkozások következtében kialakuló értékvesztést, ilyen helyszín egyértelműen Magyarzsákod és Rava, ahol értelmetlen módon, esetleg szakszerűtlenül vagy nem megfelelő sorrendben végezték az egyes műveleteket. Ilyenkor az értékvesztés mellett az anyagi források nem megfelelő felhasználása szintén terhelő körülmény. Ez utóbbi

Partial restorations in progress

■ 27 partial restoration works are in progress or interrupted, and as above, most of these are also roof covering repairs and whitewashing: Aldea (Abásfalva) (Harghita County), Arcuş (Árkos) (Covasna County), Belin (Bölön) (Covasna County), Braşov (Brassó) (Braşov/ Brassó County), Cioc (Csókfalva) (Mureş County), Dopca (Datk) (Braşov County), Deaj (Désfalva) (Mureş County), Racoşul de Sus (Felsőrákos) (Covasna County), Firtănuş (Harghita County), Făgăraş (Fogaras) (Braşov County), Goagiu (Gagy) (Harghita County), Ghipeş (Gyepes) (Harghita County), Gheorgheni (Gyergyószentmiklós) (Harghita County), Crăciunel (Harghita County), Mereşti (Homoródalmás) (Harghita County), Comăneşti (Homoródkeményfalva) (Harghita County), Mărtiniş (Homoródszentmárton) (Harghita County), Petreni (Harghita county), Satu Nou (Homoródújfalu) (Harghita county), Calnic (Covasna county), Chinuşu (Kénos) (Harghita County), Rupea (Kőhalom) (Braşov County), Plăieşti (Kövend) (Cluj County), Mediaş (Medgyes) (Sibiu/ Szeben County), Roua (Rava) (Mureş County), Mihăileni (Székelyszentmihály) (Harghita County) and Colţeşti (Torockószentgyörgy) (Alba County). The modernist church of Braşov has undergone interior whitewashing, while its electrical network was renovated and its brick floors replaced. In Satu Nou, the team controlled the damage caused by the *Serpula lacrimans* fungus before internal whitewashing. In Arcuş, the main achievement was the restoration of the parapet and of the murder holes in the defensive wall.

Repairs and major repairs

■ 14 major repairs and repairs have been completed: Mihai Viteazu (Alsófelsőszentmihály) (Cluj County), Bencid (Benczéd) (Harghita County), Sângeorgiu de Pădure (Mureş County), Icland (Ikland) (Mureş County), Şoimuşu Mic (Kissolymos) (Harghita county), Jacodu (Magyarzsákod) (Mureş County), Deleni (Mureş County), Oradea (Nagyvárad) (Bihor/ Bihar County), Miercurea Nirajului (Mureş County), Chilieni (Covasna County), Sovata (Mureş County) and Vadu (Vadad) (Mureş County). Four major repairs or repairs were not completed in: Chidea (Kide) (Cluj County), Sânbenedic (Alba County), Târgu Mureş (Mureş County – Dâmbul Pietros/ Kövesdomb) and Pipea (Pipe) (Mureş County).

The church in Mihai Viteazu was fully renovated, including: the roof covering, the tin roof covering of the tower and the external and internal rendering. The work allowed, at least at the plinth level, the identification and partial presentation of the Roman stone masonry and the construction of a ventilated plinth. The replacement of the roof covering followed the external and internal repairs in Şoimuşu Mic. Underfloor heating was installed, but this choice facilitated, unfortunately, the reappearance of the *Serpula lacrimans* fungus. The church in Chilieni is in the follow-up stage of the previous

full restoration; that is, appropriate maintenance operations are carried out periodically. These will be necessary in the future as well. In Miercurea Nirajului, windows of superior quality replaced the previous ones, while in Sângeorgiu de Pădure the damage resulting from the design and construction deficiencies of the new church had to be repaired. In Sovata the shingle covering with a short expiry time on the new church was replaced. The same task had to be carried out on the church in the Dâmbul Pietros neighbourhood of Târgu Mureş, where fire safety licensing imposed further construction and licensing obligations on parishioners. An approved design documentation was elaborated for the repair of the structural cracks of the church in Deleni, which was designed by Lajos PÁKEY. Unfortunately, the congregation's opposition prevented the construction of the required retaining wall and of the underpinning. Thus, the team renovated only the cladding and – notwithstanding the prescriptions of the design – replaced the original windows, which could have been restored. The repair of the church in Jacodu, which includes medieval elements, was carried out in an unprofessional manner, because of the hurry caused by the pastor's retirement. No plans were elaborated. However, art-history research was still possible afterwards. The interior floor of the church was covered with a thick layer of concrete; the high-quality, unusually shaped beaver-tail tile roof covering has been replaced and the walls were replastered. A shingle covering was applied on the tin roof of the belfry, which was still in a very good condition; and a historically totally inappropriate, new horizontal planking was nailed to the outer sides of the belfry using plywood technique. In Sânbenedic the restoration of the painted coffered ceiling followed the repair of the tower, which was carried out in the first decade of the century. In 2009–2010, the rendering of the southern wall and of the tower was remade. The re-shingling of the tower caused the unwarranted dismantling and extensive replacement of the elements of the steeple. The work was abandoned because of lack of funds, but perhaps it was already too late. Despite many efforts, the task of maintaining this church having no parishioners remains unresolved.

One can state that between 2009 and 2024, out of 111 restoration and repair works, 70 were completed, 28 interrupted, while 13 are still in progress. For 60 works, adequate research was carried out, designs were elaborated and permits obtained; for the remaining interventions, either only the architectural advisor provided technical supervision, or the owner failed to grant this opportunity. It can also be seen that avoiding the loss of value due to interventions was not always possible. Such clear cases are Jacodu and Roua, where operations were carried out in an irrational – possibly unprofessional – manner or in an inappropriate order. In such cases, in addition to the loss of value, the inappropriate and wasteful use of material resources is also an aggravating circumstance. These last few cases illustrate that lo-



■ ***18. ábra.*** *Bethlenszentmiklós, a szentségtartó művészettörténeti kutatása. © FURU Árpád*
■ ***Fig. 18.*** *Sânmiclăuş (Bethlenszentmiklós), art history research of the sacrament box. © Árpád FURU*

néhány eset jól mutatja, hogy egy lelkész lendülete vagy a gyülekezet egyes tagjai által diktált közösségépítés szükségessége az a helyiek által látott pozitív erő, ami mellett a műemlékvédő szakszerűségre, folyamatok kivárására buzdító érvelése minősül időhúzásnak és fölösleges pénzkidobásnak.

Iskolákon, polgári épületeken elvégzett munkálatok

■ Az egyházközségi templomokon és kiemelt beruházásokon kívül Kolozsváron, Székelykeresztúron és Székelyudvarhelyen az egyház tulajdonában oktatási épületek és lakóházak is állnak.

Kolozsváron kiemelt, állandó szakmai figyelmet igénylő épület a PÁKEY Lajos által tervezett unitárius kollégium. Folyamatosan szükség van a karbantartási és felújítási munkálatok végzésére. Helyreállítottuk az épület utcai és udvari homlokzatait. A négy külső és négy belső udvari homlokzatot különböző időben, különböző munkacsoportokkal végezték. A Magyar utcai fő homlokzat és a nyugati, templom felőli homlokzat helyreállítása a helyi polgármesteri hivatallal partnerségben, ennek résztámogatásával és az általuk kiválasztott kivitelezővel történtek. A munka minőségét szolgáló technológiai előkészítésre kevés mód volt. Egyházi szervezéssel, ám kis költségvetéssel készült ugyancsak a déli és nyugati udvari homlokzat. Az alpinista technológia nem biztosította a megfelelő műszaki paramétereket. Jobb volt a helyzet a keleti és északi udvari homlokzat helyreállításánál, ahol a mészből és homokból, hagyományos módszertan szerint kavart vakolat kiváló minőséget adott. Szintén nagyon jó minőséget sikerült elérni a külső keleti és északi homlokzaton, ahol a minőségi anyaghasználat mellett sor került az eklektikus gipszkonzolok és vakolatornamentika igényes restaurálására is.

Állandó javítást igényel a tető. Szakaszosan újítható fel a villamos hálózat, a fűtés-, víz- és kanalizálási rendszer. Az épületben való akadálymentes közlekedés biztosítása érdekében felvonó készült. Folyamatosan



■ ***19. ábra.*** *A kolozsvári Unitárius Kollégium stukkódíszei restaurálás közben. © FURU Árpád*
■ ***Fig. 19.*** *The stucco decorations of the Unitarian College in Cluj-Napoca (Kolozsvár) during restoration. © Árpád FURU*

szükség van az egyes tantermek kifestésére, néhány fontosabb terem esetén sikerült visszaállítani az eredeti díszítőfestés elemeit is.

Nagy kihívás az ablakok, ajtók szakszerű felújítása, ezekből évente az anyagiak függvényében lehet valamennyit[19] elvégezni. Jelentős eredmény, hogy az imaterem nagy méretű főhomlokzati nyílászárói, valamint a főkapu helyreállítására is sor került. A keretek szakszerű javítása mellett javítják a zárszerkezeteket, és az osztálytermek, irodák esetén a belső ablakszembe hőszigetelő üveglapokat szerelnek.

Fontos lépés volt a reprezentatív nagyterem, a Dávid Ferenc Imaterem díszítőfestéssel ellátott, kazettás kialakítású, vakolt mennyezetének megtisztítása és részleges restaurálása.

Megújult két kiemelt fontosságú gyűjteménynek helyet adó terem is, a biológia- és fizikaszertár is.[20]

A kolozsvári régi kollégium épületén sajnos eddig még nem végeztek átfogó javítást. Csupán a főhomlokzat felújítása van folyamatban, az osztálytermek belső javítására természetesen itt is rendszeresen sor kerül.

Kolozsváron kiemelt beruházásnak minősült az egykori püspöki rezidencia felújítása, mely épület Kolozsvár egyik legjelentősebb, gótikus részleteket őrző polgárháza. Az évszázadok során többször bővítették, átalakították. Kora, egyes építészeti elemei és megoldásai, a kapualj ívei, az utcai portál az óvári Mátyás-szülőházhoz sokban hasonlító épületről tanúskodnak. 2009-ben, tekintettel az épület állapotára, döntés született a felújításáról. A helyreállítás egy évtizedes hossza utal a folyamat összetettségére, a kihívások bonyolultságára. A munka eredményeként 2018-ban Vallásszabadság Háza névvel nyílt meg Kolozsvár új közintézménye, melynek emeletén előadótermek, kiállítások és a Valláskutató Intézet irodái kaptak helyet. A ház működését az emeleten és a tetőtérben kialakított vendégszobák és a földszinten működő étterem és könyvesbolt biztosítja. A ház önmaga történeti értékeinek bemutatása mellett teret ad egyházművészeti kiállítások és a püspökség festménygyűjteménye egyes darabjainak bemutatására is. A megnyitás óta eltelt több mint öt évben a házban vibráló művelődési és tudományos élet bontakozott ki. Annak ellenére, hogy az emeleti termek nem órarend szerint nyitnak, jelentős a turisztikai látogatottsága, és gyakoriak a kulturális események: könyv-

19 10–15 db.

20 Az épület teljes bemutatása, a felújítás, helyreállítás részletes ismertetése külön szakcikket érdemelne.

cal people perceive the impetus of the pastor or the need for community building dictated by some members of the congregation as a positive force, while the arguments of the historic building preservationist calling for professionalism and patience regarding the process as a waste of time and money.

Works carried out on schools and civil buildings

■ In addition to parish churches and priority investments, the church also had to take care of educational and residential buildings in Cluj-Napoca, Cristuru Secuiesc and Odorheiu Secuiesc.

In Cluj-Napoca, the building of the high school designed by Lajos PÁKEY requires constant professional attention; that is, constant maintenance and renovation work. We restored the street and courtyard façades of the building. The four external and four internal courtyard façades were dealt with at different times by different teams. The main façade on the 21st of December Boulevard (formerly Magyar Street) and the western façade facing the church were restored in partnership with the Mayor's Office, with their partial support and with the contractor selected by them. Preparing technologically for the intervention to ensure the quality of the work was virtually impossible. The south and west courtyard façades were completed with the help of the church, but with a small budget. The alpine technology could not insure the appropriate technical parameters. The situation was better regarding the restoration of the eastern and northern courtyard façades, where the plaster, which was applied using lime and sand according to traditional methods, yielded an exquisite finish. Very good quality was also achieved at the external eastern and northern façades, where – in addition to the use of high-quality materials – the eclectic plaster consoles and plaster ornamentation were also carefully restored.

The roof needs permanent repair. The electrical, heating, water and sewage systems can be upgraded in stages. A lift was installed to make the building accessible by disabled people, too. The need to repaint some of the rooms is permanent, and in some of the more important rooms it was possible to restore the original decorative paintwork.

A big challenge is the professional renovation of windows and doors, some of which can be done every year[20] depending on the available financial resources. It is important that the large main front windows of the prayer room and the main door have been restored. In addition to the professional repair of the frames, the locking mechanisms are being repaired and in the case of classrooms and offices, insulating glass panels are being installed in the inner window mesh.

An important achievement was the cleaning and partial restoration of the representative large hall, the Dávid Ferenc Prayer

20 10–15 of them.

Room having a coffered ceiling with decorative painting.

The two rooms housing very valuable collections, the biology and the physics collections, have also been renovated.[21]

Unfortunately, the building of the old high school in Cluj-Napoca was not renovated comprehensively yet. Only the main façade is being renovated, and of course the interiors of the classrooms are regularly repaired.

Similarly, in Cluj-Napoca, the renovation of the former bishop's residence, one of the most important Gothic buildings of the city, has been a priority project. Over the centuries, it has been extended and remodelled several times. Its age, some architectural elements and solutions, the arches of the doorway and the street portal show that it is a building very similar to the birthplace of King Matthias Corvinus. In 2009, in view of the state of the building, a decision was taken to renovate it. A decade of restoration is an indication of the complexity of the process and the challenges involved. In 2018, a new public institution called the House of Religious Freedom was opened in Cluj-Napoca, hosting lecture halls, exhibitions and the offices of the Institute for the Scientific Study of Religions on the first floor. The building's financial operation is ensured by guest rooms on the upper floor and in the attic, and a restaurant and a bookshop on the ground floor. Besides displaying its own historical heritage, the house also provides space for exhibitions of ecclesiastical art and pieces from the bishopric's painting collection. Although the rooms upstairs are not open on a regular basis, there is a significant tourist flow and cultural events are organised frequently here, e.g. book launches, concerts, theatre evenings. Associations from Cluj-Napoca prefer to use the edifice as a venue for their events and conferences. On the ground floor, the restaurant's daily customers, the bookshop's customers and the hotel's guests enrich the daily life of the house.[22]

The renovation of the façades of three historic houses in the centre of Cluj-Napoca has been completed, including the full interior renovation of one of them.

An important part of the Unitarian ecclesiastical heritage of Cluj-Napoca are the few modernist houses built in the immediate vicinity of the church before the Second World War. The biggest challenge in the restoration of their façades was the production and proper application of the mica-enriched plaster. The largest and most visible of the three properties is the Sora Shopping Center building. The church organised a planning competition for its use, and they hope that it will be implemented in the future, depending on available funding.

In Cristuru Secuiesc, two school buildings, an 18th century high school and a board-

21 A full description of the building, its renovation and restoration deserve a separate article.

22 Xénia FURU – Árpád FURU: Restoration of a medieval house in Cluj Napoca. From the Unitarian Bishop's House to the House of Religious Freedom in *Transsylvania Nostra* 25–45.02.2020.



■ ***20. ábra.*** *A kolozsvári Unitárius Kollégium díszterme kazettás mennyezetének vizsgálata. © FURU Árpád*

■ ***Fig. 20.*** *The examination of the coffered ceiling in the Unitarian College's ceremonial hall in Cluj-Napoca (Kolozsvár). © Árpád FURU*

bemutatók, koncertek, színházi estek. Kolozsvári egyesületek előszeretettel választják eseményeik, konferenciáik helyszínéül. A földszinten pedig az étterem mindennapi vendégei, a könyvesbolt vásárlói, a szállóvendégek színesítik a ház hétköznapi életét.[21]

Kolozsvár belvárosában elkészült három történeti értékű lakóház homlokzatának felújítása, ebből egyiknek a teljes belső felújítása is folyamatban van.

Fontos része Kolozsvár unitárius egyházi örökségének az a néhány modernista lakóház, amely a templom közvetlen közelében épült fel a második világháború előtt. Homlokzatuk felújításának legnagyobb kihívása a csillámdarabokkal gazdagított vakolat előállítása és megfelelő felvitele volt. A három ingatlan közül a legnagyobb és legláthatóbb a Sora üzletház. Ennek hasznosítására az egyház tervpályázatot írt ki, a megvalósítás a finanszírozás függvényében remélhetőleg a jövőben elkezdődik.

Székelykeresztúron szintén két iskolaépület, egy 18. századi és a PÁKEY Lajos által tervezett, 20. század elején épült kollégium szorul állandó műszaki felügyeletre. Számos javítási, felújítási munkálatot követően mindkét épület esetében átfogó helyreállítási terv is készül, annak reményében, hogy a jövőben a munkálatokra is sor kerülhet.

Székelyudvarhelyen a Gondviselés segélyszervezet vásárolt egy műemlék ingatlant. Felújítási terve elkészült, a munkálat folyamatban van.

A kolozsvári belvárosi egyházközség beruházásaként, magyarországi támogatással, megújult, műemlék jellegű épületben kapott helyet az Unitárius Bölcsőde. Ugyanebből a keretösszegből a kolozsvári Petőfi utcai Mikó-házat is sikerült megvásárolni, ezen karbantartási javításokat eszközölt az egyházközség.

Építészeti tervezés és tudományos munka

■ Az építészeti tanácsadói munkakör természetes része az építészeti tervezés, a tudományos kutatás ösztönzése, elvégzése, a publikációs tevékenységek ellátása.

Építészeti tervezést eddig az alábbi épületeken végzett FURU Xénia építész: Alsófelsőszentmihály – a parókia felújítása, Kolozs – a templom,

21 FURU Xénia – FURU Árpád: Egy középkori ház helyreállítása Kolozsváron. Az unitárius püspöki háztól a vallásszabadság házáig. In: *Transsylvania Nostra* 2020. 02. 25–45.



■ ***21. ábra.*** *Kanálhátas vakolat felvitele a Vallásszabadság Házában. © FURU Árpád*
■ ***Fig. 21.*** *Application of historic plaster at the House of Religious Freedom. © Árpád FURU*

parókia és iskola felújítása, Mészkő, Szind, Betlenszentmiklós templomainak helyreállítása, a Vallásszabadság Háza, Bolyai u. 9. és 12. szám alatti lakóházak felújítása, a kolozsvári Unitárius Kollégium többrendbeli felújítási tervei, a kolozsvári régi kollégium (ma a Brassai Sámuel Líceum által használt épület) homlokzatának felújítási terve, a Sora üzletház homlokzatának felújítási tervei, a dévai szórványközpont tervezése, valamint a kolozsvári Dávid Ferenc-szobor és a tordai Vallásszabadság szobor engedélyezési tervei.

A helyreállítások során elsődleges szempont az előkutatások elvégeztetésének megszervezése, ezek nyomon követése, majd a jelentések, összefoglalók begyűjtése, ezekből publikációk, kiállítások szervezése. Kiemelt feladatnak bizonyult a kolozsvári püspöki rezidencia (ma a Vallásszabadság Háza) kutatása. Ebben a folyamatban személyesen is jelentős részt vállaltunk, és tervezzük a megfelelő tudományos publikációk elkészíttetését is.

Ösztönöztük, majd megszerveztük dr. BALASSA M. Iván néprajzkutató bevonásával, célzott kutatásként az unitárius templomokban fellel-



■ ***22. ábra.*** *A kolozsvári unitárius püspöki rezidencia, ma Vallásszabadság Háza helyreállítás után. © FURU Árpád*
■ ***Fig. 22.*** *The Unitarian Episcopal residence in Cluj-Napoca (Kolozsvár), now the House of Religious Freedom, after restoration. © Árpád FURU*

ing school designed by Lajos PÁKEY at the beginning of the 20th century, also need constant technical attention. Following a number of repairs and renovation works, a comprehensive restoration plan will be elaborated for both buildings, in the hope that work can be carried out in the future.

In Odorheiu Secuiesc the charity called Gondviselés (Providence) bought a historic building in the centre. The conservation plan is ready and the work is underway.

The Unitarian Nursery School was renewed in a historic building in downtown Cluj-Napoca, as an investment of the parish of Cluj-Napoca, with the support of the Hungarian Government. From the same budget, the Mikó House on the Avram Iancu (formerly Petőfi) Street in Cluj-Napoca was bought and maintenance repairs were carried out by the parish.

Architectural design and scientific work

■ An organic part of the job of the architectural advisor is architectural design, the promoting and carrying out of scientific research as well as publishing.

Architect Xénia FURU designed the following buildings/ works: the renovation of the parish of Mihai Viteazu, the restoration of the church, parish and school of Cojocna, the restoration of the churches of Cheia, Sănduleşti, Sânmiclăuş, the House of Religious Freedom, Bolyai Street 9 and 12, the renovation of the Unitarian College in Cluj, the renovation of the façade of the Old College in Cluj-Napoca (now used by the Brassai Samuel High School), the renovation of the façade of the Sora shopping centre, the design of the Deva Diaspora Centre, the licensing plans for the Statue of Dávid Ferenc in Cluj and the Statue of Religious Freedom in Turda.

During the restoration process, the primary aspect is to organise and follow up the preliminary research, then collect reports and summaries, and organise publications and exhibitions. The research of the Bishop's Residence in Cluj (now the House of Religious Freedom) proved to be a major task. We have personally taken a significant part in this process, as we are planning to have the corresponding scientific publications prepared.

We encouraged and organized the inventory of painted wooden ceilings and other elements from Unitarian churches, and then the processing of the material, with the involvement of ethnographer Iván BALASSA M. PhD. The work of Iván BALASSA M. PhD entitled Painted Wooden Ceilings and Furnishings in Unitarian Churches was published in 2018. [23]

Since 2019, the architectural and heritage consultant is involved in organising the protection of the entire Unitarian movable and immovable heritage. One of the very important tasks is to ensure the preserva-

23 Iván BALASSA M.: Painted wooden ceilings and furnishings in Unitarian churches. Hungarian Unitarian Church – Exit Publishing House, Cluj-Napoca, 2018.

tion of the church collections for scientific needs. Traditionally, the church library and archives has had a well-trained librarian and archivist. There is a need for more attention and a more rigorous methodology for the fate of the movable ecclesiastical heritage, such as artefacts, jewellery, textiles, carved stones or other architectural elements previously removed from certain churches, and of course paintings, whose inventory, research, restoration and exhibitions of objects represent a new challenge. Until the employment of a suitable museologist, this task also falls within the remit of the architectural and heritage consultants.

Conclusions

■ We have just concluded a very important period in the history of the Unitarian Church in the 20th century, because such a large number of buildings have never been restored in a short time (at the beginning of the period, there were usually 25–35 interventions per year, while in the years before 2018 this number gradually increased to around 60, reaching 85–90 sites with work in 2018). This was mainly due to the availability of significant resources, perhaps we are not mistaken to state that governmental channels never made so much funding for building restoration available.

Considering the general shortage of workforce in the sector, this challenge has been a huge effort, putting the available teams of designers and contractors at maximum performance, so to speak, and working to the highest quality standards.[24] We would like to thank the large number of professionals involved in research, design, preparation, construction and restoration work. The work was generally characterised by dedication, diligence and fidelity to professional principles. It is regrettable that it is not possible to list all the names in this article, but we cannot fail to thank some of the designers, contractors and their teams who have demonstrated their professionalism and quality on a regular basis and in multitude of projects. We would like to thank Zoltán MÁTHÉ architect and his team, Márta FEKETE, Sándor BENCZÉDI and his team, Zsolt KOZMA architect and his team, Katalin MAKSAY and Zoltán LÁZÁR architects, Zsolt TÖVISSI architect and his team, Géza KERESZTES architect and his team, Dorottya MAKAY civil engineer and his team, Csaba BODOR and Sámuel FERENCZI civil engineers, Georgiana TIRT civil engineer and her team, Augustin POPA, Rozália DÁNÉ, Ildikó KIRIZSÁN and Imola KIRIZSÁN civil engineers, Dezső CSÁKÁNY and István BENKE structural engineers, Erzsébet SZABÓ and Anca BUZURA electrical engineer and her team. Our thanks go to Ferenc MIHÁLY and Erzsébet SZÁSZ and their colleagues for their work as wood conservators, Lóránt KISS, Péter PAÁL, János SZŐCS, Tamás SZAKÁCS and their teams for their work as mural conservators, and Zoltán

24 We have to note unfortunately that there have been works where the workers were not skilled in the restoration of historic buildings.

hető festett faberendezések inventarizációját, majd az anyag feldolgozását. Dr. BALASSA M. Iván *Festett famennyezetek és berendezések az unitárius templomokban* című munkája 2018-ban jelent meg.[22]

2019-ben megfogalmazott feladatként az építészeti és örökségvédelmi tanácsadó részt vesz a teljes unitárius ingó és ingatlan örökség védelmének megszervezésében. Az egyik igen jelentős feladatcsoport az egyházi gyűjtemények tudományos igényű fenntartásának biztosítása. Az egyházi könyvtár és levéltár hagyományosan rendelkezik megfelelően képzett könyvtárossal és levéltárossal. Több figyelemre és határozottabb módszertanra van szükség az egyházi ingó örökség sorsát illetően: kegytárgyak, ötvöstárgyak, textíliák, az egyes templomokból korábban kiemelt faragott kövek vagy egyéb építészeti elemek és természetesen a festmények esetében, melyek leltára, kutatása, helyreállítása és a tárgyakból szervezett kiállítások számos új feladatot jelentenek. Megfelelő muzeológus alkalmazásáig ez a feladat is az építészeti és örökségvédelmi tanácsadó munkájának része.

Következtetések

■ Az unitárius egyház jelenkori történetének kiemelt fontosságú időszaka áll mögöttünk, ugyanis eddig még nem fordult elő, hogy ilyen rövid idő alatt ilyen sok épületen szervezzenek javítási-helyreállítási munkálatokat. (Az időszak elején évente általában 25–35 egyházközségben volt valamilyen építészeti tevékenység, míg a 2018 előtti években ez a szám fokozatosan 60 körülire emelkedett, hogy 2018-ban elérje a 85–90 helyszínt.) Ez elsősorban annak köszönhető, hogy jelentős források álltak rendelkezésre, talán nem tévedünk, ha úgy fogalmazunk, hogy soha korábban ennyi támogatás épület-helyreállításra, javításra hazai és külföldi kormányzati csatornákon nem állt rendelkezésre.

Tekintetbe véve a szakágazatra jellemző általános munkaerőhiányt, kijelenthetjük, hogy ez a kihívás hatalmas erőfeszítést jelentett, úgymond maximális fordulaton járatta a rendelkezésre álló, megfelelő minőségben dolgozó tervező- és kivitelezőcsapatokat.[23] Ezúton mondunk köszönetet a kutatásban, tervezésben, előkészítésben, valamint a kivitelezésekben és a restaurátori munkákban részt vevő nagyszámú szakembernek. Általánosan jellemző volt a hivatástudattal, szorgalommal és a szakmai elvekhez való hűséggel végzett munka. Minden név felsorolására e cikk kereteiben nincs mód, mindezek ellenére nem tehetjük meg, hogy köszönetünkben ne említsünk meg néhány olyan tervezőt, kivitelezőt és csapatát, akik rendszeresen és nagyobb számú munkálaton biztosították a szakmai feltételeket és minőséget. Köszönetünket fejezzük ki MÁTHÉ Zoltán építész és csapata, FEKETE Márta, BENCZÉDI Sándor és csapata, KOZMA Zsolt építész és csapata, MAKSAY Katalin, LÁZÁR Zoltán építész, TÖVISSI Zsolt építész és csapata, KERESZTES Géza építész és csapata, MAKAY Dorottya építőmérnök és csapata, BODOR Csaba és FERENCZI Sámuel építőmérnökök, TIRT Georgiana építőmérnök és csapata, POPA Augustin, DÁNÉ Rozália, KIRIZSÁN Ildikó és KIRIZSÁN Imola építőmérnök, CSÁKÁNY Dezső és BENKE István tartószerkezeti szakértők, SZABÓ Erzsébet, majd BUZURA Anca villamosmérnök és csapata munkájáért. Köszönetünk MIHÁLY Ferenc és SZÁSZ Erzsébet, valamint munkatársaik farestaurátori munkájáért, KISS Lóránd, PAÁL Péter, SZŐCS János, SZAKÁCS Tamás és csapataik falkép-restaurátori, valamint KISS Zoltán, NAGY Benjámin és csapataik kőrestaurátori

22 BALASSA M.Iván: *Festett famennyezetek és berendezések az unitárius templomokban.* Magyar Unitárius Egyház – Exit Kiadó, Kolozsvár, 2018.

23 Sajnálattal megállapítjuk, hogy voltak munkálatok, ahol történeti épületek helyreállításához nem értő munkaerő állt csak rendelkezésre.

munkájáért. A kivitelezőcsapatok közül köszönetünkkel tartozunk a DÉNES Ibolya, DEMETER Zsolt, SZÉKELY István, SARCA Bogdan, GÁLFI Attila, HANKÓ Dénes, FEKETE Mihály, BÁLINT Antal, CSETE Márton által vezetett munkaközösségeknek. Köszönet KOVÁCS Zsolt, LUPESCU Radu, WEISZ Attila és FEHÉR János művészettörténészek, CSÓK Zsolt, EÖTVÖS Koppány, NYÁRÁDI Zsolt, SÓFALVI András, SZTÁNCSULY József régészek és csapatuk lelkes és folyamatos együttműködéséért.

Az elvégzett munkálatok jelentősen javították az unitárius építészeti örökség műszaki és építészeti állapotát. Szerkezeti, épületfizikai, burkolatelemekre vonatkozó károsodások sorának kiküszöbölése valósult meg, az épületek esztétikai megjelenése is sokat javult. A megfelelő kutatás és felkészülés után elkészült munkálatok esetében jelentős történeti és építészettörténeti többletérték bemutatása volt lehetséges. Feltárásra és helyreállításra kerültek középkori és kora újkori falképek, faragottkő elemek, korábban lemázolt, festett fafelületek váltak láthatóvá, vagy elhanyagolt, megkopott festett faelemeknek, mennyezeteknek, karzatoknak sikerült eredeti pompáját visszaállítani. A régészeti kutatások az egyes egyházközségek történetére vonatkozó adatok sorával gazdagították a tudományt. Fontos szempont, hogy a munkálatok sikere hozzájárult az egyes közösségek önbecsülésének növeléséhez, identitásuk megerősítéséhez, a közösségi önbizalom növekedéséhez. Megfigyelhető, hogy a helyreállított templom vonzóbbá vált, egyre gyakrabban szerveznek a közösségek az egyházi rendezvényeken túlmutató kulturális összejöveteleket, megemlékezéseket. Növekszik az igény a templom közvetlen környezetében elhelyezett, közösségi vagy családi emlékezést szolgáló emlékművek, emléktáblák állítására, melyek természetesen az egyes egyházközségek közösségi életének jelentős helyszínei, ám elhelyezésük körültekintést, tervezést, jelentős kommunikációs kihívást jelent.

Továbbra is megoldandó kihívás a gyülekezet nélkül maradt vagy közeljövőben anélkül maradó templomok sorsa. Bár e kérdés kezelésére számos kezdeményezés és megbeszélés történt, a verespataki templomon és paplakon, és talán a kidei templomon kívül a helyzet még mindig megoldásra vár.

Szakmai szempontból szintén jelentős kihívás a megtörtént nagyszámú munkálat megfelelő dokumentálása. Ideális esetben minden terv, minden építőtelepi jegyzőkönyv időben meg kellene, hogy érkezzen a püspökség építészeti tanácsadójához, aki helyszíni kiszállásokon a folyamatokat és az eredményeket fényképen és jegyzőkönyvben rögzíti. A helyszíni szemlék ugyanakkor lehetőséget teremtenek a beavatkozások ellenőrzésére, ezek műszaki minőségének növeléséhez. Sajnálatosan, az egymással párhuzamosan futó tevékenységek nem tették lehetővé minden folyamat megfelelő időben történő rögzítését. Szükséges a tervdokumentációk tervezőktől, egyházközségektől történő begyűjtése, rendszerezése, központi levéltárban való elhelyezése, az egyes építőtelepi folyamatok fényképes és jegyzőkönyves, sok esetben utólagos narratív dokumentálása. Szükséges mindenhol a munkálatok adminisztratív követése, lezárása.

Az egyes munkálatok lezárásával a figyelem nem lankadhat. Szükséges az utókövetés és a rendszeres karbantartás elkezdése. Az utókövetést az építészeti előadó időkorlátai között igyekszik ellátni, ahogy a karbantartás szükségességére is igyekszik rendszeresen figyelmeztetni az egyes egyházközségeket.

Az eltelt időszak tapasztalatai egyértelműsítik, hogy a jövő szempontjából előny lenne a proaktív előkészítés kibővítése, még több kommunikáció biztosítása az egyházközségek és az építészeti tanácsadó vagy az építészeti tanácsadó és az egyes szakmai csoportok képviselői között. Ideális esetben templomonként szükséges lenne egy karbantartási menedzsmentterv nem csupán elméleti megalkotása, hanem gyakorlatba ültetése, valamint egy rövid, közép- és hosszú távú beavatkozási terv megszerkesztése, amit összhangba kellene hozni a gyülekezetek igényeivel,

KISS, Benjámin NAGY and their teams for their work as stone conservators. We would like to thank the teams led by Ibolya DÉNES, Zsolt DEMETER, István SZÉKELY, Bogdan SARCA, Attila GÁLFI, Dénes HANKÓ, Mihály FEKETE, Antal BÁLINT, Márton CSETE. Thanks to art historians Zsolt KOVÁCS, Radu LUPESCU, Attila WEISZ and János FEHÉR, archaeologists Zsolt CSÓK, Koppány EÖTVÖS, Zsolt NYÁRÁDI, András SÓFALVI, József SZTÁNCSULY and their team for their enthusiastic and continuous cooperation.

The works carried out have significantly improved the technical and architectural condition of the Unitarian architectural heritage. A series of structural, physical and cladding damages have been eliminated, and the aesthetic appearance of the buildings has also been greatly improved. After proper research and preparation, it was possible to add considerable historical and architectural value to the works. Medieval and early modern mural paintings, carved stone elements, painted wooden surfaces that had previously been washed away have been excavated and restored, or neglected and worn painted wooden elements, ceilings and mouldings have been restored to their original splendour. Archaeological research has enriched science with a wealth of data on the history of individual parishes. An important aspect is that the success of the work has contributed to the self-esteem of each community, strengthening its identity and increasing its self-confidence. It is noticeable that the restored church has become more attractive, with communities increasingly organising cultural gatherings and commemorations that go beyond church events. There is an increasing demand for the erection of commemorative monuments and plaques in the immediate vicinity of the church, which are of course important physical sites of community life in each parish, but their placement requires care, planning and a considerable communication challenge.

The challenge remains to address the fate of churches that are or will soon be without a congregation. Although numerous initiatives and discussions have taken place to address this issue, apart from the church and priesthood in Roșia Montană and perhaps the church in Chidea, the situation is still to be resolved.

From a professional point of view, it is also a major challenge to properly document the large number of works that have been carried out. Ideally, all plans and site reports should be received in time by the diocesan architectural consultant, who will record the progress and results on site visits, in photographs and minutes. At the same time, site visits provide an opportunity to monitor the interventions and improve their technical quality. Unfortunately, the parallel activities did not allow all the processes to be recorded in good time. There is a need to collect and organise the planning documents from the designers, from the parishes, to store them in a central archive and to document the individual processes in the building site in the form of photographs and notebooks,

often with a narrative. Administrative follow-up and closure of the works is required everywhere.

As each work is completed, attention must not wane. Follow-up is necessary and regular maintenance must begin. The architectural and heritage consultant will try to carry out this follow-up within the time limits of the project, as well as to regularly alert the parishes to the need for maintenance.

The experience of the past period makes it clear that the future would benefit from more proactive preparation, ensuring more communication between parishes and the architectural consultant, or between the architectural consultant and representatives of the various professional groups. Ideally, a maintenance management plan per church would need to be not only theoretical but also practical, and a short, medium and long-term intervention plan should be drawn up and aligned with the needs and objectives of the congregations. Regular and appropriate communication can also help slowly to change the attitude of the owners.

Of course, the main initiators, organisers and followers of the work are the individual pastors or the staff of the economic department of the General Authority. They were responsible for securing funding, writing or having written tenders, and compiling the accounts and technical reports. Their efforts, their work, their struggles, their persistent community leadership and their constructive work add invaluable value. It is gratifying to note that a significant number of Unitarian pastors have been open to accepting and implementing professional perspectives. Their attitude towards the importance of architectural heritage has changed a lot and in a good direction. Without the openness and support of the clergy and church officials, our work as advisors to the church on architecture and heritage conservation would become meaningless and useless. Thank you for all!

céljaikkal. A rendszeres és megfelelő kommunikáció segíthet lassan a tulajdonosi szemlélet alakításán is.

Természetesen a munkálatok fő kezdeményezői, a szervezés lebonyolítói és követői az egyes lelkészek vagy a főhatóság gazdasági osztályának munkatársai. Rájuk hárult a finanszírozás biztosítása, a pályázatok megírása vagy megíratása, valamint az elszámolások, szakmai jelentések összeállítása. Erőfeszítéseik, munkájuk, vívódásaik, kitartó közösségvezető és -építő tevékenységük felbecsülhetetlen hozzáadott értéket képvisel. Örömmel állapítjuk meg, hogy az unitárius egyház lelkészeinek jelentős része nyitott volt a szakmai szempontok elfogadása és ezek érvényesítése irányába. Viszonyulásuk az építészeti örökség fontosságához sokat és jó irányban változott. Az egyház építészeti és örökségvédelmi tanácsadóiként munkánk a lelkészek és az egyházi tisztségviselők nyitottsága és támogatása nélkül értelmetlenné és haszontalanná válna. Mindezért köszönet!

Bibliográfia / Bibliography

- BALASSA M. Iván 2018: *Festett famennyezetek és berendezések az unitárius templomokban.* Magyar Unitárius Egyház – Exit Kiadó, Kolozsvár.
- FURU Árpád 2012, 2013: Az egyházi épületek karbantartásáról 1–11., *Unitárius Közlöny* 22.(82.) 2012 4. sz. 13–14., 5. sz. 15–16., 6. sz. 15–16., 7. sz. 15–16., 8. sz. 15–16., 9. sz. 14–15.,10. sz. 17–18., 11. sz. 15–16., *Unitárius Közlöny* 23.(83). 2013. 1. sz. 14–15., 2. sz. 17–18., 4. sz. 15–16.
- FURU Árpád 2015: *Útmutató az unitárius egyházi épületek karbantartásához.* Magyar Unitárius Egyház, Kolozsvár.
- FURU Xénia – FURU Árpád 2020: Egy középkori ház helyreállítása Kolozsváron. Az unitárius püspöki háztól a vallásszabadság házáig. In: *Transsylvania Nostra* 2020. 02. 25–45.
- PASKUCZ-SZATHMÁRY Viola 2007: Építményfelújítások az Erdélyi Unitárius Egyházban. *Keresztény Magvető* 113. évf. (2007.) 2. sz. 173–180.
- PASKUCZ-SZATHMÁRI Viola 2008: Történelmi örökségünk tárgyi emlékeinek megőrzése és védelme. *Keresztény Magvető* 114. évf. (2008.) 2. sz. 242–253.

■ Imola KIRIZSÁN[1]

Completări la cercetarea șarpantelor istorice (cu accent pe cele din Transilvania)

(ÎNCERCĂRI DE A RĂSPUNDE LA ÎNTREBĂRILE NESCRISE)

■ **Rezumat:** *Tematica şarpantelor istorice din Transilvania este strâns legată de activitatea profesorului SZABÓ Bálint, inginer constructor, profesor şi manager, creator de sistem, care şi-a dedicat ultimele trei decenii din activitatea profesională protejării patrimoniului construit. Acest articol îşi propune să fie o retrospectivă, să ofere o radiografie a situaţiei abordării şarpantelor istorice din Transilvania, axându-se pe cercetarea, analiza, reuşitele obţinute sau chiar lipsurile identificate, încadrându-le şi în contextul şarpantelor europene. Procesul de la neglijarea completă a şarpantelor în studiile de specialitate până la transformarea lor într-un subiect central al restaurării a fost unul lung şi complex.*

Prin cărţile şi publicaţiile sale, precum şi prin influenţa asupra studenţilor săi, profesorul SZABÓ a adus şarpantele transilvănene în atenţia specialiştilor, determinând o mai mare atenţie şi în fazele de avizare. Deşi clasificarea, tipologiile formulate de dânsul şi analiza acestor şarpante nu au fost întotdeauna unanim acceptate, ele constituie o bază solidă pentru viitoare cercetări, mai ales odată cu apariţia şi răspândirea dendrocronologiei în România, care permite o reanalizare a tipologiilor în funcţie de perioada de construire.

În acest articol, vom defini aceste subansambluri structurale, vom discuta rolul şarpantei şi necesitatea studierii acesteia. Vom discuta, de asemenea, despre cine se ocupă în prezent de şarpante în România şi cine ar trebui să fie implicat, precum şi despre diversele intervenţii efectuate asupra acestora. Nu în ultimul rând prezentăm o metodologie de analiză şi promovare a şarpantelor prin introducerea lor în circuite deschise publicului larg.

■ **Cuvinte cheie:** şarpante istorice, reabilitarea şarpantelor, caracter gotic, baroc, dendrocronologie

Introducere

■ Când abordăm tema şarpantelor istorice din Transilvania, nu putem ocoli numele profesorului Bálint SZABÓ. El este unul dintre pionierii care, încă din a doua jumătate a anilor ’90, a adus în prim-plan studiul acestei componente ascunse a clădirilor istorice în România. Iniţial un

1 Dr., inginer, specialist în conservarea clădirilor istorice, expert tehnic, conferenţiar la Facultatea de Arhitectură şi Urbanism, Universitatea Tehnică Cluj, director al societăţii Utilitas – Centru de cercetare, proiectare în domeniul reabilitării patrimoniului construit Srl., Cluj, România.

Additions to the Research on Historic Roof Structures (With a Focus on Transylvanian Structures)

(ATTEMPTS TO ANSWER UNWRITTEN QUESTIONS)

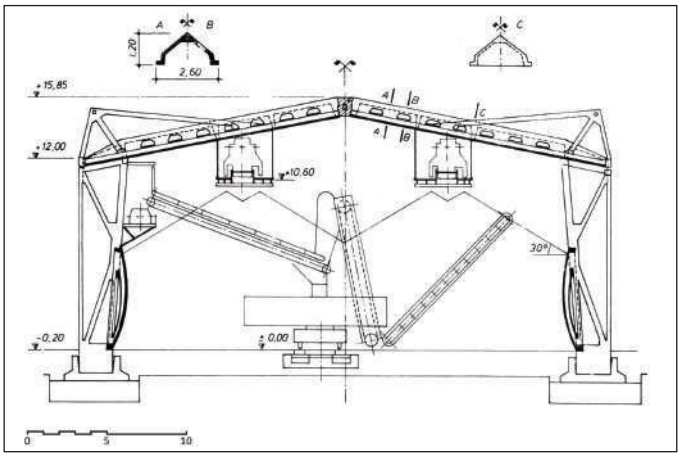
■ **Summary:** *The topic of historic roof structures in Transylvania is closely related to the work of Professor SZABÓ Bálint, a civil engineer, teacher and manager, system creator, who dedicated the last three decades of his professional activity to the protection of built heritage. This paper aims to be a retrospective, to provide an overview of how historic roof structures in Transylvania are approached. It focuses on research, analysis, achievements and even shortcomings found, and places them in the context of the European roof structures. The process from the complete disregard of roof structures in specialized studies to their becoming a central subject of conservation has been a long and complex one.*

Through his books and publications, as well as through his influence on his students, Professor SZABÓ has brought the Transylvanian roof structures to the attention of specialists, leading to greater attention in the approval phases. Although his classification, typologies and analysis of these roof structures have not always been unanimously accepted, they are a solid basis for future research, especially with the advent and spread of dendrochronology in Romania, which allows a re-examination of the typologies considering the period of construction.

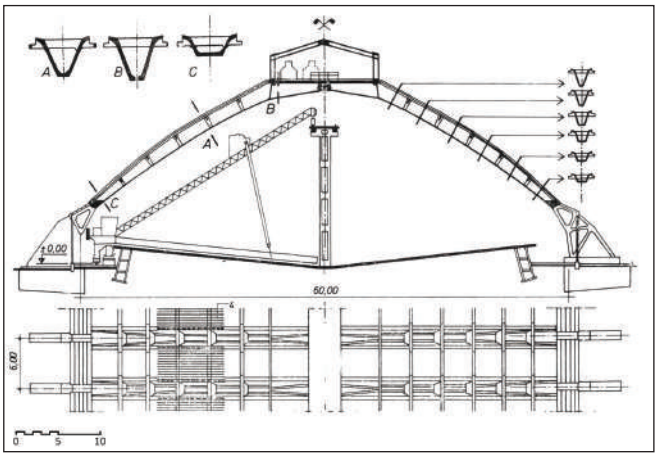
In this paper, we will define these structural subensembles, discuss the role of the roof structure and the need to study it. We will also discuss who is currently dealing with roof structures in Romania and who should be involved, as well as the various interventions carried out on them. Last, but not least, we present a methodology for analysing and promoting the roof structures by introducing them in circuits open to the public.

■ **Keywords:** Historic roof structures, roof structure conservation, Gothic, Baroque characteristics, dendrochronology

1 PhD, engineer, historic building conservation specialist, technical expert, associate professor at the Faculty of Architecture and Urban Planning, Technical University Cluj, head of Utilitas – Built Heritage Conservation Research and Design Centre Ltd., Cluj, Romania.



■ ***Fig. 1.*** *Hala de depozitare de la Combinatul chimic Făgăraș – secțiune caracteristică.*
■ ***Fig. 1.*** *Warehouse at Făgăraș Chemical Plant – typical section.*



■ ***Fig. 2.*** *Hala de depozitare a materialelor în vrac de la Combinatul chimic Bacău – secțiune caracteristică.*
■ ***Fig. 2.*** *Warehouse for bulk materials at Bacău Chemical Plant – typical section.*

Introduction

■ When we approach the topic of historic roof structures in Transylvania, we cannot avoid the name of Professor Bálint SZABÓ. He is one of the pioneers who, since the second half of the 1990s, brought to the forefront the study of this hidden component of historic buildings in Romania. Initially an outstanding engineer and professor in the field of reinforced and prestressed concrete structures,[2] [3] in the early 1990s he turned his attention to historic buildings and specialized in historic roof structures as well.

1. About Professor SZABÓ's work and impact

■ Through his work, he has consistently emphasised that interventions on the existing building stock, whether listed as historic buildings or not, require a distinct approach from the design of new buildings. As early as 1992, with his first conservation project,[4] he set up his own assessment system for existing buildings, emphasising a multidisciplinary approach, detailed analysis and synthesis. This content has been constantly updated, using the experience gained along

2 He is one of the designers of the Făgăraș Chemical Plant Warehouse, with a precast frame structure with a 30m span, 9m interaxial distance, and prestressed reinforced concrete elements.

3 The bulk materials warehouse at the Bacău Chemical Plant has a three-hinge arch structure with a span of 60m and a height of 20m. The arches are made of precast prestressed concrete shell elements with a 1.60m width and variable height.

4 In the list of conservation projects, the first major one, number 7 of 1992, is the Conservation of the Evangelical Church in Bistrița. He already develops the first framework content of the technical assessment. It will be published and adapted to the different categories of buildings. The church is important not only because of the long duration of the intervention, but also because of the exceptional value of its roof structure. It is the first real contact with the world of historic roof structures.

inginer şi profesor remarcabil în domeniul structurilor de beton armat şi precomprimat,[2] [3] la începutul anilor 1990 s-a orientat către construcţiile istorice, specializându-se şi pe şarpantele istorice.

1. Despre activitatea profesorului SZABÓ şi impactul său

■ Prin activitatea sa, a subliniat constant că intervenţiile asupra fondului construit existent, fie că sunt sau nu listate ca monumente istorice, impun o abordare distinctă faţă de proiectarea construcţiilor noi. Încă din 1992, cu ocazia primului său proiect de restaurare,[4] a formulat un sistem propriu de expertizare a clădirilor existente, punând accent pe o abordare multidisciplinară, pe analiză detaliată şi sinteză. Acest conţinut a fost în permanenţă actualizat, folosindu-se experienţele acumulate pe parcurs, dar şi tendinţele de la nivel mondial.[5] Reabilitarea şi restaurarea clădirilor istorice nu poate fi concepută fără o teorie ştiinţifică a structurii, iar aplicarea principiului compatibilităţii, atât a materialelor, cât şi a tehnologiilor şi conceptelor structurale, reprezintă o condiţie esenţială pentru succesul intervenţiei.

Gândirea sa sintetică a fost esenţială şi în încercarea de a grupa şi clasifica şarpantele istorice pe baza unor criterii mecanice, subordonate celor arhitectural-istorice. Pentru acest lucru a fost deseori criticat, dar o dezbatere propriu-zisă privind aceste criterii nu a avut, din păcate, loc.

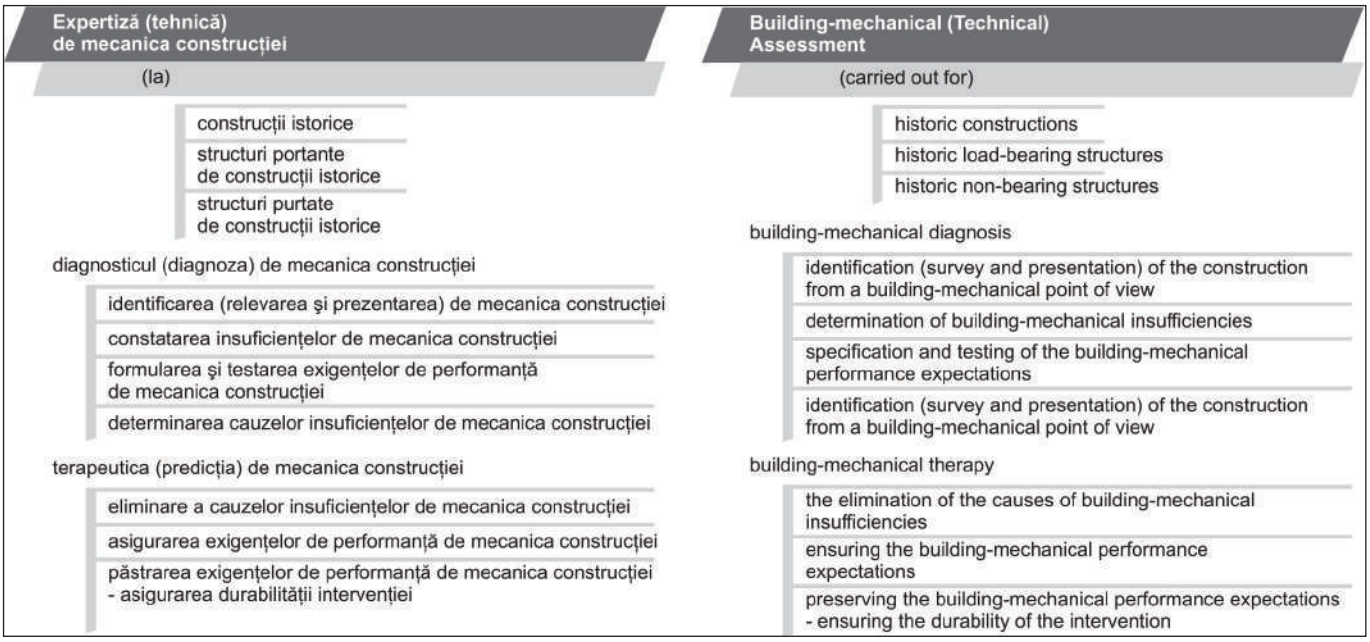
Numeroasele programe de inventariere şi documentare iniţiate de Bálint SZABÓ încă din 1993, după care şi proiectele de reabilitare au furnizat informaţiile necesare, care au fost ulterior procesate şi organizate pentru a sprijini cercetarea de fond şi cea aplicată.

2 Hala de depozitare de la Combinatul chimic Făgăraş, cu o structură în cadre prefabricate cu deschidere de 30m, interax de 9m şi elemente de beton armat precomprimat.

3 Hala de depozitare a materialelor în vrac de la Combinatul chimic Bacău are structură de arc cu trei articulaţii cu deschidere de 60m şi înălţime de 20m. Arcele sunt alcătuite din elemente prefabricate de beton precomprimat cu pereţi subţiri având profil chesonat cu lăţime de 1,60m şi înălţime variabilă.

4 În lista proiectelor de reabilitare, primul proiect de anvergură, numărul 7 din 1992, este Restaurarea Bisericii Evanghelice din Bistriţa. Deja formulează primul conţinut-cadru al expertizei tehnice care urmează să fie publicat şi adaptat la diferitele categorii de clădiri. Biserica este importantă nu doar din cauza duratei lungi de intervenţie, dar şi a valorii excepţionale a şarpantei. Este primul contact real cu lumea şarpantelor istorice.

5 Comitetul ştiinţific al ICOMOS care se ocupă de analiza şi restaurarea structurilor patrimoniului arhitectural (ISCARSAH) aprobă în 2003 Principiile şi ghidul privind analiza, conservarea şi restaurarea structurală a patrimoniului arhitectural. Ghidul este în curs de revizuire (2024).



■ ***Fig. 3.*** *Diagrama celor șapte etape ale expertizării, publicată în mai multe cărți 33, 34.*
■ ***Fig. 3.*** *Diagram of the seven stages of structural assessment, published in several books 33, 34.*

Noi, ca studenţi ingineri de structuri, am început colaborarea profesională cu dânsul prin releveele efectuate la Biserica Evanghelică din Bistriţa, după care, ca tineri absolvenţi, am continuat cu documentarea câtorva sate din Transilvania, cu scopul de a susţine proiectul pentru Vlkolínec din Slovacia,[6] urmat de cercetarea patrimoniului vernacular şi a reşedinţelor nobiliare din Transilvania. Munca de teren şi contactul direct cu clădirile aflate în diverse stadii de conservare au constituit un „liant" care ne-a permis să interpretăm aceste structuri într-un mod diferit faţă de o abordare teoretică pură din birou. Am absorbit întotdeauna cu profundă admiraţie explicaţiile pe care ni le oferea, fie la diferitele obiective sau pe şantierele de restaurare, fie în biroul său. Avea întotdeauna timpul şi răbdarea necesare pentru a ne explica modul de lucru al structurilor şi cauzele probabile ale diferitelor tipuri de deficienţe.

Câţiva dintre noi, împreună cu profesorul SZABÓ, am călătorit timp de doi ani la Budapesta, în fiecare a treia săptămână, pentru a participa la un curs de specializare în domeniul patrimoniului construit.[7] Atunci am avut ocazia să asistăm la prelegeri despre şarpantele istorice susţinute de dr. István POMOZI[8] şi dr. András VÁNDOR.[9] A fost a doua întâlnire importantă cu şarpantele istorice, după releveele şi măsurătorile şarpantelor de la Bistriţa.

Programele de documentare demarate de dânsul s-au extins constant, iar în 1997 a fost lansat un proiect dedicat bisericilor cu picturi murale şi tavane casetate din lemn, precum şi un proiect destinat patrimoniului pe cale de dispariţie, care ne furnizau informaţii utile şi despre şarpante.[10]

6 A formulat acest lucru şi în capitolul „Cuvânt înainte" al cărţii scrise de dr. ing. Árpád FURU, *Protecţia Monumentelor Istorice la Rimetea*, p. 8.

7 Văzând şi ce implică efortul de a călători şi a fi departe de casă, a demarat organizarea unui curs similar şi la noi. Propria experienţă de cursant i-a permis să ştie mai bine cu ce ar trebui completate cursurile nou lansate în 1998 la Cluj-Napoca.

8 Împreună cu care au relevat şarpanta castelului din Ozd, care din păcate nu a putut fi salvată. Însă, la insistenţele dumnealui, castelul a fost preluat de Asociaţia „Bonus Pastor".

9 Teza sa de doctorat este intitulată „Structura şarpantelor din Ungaria în secolele XVI-XIX. Conformarea istorică şi reabilitarea lor", susţinută în 1980 la Budapesta. Este publicată în colecţia *Protejarea monumentelor istorice în Ungaria între 1980-1990* sub forma unui articol: „Structuri de acoperiş dulghereşti din Ungaria între secolele XVI-XIX", pp. 77-102.

10 Denumirea proiectelor de documentare a bisericilor: *Inventarierea patrimoniului arhitectural din Transilvania având pictură murală şi planşeu casetat pictat* (1997-2005), *Programul de documentare şi inventariere a patrimoniului construit pe cale de dispariţie* (1997-2005).

the way, as well as worldwide trends[5]. The conservation of historic buildings cannot be conceived without a scientific theory of the structure, and the application of the principle of compatibility, both of materials and of structural technologies and concepts, is an essential condition for the success of the intervention.

His synthetic thinking has also been essential in his attempt to group and classify historic roof structures based on mechanical criteria, subordinated to architectural and historical criteria. He has been often criticized for this, but a proper debate on these criteria has unfortunately not taken place.

The numerous inventory and documentation programmes initiated by Bálint SZABÓ as early as 1993, followed by conservation projects, provided the necessary information, which was further processed and organized to support basic and applied research.

As students in structural engineering, we started our professional collaboration with Bálint SZABÓ with the surveys of the Evangelical Church in Bistriţa. Then, as young graduates, we continued with the documentation of several Transylvanian villages as support for the Vlkolínec project in Slovakia,[6] followed by the research of the vernacular heritage and noble residences in Transylvania. The fieldwork and direct contact with buildings in various stages of conservation was a "binder" that allowed us to interpret these structures in a different way

5 The ICOMOS Scientific Committee for the Analysis and Restoration of Structures of Architectural Heritage (ISCARSAH) approved the Principles and Guidelines for the Analysis, Conservation and Structural Restoration of Architectural Heritage in 2003. The Guidelines are under revision (2024).

6 He also developed this in the "Foreword" to the book written by Eng. Árpád FURU PhD, *Protecţia Monumentelor Istorice la Rimetea*, p. 8.

than a purely theoretical approach from the office. We would always absorb in deep admiration the explanations he gave us, either on site, during conservation works, or in his office. He always had the time and patience to explain to us how the structure works and the probable causes of various types of deficiencies.

A few of us, together with Professor SZABÓ, travelled for two years to Budapest, every third week, to attend a specialization course in the field of built heritage conservation.[7] We had the opportunity to attend lectures on historic roof structures given by István POMOZI PhD[8] and András VÁNDOR PhD.[9] This was the second important encounter with historic roof structures, after the surveys and measurements of the Bistriţa roof structures.

The documentation programs initiated by Professor SZABÓ had steadily expanded, and in 1997 a project dedicated to churches with mural paintings and wooden coffered ceilings was launched, as well as a project dedicated to endangered heritage, which also provided useful information on roof structures.[10]

Under his guidance, four doctoral theses in civil engineering, analysing various types of historic Transylvanian roof structures,[11] and other foreign works on the topic of roof structures[12] have been developed.

7 Seeing the effort involved in traveling and being away from home, he started the organization of a similar course in Romania. His own experience as a learner gave him a better idea of what should be added in the new courses launched in Cluj in 1998.

8 Together they surveyed the roof structure of the castle in Ozd, which unfortunately could not be saved. However, at his insistence, the castle was taken over by the Bonus Pastor Association.

9 His doctoral dissertation is titled "The structure of Hungarian roof structures in the 16th-19th centuries. Their historical conformation and rehabilitation", defended in 1980 in Budapest. It is published in the collection *The Protection of Historic Buildings in Hungary 1980-1990* in the form of an article: "Timber Roof Structures in Hungary in the 16th-19th centuries", pp. 77-102.

10 Name of the church documentation projects: *Recording of Transylvanian architectural heritage containing wall paintings and painted coffered ceilings* (1997-2005), *Endangered built heritage documentation and recording programme* (1997-2005).

11 At the Doctoral School of the Technical University of Cluj, under the guidance of Prof. Bálint SZABÓ, each of the roof structure systems was dedicated a doctoral degree. More specifically, through Horaţiu SUETAN, for the Romanesque roof structures, through Imola KIRIZSÁN, for the Gothic roof structures, through MAKAY Dorottya, for the Baroque and Baroque character roof structures. The eclectic roof structures are being researched by Adrian TUDORANU CRIŞAN, currently in his third doctoral internship, and the degree for these structures will be awarded upon completion and defence of this thesis.

12 Attempted postdoctoral dissertation in 2006 with Eng. Carl THELIN PhD from Sweden in the field of medieval roof structures; dissertation paper by student Lia Magnus from Belgium, entitled "Historic Timber Roof Structures, Construction Technology and Structural Behaviour, Master Thesis to obtain the title of civil engineer-architect", from September 2008 (coordination together with Prof. Eng. Luc SCHUEREMANS PhD from the Catholic

Sub îndrumarea sa au fost elaborate patru teze de doctorat în inginerie civilă care analizează diverse tipuri de şarpante istorice din Transilvania[11] sau alte lucrări pe tematica şarpantelor şi din afara ţării.[12]

2. Oare de ce șarpante? Premisa cercetărilor

2.1. Ce este şarpanta? Limita între înfăţişare şi structură

Complexitatea patrimoniului cultural este de secole subiect de discuţii. Grupuri mai mici şi mai mari, întotdeauna cu propriul lor set de valori, proclamă „adevăratul" patrimoniu cultural. Recunoaşterea calităţilor culturale ale patrimoniului construit, respectiv consensul în această privinţă, este destul de actual, fiind acceptat mai mult de specialişti decât de opinia publică, mai puţin interesată de subiect.

Valorile ce definesc monumentele istorice, şi anume resursele culturale, sunt corectate în permanenţă în timp şi în spaţiu. Subansamblurile structurale declarate valoroase sunt din ce în ce mai multe. Pe lângă componentele artistice consacrate (pictură murală, lemn pictat, piatră sculptată, fier, fier forjat), fiecare subansamblu structural este considerat demn de protejat, mai întâi datorită calităţilor de formă, apoi celor de conţinut (materiale, tehnici) şi, în final, celor conceptuale. Concepţia structurală – chiar intuitiv realizată (iar acest lucru poate constitui argument suplimentar) – este deosebit de valoroasă, aşadar trebuie obligatoriu protejată. Toate aceste criterii sunt valabile şi pentru şarpantele istorice, subansambluri structurale parte integrantă a clădirilor istorice şi care, din cauza accesului limitat şi a vizibilităţii reduse (cu excepţia şarpantelor deschise) sunt adesea omise.

Cu toate acestea, literatura de specialitate internaţională este bogată în tratate dedicate şarpantelor istorice pe diferite teme şi specialităţi, care, pe lângă descrierile ce se concentrează mai mult pe formă decât pe detaliile structurale privind preluarea şi transmiterea acţiunilor, includ şi relevee de o valoare documentară semnificativă. Mai mult, şarpantele sunt considerate adevărate „cutii negre[13] ale construcţiilor, oferind informaţii valoroase despre evoluţia tehnicilor de construcţie şi a clădirii în sine, acoperind intervenţiile ulterioare. Şarpantele pot avea nu doar un rol utilitar, ci şi estetic! Prin forma acoperişurilor şi materialul învelitorii, acestea definesc în mod concret aspectul unei aşezări.

Subansamblurile structurale care sunt şarpantele, având rolul principal de a susţine materialul învelitorii, esenţial pentru protecţia superioară a clădirilor, reflectă atât ingeniozitatea, cât şi nivelul culturii tehnice din epoca în care au fost realizate. În aceste şarpante, în spaţiile ascunse, descoperim o reţea de bare ingenios asamblate în noduri, concepute să

11 La Şcoala Doctorală a Universităţii Tehnice din Cluj, sub îndrumarea profesorului Bálint SZABÓ, fiecărui sistem de şarpante i-a fost dedicat un titlu de doctor. Mai exact, prin Horaţiu SUETAN, pentru şarpantele romanice, prin Imola KIRIZSÁN, pentru şarpantele gotice, prin Dorottya MAKAY, pentru şarpantele baroce. Şarpantele eclectice sunt în curs de cercetare de către Adrian TUDORANU CRIŞAN, aflat în prezent în al treilea stagiu de doctorand, iar titlul pentru acestea va fi acordat odată cu finalizarea şi susţinerea tezei.

12 Tentativă de disertaţie postdoctorală în anul 2006 cu dr. ing. Carl THELIN din Suedia în domeniul şarpantelor medievale; lucrare de disertaţie a studentei Lia MAGNUS din Belgia, intitulată „Historic Timber Roof Structures, Construction Technology and Structural Behaviour, Master Thesis to obtain the title of civil engineer-architect", din septembrie 2008 (coordonarea a fost împreună cu prof. dr. ing. Luc SCHUEREMANS de la Universitatea Catolică din Leuven, Faculty of Engineering, Departament of Civil Engineering); studentul Miquel Jorge MAGINA în anul 2018 a întocmit disertaţia intitulată „Historic timber roof structures", sub îndrumarea profesorului dr. ing. Carlos CHASTRE RODRIGUES de la Universidade Nova de Lisboa, Faculdade de Ciencias e Technologia.

13 Patrick HOFFSUMMER et al., *Charpentes d'Europe* ed. J. FREDDY (Namur: Institut du Patrimoine wallon (IPW), 2009).

preia diversele solicitări în funcţie de tipul de învelitoare şi de direcţia vântului sau de alte combinaţii de acţiuni. Panta acoperişurilor depinde de deschiderea spaţiului acoperit, de tipul învelitorii, precum şi de stilul arhitectural specific perioadei în care au fost realizate. Deschiderea şi panta acoperişurilor conduc şi la necesitatea rigidizării în plan transversal a căpriorilor, dar şi longitudinal a acoperişurilor.

Spre deosebire de şarpantele inginereşti, cele istorice transferă încărcările direct către structurile portante verticale prin intermediul cosoroabelor, fără a se sprijini pe planşeele de închidere. În unele cazuri, când există elemente structurale interioare – cum sunt stâlpii din interiorul unui spaţiu bisericesc sau pereţii de compartimentare –, supraînălţarea acestora constituie reazeme intermediare. În ciuda naturii lor intuitive – sau chiar mai mult din cauza acesteia – aspectele conceptuale sunt foarte valoroase şi trebuie protejate. De exemplu, o intervenţie structurală care transformă o bară de agăţare într-un stâlp prin inserarea de reazeme se face în detrimentul autenticităţii (conceptuale structurale) şi poate fi considerat un păcat, precum înlocuirea unei ferestre baroce cu o fereastră modernă tripartită, cu geam termoizolant pe o faţadă.

2.2. Şi cine se ocupă de şarpante?

Studiul şarpantelor presupune o echipă pluridisciplinară, dar şi o abordare multicriterială. De la a uita total reprezentarea şarpantei în cazul unei secţiuni transversale sau longitudinale prin construcţie până la o modelare tridimensională este cale lungă. Dar cine ar trebui să se ocupe de şarpante? Lemnul fiind un material susceptibil la degradare biologică, şi a cărui proprietate este influenţată de mediul înconjurător, nu strică nici un biolog în echipă, un specialist în lemn, un dendrocronolog care să furnizeze informaţii suplimentare despre vârsta lemnului pus în operă. Pe lângă determinarea speciei lemnului, trebuie stabilite şi condiţiile de mediu, nivelul de degradare etc. Podul poate fi un spaţiu al tuturor, atât al arhitecţilor, cât şi al inginerilor constructori, istoricilor de artă etc.

Releveele şi tratatele vechi sunt realizate de meşteri dulgheri, istorici de artă, arhitecţi, puţini care să pună problema din punct de vedere al conformării structurale şi al eficienţei elementelor, folosirea tipurilor de îmbinări depinzând de intuiţia meşterilor, dar şi de uneltele folosite şi de răspândirea pieselor metalice. Documentele şi releveele vechi publicate, chiar şi în cazul celor considerate studii aprofundate despre construcţii medievale, nu menţionează deloc valoarea şarpantei.[14] Exemplul bisericii reformate din Dej, care are corzi pictate, situaţie rar întâlnită azi în România, indică că cei care le-au studiat la începutul şi în a doua parte a secolului al XX-lea, nu au fost sensibili la şarpante. Reprezentările vechi nu reflectă întocmai structura reală, dacă şarpanta nu a fost obiectul cercetării. Coperta de pe cartea despre Sebeş[15] ne-a indus în eroare multă vreme. Doar din întâmplare am ajuns în podul Bisericii evanghelice, unde am identificat două structuri cu valoare excepţională.[16] Reprezentările de la începutul secolului al XX-lea[17] ale Catedralei romano-catolice din Alba Iulia nu indică situaţia actuală a unei „banale" şarpante baroce.

14 Biserica reformată din Dej – este relevată de Şcoala superioară din Budapesta, releveele indicând o structură medievală.

15 Livia VARGA, *A szászsebesi evangélikus templom középkori építéstörténete*, Művészettörténeti füzetek 16. Cahiers d'histoire de l'art (Budapesta: Akadémiai Kiadó, 1984).

16 Prof. dr. ing. SZABÓ, printr-o adresă în anul 2012, a formulat obiecţii privind intervenţia excesivă asupra şarpantelor, prin care se distrugea atât conceptul structural, cât şi aspectul. În cadrul proiectului Patrimoniu Ascuns 2, structura având caracter romanic a fost datată în 2012.

17 Conform releveelor din arhiva Direcţiei Monumentelor Istorice de la Budapesta, întocmite de LUX Géza.

2. But why roof structures? Research premise

2.1. What is the roof structure? The boundary between appearance and structure

The complexity of cultural heritage has been debated for centuries. Smaller and larger groups, always with their own set of values, proclaim the "true" cultural heritage. The recognition of the cultural qualities of built heritage, i.e. the consensus on it, is quite topical, being accepted more by specialists than by the public, who is less interested in the subject.

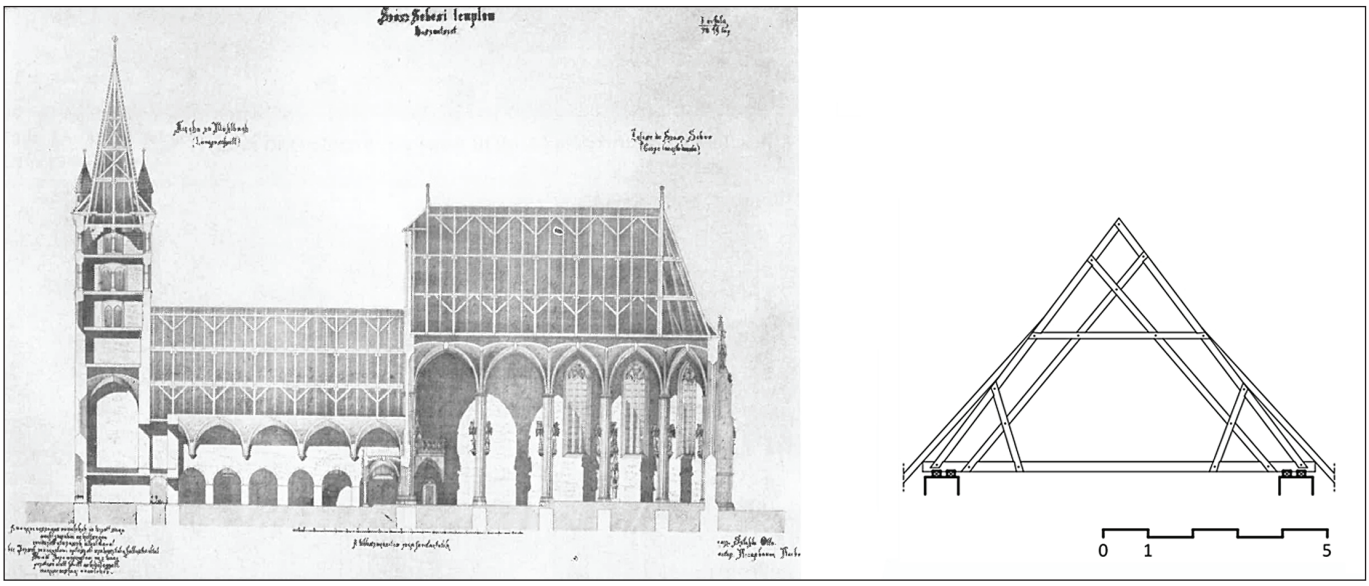
The values that define historic buildings, i.e. cultural resources, are constantly being corrected in time and space. More and more structural subensembles are being declared valuable. In addition to the established artistic components (mural paintings, painted wood, carved stone, iron, wrought iron), each structural subensemble is considered worthy of protection, firstly for its shape-related qualities, then for its content (materials, techniques) and finally for its conceptual qualities. The structural design – even if intuitively realized (and this may be an additional argument) – is particularly valuable and must therefore be protected. All these criteria also apply to the historic roof structures, as structural subensembles which are an integral part of the historic buildings and which, because of the limited access and low visibility, are often overlooked (except for the open roof structures).

However, the international literature is rich in treatises on various topics and specialities related to the historic roof structures, which, in addition to descriptions that focus more on shape than on the structural details of the taking over and transmission of actions, also include surveys of significant documentary value. Moreover, roof structures are real "black boxes"[13] of buildings, providing valuable information about the evolution of the construction techniques and the building itself, covering later interventions. Roof structures can have not only a utilitarian but also an aesthetic role! Through the shape of the roofs and the material of the roof covering, roof structures concretely define the appearance of a settlement.

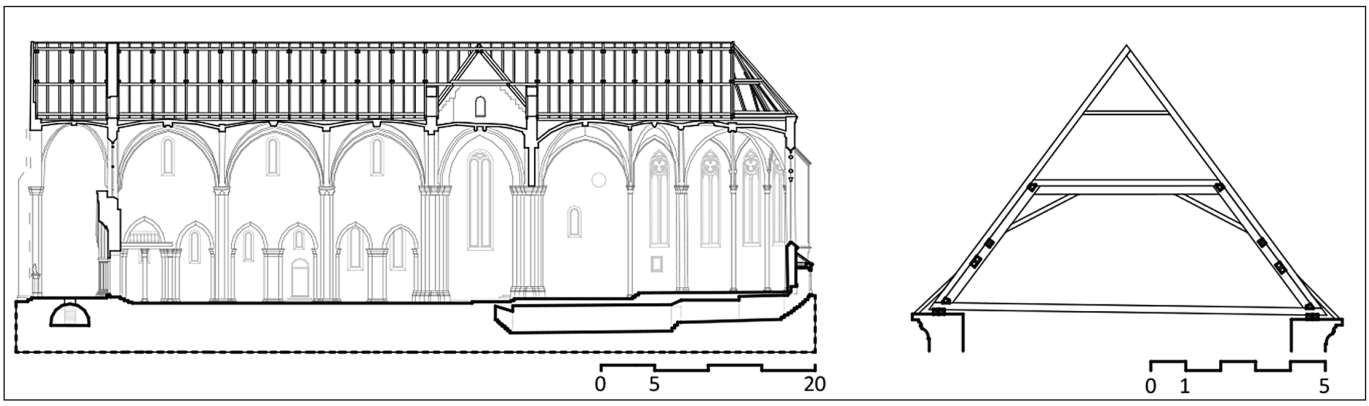
The roof structures as structural subensembles have the main role to support the covering material, which is essential for the upper protection of buildings. They thus reflect both the ingenuity and the level of technical culture of the era in which they were made. In the hidden spaces of these roof structures, one can discover a network

University of Leuven, Faculty of Engineering, Department of Civil Engineering); student Miquel Jorge MAGINA prepared the dissertation entitled "Historic timber roof structures" in 2018, under the guidance of Prof. Eng. CCHASTRE RODRIGUES PhD from Universidade Nova de Lisboa, Faculdade de Ciencias e Technologia.

13 Patrick HOFFSUMMER et al., *Charpentes d'Europe* ed. J. FREDDY (Namur: Institut du Patrimoine wallon (IPW), 2009).



■ ***Fig. 4.*** *Secțiune longitudinală prin Biserica evanghelică din Sebeș, ferma deasupra navei centrale.*
■ ***Fig. 4.*** *Longitudinal section of the Evangelical Church in Sebeș, typical frame.*



■ ***Fig. 5.*** *Secțiune longitudinală prin Catedrala romano-catolică din Alba Iulia, ferma principală deasupra navei centrale.*
■ ***Fig. 5.*** *Longitudinal section of the cathedral in Alba Iulia, main frame above the nave.*

of posts ingeniously jointed, designed to take over the various stresses depending on the type of covering and the direction of the wind or other combinations of actions. The roof pitch depends on the span of the covered area, the type of covering, as well as the architectural style of the period in which the roof was built. The roof span and pitch also lead to the need for transverse bracing of the common rafters and longitudinal bracing of the roofs.

Unlike engineered roof structures, historic roof structures transfer loads directly to the vertical load-bearing structures through the wall plates, without resting on the roof ceilings. In some cases, where there are interior structural elements – such as the columns inside a church or the separating walls – their elevations provide intermediary supports. Despite their intuitive nature – or even more because of it – the conceptual aspects are very valuable and must be protected. For example, a structural intervention that transforms a bar into a post by inserting supports is done at the expense of authenticity in terms of structural design, and can be considered a sin, such as replacing a Baroque window on a façade with a modern tripartite, insulated glass window.

Dispunem de informaţii valoroase şi datorită releveelor publicate de autori importanţi ai domeniului precum VIOLLET-LE-DUC,[18] OSTENDORF,[19] DENEUX,[20] BINDING[21] şi DEBRECZENI.[22]

Deşi dendrocronologia sau, altfel spus, metoda datării cu ajutorul inelelor anuale ale lemnului, începe să fie folosită în SUA la începutul anilor 1900, nu este răspândită pe o scară largă în rândul specialiştilor autohtoni nici după aproape un secol. Decizia de a efectua sau nu această cercetare depinde de şeful de proiect, istoricul de artă, inginerul implicat şi, nu în ultimul rând, de bugetul disponibil. Podul poate constitui un loc în care se desfăşoară activităţi de cercetare, atât pentru arheologii de clădire, cât şi pentru ingineri şi arhitecţi. Colaborarea între aceste specialităţi asigură nu doar informaţiile necesare în faza de cercetare – studii şi expertize, ci şi o restaurare integrată a întregii clădiri. Hai să urcăm cu toţii în pod!

18 Eugène Emmanuel VIOLLET-LE-DUC(1814-1879), un arhitect francez renumit mai ales pentru restaurarea edificiilor medievale.
19 Friedrich OSTENDORF s-a născut în Lippstadt, Westfalia, în 1871. În 1908 publică cartea intitulată *Die Geschichte des Dachwerks*, o lucrare de bază privind istoria tehnologiei construcţiilor. A fost un arhitect german, teoretician al arhitecturii, profesor universitar.
20 Henri DENEUX (1874-1969), arhitect francez, arhitect şef al monumentelor istorice însărcinat cu reconstrucţia structurii catedralei din Reims.
21 Günther BINDING (născut pe 6 martie 1936) este un istoric de artă german şi profesor emeritus de istoria artei şi conservarea urbană la Universitatea din Köln.
22 László DEBRECZENI (1903-1986) întocmeşte relevee ale bisericilor, unde reprezentarea şarpantelor este primordială, şi are rol documentar pentru multe edificii de cult. Pe lângă alte intervenţii, întocmeşte proiectul de consolidare a şarpantei peste corul bisericii reformate din Cetatea Târgu Mureş.

2.3. Schimbare de atitudine în abordarea şarpantelor

Înainte de 1989, a fost o perioadă când Facultatea de Construcţii a ignorat aproape complet lemnul ca material de construcţie. Materialul lemnos era întâlnit mai ales în realizarea cofrajelor şi eşafodajelor sau în construcţiile agro-zootehnice, fără a fi studiat serios ca material de construcţie. În aceste condiţii, este evident că nu s-a acordat atenţie nici studiului şarpantelor, în general, nici al celor istorice, în special, precum nici sensibilizării asupra valorilor structurilor portante. Dacă cineva era interesat de acest domeniu, trebuia să găsească altă sursă pentru informare şi documentare. Datorită politicii anticulturale din perioada comunistă şi a stării economice dezastruoase, monumentele istorice şi patrimoniul arhitectural din România se aflau într-o stare tehnică critică, fiind agravată de existenţa zonelor cu seismicitate ridicată din ţară. Laboratoarele din România nu au fost specializate în materiale tradiţionale, iar cercetările ştiinţifice legate de analiza structurală a clădirilor cu structuri tradiţionale, precum şi modelarea pe calculator a ansamblurilor structurale sunt rare şi depind de nivelul de expertiză al proiectanţilor.

După seria de Conferinţe Internaţionale de Reabilitare a Patrimoniului Construit – Tuşnad,[23] lansate ca un fel de curs de specializare în 1992, cu participarea unor lectori din străinătate şi unde sunt reprezentate aproape

23 Conferinţa Tusnad – Teoria şi practica reabilitării patrimoniului construit s-a desfăşurat începând din anul 1992 anual, iar din 2001 la doi ani, regulă perturbată de perioada pandemiei. Ultima ediţie jubiliară a avut loc în noiembrie 2022.



■ ***Fig. 6.*** *Cronologia evenimentelor principale de la Carta de la Atena până azi.*
■ ***Fig. 6.*** *Timeline – The main events from the Athens Charter until today.*

2.2. But who's in charge of the roof structures?

The study of roof structures requires a multidisciplinary team and a multi-criteria approach. It is a long way from completely forgetting the representation of the roof structure in the case of a building cross-section or longitudinal section to three-dimensional modelling. But who should oversee the roof structure? As wood is a material susceptible to biological decay, and whose properties are influenced by the environment, it does not hurt to have a biologist in the team, as well as a wood specialist, a dendrochronologist to provide additional information about the age of the wood used. In addition to determining the wood species, the environmental conditions, the level of decay, etc. must also be established. The attic can be a space for everyone, architects, civil engineers, art historians, etc.

The old surveys and treatises are made by master carpenters, art historians, architects, few of them to approach the structural conformation and the efficiency of the elements, as the use of the types of joints depends on the intuition of the craftsmen, as well as the tools used and the spread of metal parts. Old published documents and surveys, even when considered in-depth studies of medieval constructions, do not mention the value of the roof structure at all.[14] The example of the Reformed church in Dej, which has painted tie-beams, a rare situation in Romania today, indicates that those who studied them at the beginning and in the second part of the 20th century were not sensitive to roof structures. The old representations do not accurately reflect the actual structure, if the roof structure was not the object of the research. The cover of the book about Sebeş[15] has misled us for a long time. It was only by chance that we ended up in the attic of the Evangelical church, where we found two structures of exceptional value.[16] The early 20th-century representations[17] of the Roman-Catholic Cathedral of Alba Iulia do not show the current situation of an "ordinary" Baroque roof structure.

Valuable information is also available thanks to the published surveys by important authors in the field such as VIOLLET-LE-DUC,[18] OSTENDORF,[19]

14 The Reformed Church in Dej – The surveys made by the Budapest Superior School indicate a medieval structure.
15 Livia VARGA, *A szászsebesi evangélikus templom középkori építéstörténete*, Művészettörténeti füzetek 16. Cahiers d'histoire de l'art (Budapesta: Akadémiai Kiadó, 1984).
16 Prof. SZABÓ, in a letter from 2012, raised objections concerning the excessive intervention on the roof structures, which destroyed both the structural concept and the appearance. As part of the Hidden Heritage 2 project, the Romanesque structure was dated 2012.
17 According to the surveys in the archives of the Historic Monument Directorate of Budapest, drafted by LUX Géza
18 Eugène Emmanuel VIOLLET-LE-DUC (1814–1879), a French architect best known for restoring medieval buildings.
19 Friedrich OSTENDORF was born in Lippstadt, Westphalia, in 1871. In 1908 he published a book entitled *Die Geschichte des Dachwerks*, a seminal work on the history of building technology. He was a German architect, architectural theorist and university professor.

DENEUX,[20] BINDING,[21] and DEBRECZENI,[22]

Although dendrochronology, or, in other words, the method of dating using annual wood rings, began to be used in the USA in the early 1900s, it was not widely practiced by local specialists for almost a century. The decision whether to do this research depends on the project manager, the art historian, the engineer involved and, not least of all, the available budget. The attic can be a research site for building archaeologists, engineers and architects alike. Collaboration between these specialties ensures not only the information needed in the research phase – studies and surveys, but also an integrated conservation of the entire building. Let's all go up to the attic!

2.3. A change of attitude in the approach to roof structures

Before 1989, there was a time when the Faculty of Civil Engineering almost completely ignored wood as a building material. Timber was mainly used in formwork and scaffolding or in agricultural and zootechnical constructions, without being seriously studied as a building material. Under these circumstances, it is obvious that no attention was paid to the study of roof structures in general and historic roof structures in particular, nor to raising awareness of the values of load-bearing structures. If anyone was interested in this field, they had to find another source for information and documentation. Due to the anti-cultural policy of the communist period and the disastrous economic state, Romania's historic buildings and architectural heritage were in a critical technical condition, aggravated by the existence of high seismic zones in the country. Laboratories in Romania were not specialized in traditional materials, and scientific research related to the structural analysis of buildings with traditional structures, as well as computer modelling of structural ensembles, are rare and depend on the level of expertise of the designers.

After the series of International Conferences series on Built Heritage Conservation – Tuşnad,[23] launched as a kind of specialization course in 1992, with the participation of lecturers from abroad and where almost all specialties are represented, Professor SZABÓ considered it appropriate to organize

20 Henri DENEUX (1874-1969), French architect, chief architect for historic buildings in charge of the structural reconstruction of the cathedral of Rheims.

21 Günther BINDING (born on 6 March 1936) is a German art historian and professor emeritus of art history and urban conservation at the University of Cologne.

22 László DEBRECZENI (1903-1986) drafted church surveys, where the depiction of the roof structures was paramount, and had a documentary role for many places of worship. Beside other interventions, he drafted the design for the reinforcement of the roof structure over the chancel of the Reformed Church in the Citadel of Târgu Mureş.

23 The Tusnad Conference - Theory and Practice of Built Heritage Rehabilitation has been held annually since 1992, and every two years since 2001, a rule only disrupted by the pandemic period. The last jubilee edition took place in November 2022.

toate specialităţile, profesorul SZABÓ a considerat oportună organizarea unui for dedicat doar inginerilor. Astfel, în 1997 se organizează pentru prima dată Conferinţa de Structuri Portante Istorice,[24] [25] independent şi fără a avea informaţii despre seria SAHC lansată în 1995.

Acest simpozion a creat un cadru adecvat pentru abordarea problematicilor care au fost puţin detaliate în cadrul educaţiei universitare de specialitate referitoare la studiul materialelor şi tehnologiilor tradiţionale, precum şi la teoria şi calculul structurilor portante istorice. Ediţia a treia a fost deja dedicată şarpantelor istorice. În publicaţia lansată în cadrul Conferinţei din 1999, este inclusă o primă clasificare şi definire a şarpantelor. De atunci şi paralel, tema a devenit captivantă şi pentru mulţi alţii, însă s-a lucrat în paralel, fără a se cunoaşte informaţii despre activitatea diferitelor echipe de cercetare sau a diferitelor universităţi.

Pentru a asigura calitatea şi durabilitatea intervenţiilor, având în vedere atât criteriile de autenticitate, cât şi criteriile istorico-estetice, sunt necesari ingineri constructori specializaţi în reabilitarea structurilor portante istorice, atât în faza de expertizare, cât şi în fazele de proiectare şi execuţie. Pentru a cunoaşte rezultatele obţinute în ţară şi pentru a compara modalităţile de abordare, organizarea şi continuarea acestui simpozion s-a dovedit a fi absolut necesară.

Informaţiile culese prin documentarea bisericilor cu componente artistice valoroase sau abandonate au permis ordonarea şarpantelor în diferite categorii şi grupe. Un jalon important a fost vizita echipei împreună cu dl. profesor în Marea Britanie din anul 1999,[26] cu oportunitatea de a compara

24 Seria de Conferinţe de Structuri Portante Istorice a demarat la doi ani după ce s-a lansat prima serie de SAHC – conferinţă internaţională axată pe restaurarea structurilor de patrimoniu.

25 Schema a fost prezentată în cadrul întâlnirii anuale ISCARSAH, care în 2024 a avut loc în Bucureşti, de către dr. ing. Imola KIRIZSÁN, dr. Dorottya MAKAY: Historic Load-Bearing Structures (Based on Empirical-Intuitive Concepts) – Between the Expectations of Conservators and Standardization Requirements in Romania.

26 Programul de pregătire în cadrul ACTT – Programul Transnaţional de Specializare în Reabilitarea Patrimoniului Construit, Aiud, în perioada 10 iulie-8 august 1999.



■ ***Fig. 7.*** *Reconstrucţii de şarpante – exemplu din Ungaria, vizitat în anul 1999. Acest concept este preluat la reconstruirea şarpantelor de la Bonţida prin „conceptul baroc din dulapi" 2000. Reconstruirea şarpantei la clădirea „Miklós" Bonţida cu concept baroc, 2005. Acoperiş de protecţie la ruinele bisericii reformate din Păuca 2022. (© Mossfern)*

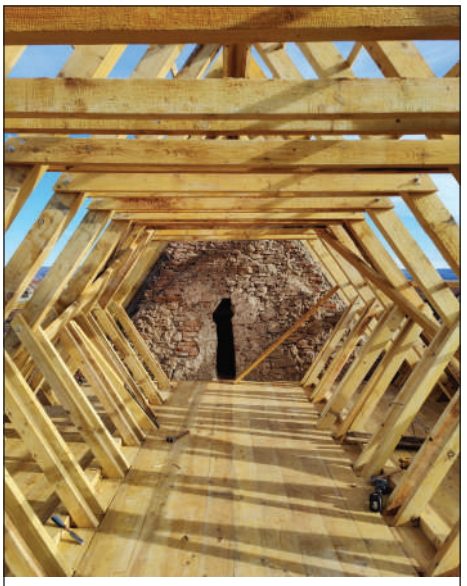
■ ***Fig. 7.*** *Reconstructions of roof structures. Example from Hungary, 1999. This concept is taken up in the reconstruction of the Bonţida roofs with the "Baroque in the boards". Reconstruction of the Miklós wing, in Bonţida with a Baroque concept. Protective roof on the ruins of the Reformed church in Păuca 2022. (© Mossfern)*

structurile continentale cu cele de coastă. Cele din ultimă, deschise, fără coardă, puteau fi considerate ca nişte bărci întoarse, rigidizate eficient la acţiuni dinamice. Contrar acestora, şarpantele continentale, în special cele transilvănene, abundă în lemn – dimensiuni secţionale, lungimi mari şi aproape deloc şarpante deschise şi astăzi.

Dacă urmărim exemple mai vechi de intervenţii la acoperişuri, se observă frecvent înlocuirea integrală a şarpantei, deoarece, în lipsa întreţinerii la timp şi de calitate, prin învelitoarea degradată apa care se infiltrează din precipitaţii cauzează degradări biologice extinse. Neavându-se încredere în şarpantele istorice, multe dintre acestea au fost înlocuite integral, păstrându-se eventual câteva elemente din structurile vechi, demonstrate de amprentele acoperişurilor pe zid sau a îmbinărilor pe elementele păstrate. Alte abordări presupun refolosirea doar a unor elemente în funcţie de conceptul şarpantei istorice sau dublarea elementelor şi introducerea de structuri auxiliare. Alt „exces" este când nu se intervine deloc, şi învelitoarea se înlocuieşte fără să se revizuiască structura.

Neexistând for specializat între 1977-1989 şi religiile fiind negate în perioada comunismului, lucrările la acoperişul bisericilor au fost făcute fără autorizaţii, fără proiect sau calcule structurale. De asemenea, nefiind la vedere, intervenţiile au fost realizate punctual, fără a se ţine cont şi de valoarea artistică şi istorică a şarpantelor, după care nu s-au efectuat nici minimele întreţineri, depunerile de păsări şi rămăşiţele lor constituind teren favorabil pentru agenţi biotici – fungi şi insecte xilofage.

Sensibilitatea crescută şi înţelegerea intuitivă a şarpantelor se oglindeşte şi în proiectele curente şi în execuţiile în curs, dar şi în publicaţiile din ce în ce mai consistente la nivel mondial pe această temă.[27] Restaurările de anvergură în cadrul proiectelor finanţate din fonduri europene pun accent şi pe valorificarea şarpantelor şi accesibilizarea acestora pentru un public mai restrâns.[28] Modul de intervenţie la nivelul şarpantelor diferă în funcţie de echipa care pregăteşte sau care implementează intervenţia. Principiul intervenţiei minimale rămâne o regulă valabilă. Astfel, se păstrează cât de mult posibil materialul istoric, eliminându-se sau nu porţiunile degradate şi asigurându-se continuitatea elementului eliminat prin diferite tipuri de îmbinări de prelungire. Iniţial, studiile şi/sau expertizele biologice prevedeau eliminarea porţiunii degradate prin cioplire, azi se pune accent şi mai puternic pe componentele intangibile ale şarpantei: amprente de unelte, semne, marcaje, şi nu se mai recomandă, de exemplu,



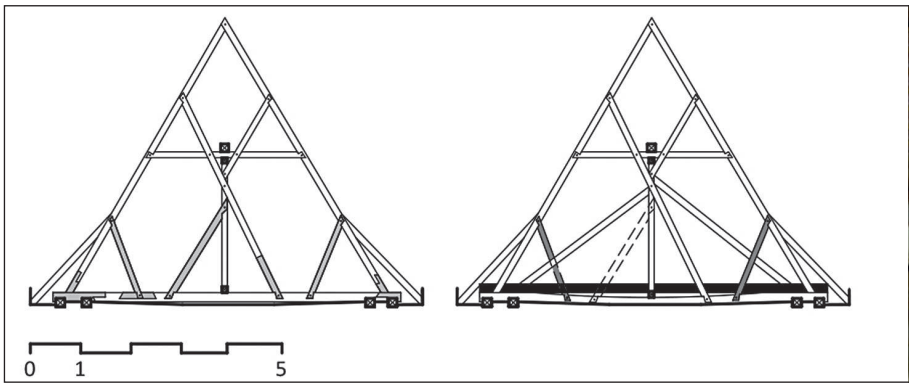


■ ***Fig. 8.*** *Păstrarea unor ferme – Rădeşti. Şarpanta nouă are pantă mai mare şi se refolosesc elemente din structura iniţială. © Mossfern*

■ ***Fig. 8.*** *Preservation of certain trusses – Rădeşti. The new roof has a steeper slope and reuses elements from the original structure. © Mossfern*

27 După anul 2010 apar ca şi teme de cercetare şi la alte facultăţi din ţară, de exemplu tezele de doctorat conduse de prof. dr. ing. Marius MOŞOARCĂ din cadrul UP Timişoara sau cercetarea structurală a bisericilor din lemn.

28 Cu ocazia proiectului *Les toits de l'Europe* a existat o intenţie de a crea reţeaua şarpantelor europene deschise publicului. Deschiderea şarpantelor pentru publicul larg pune probleme de securitate la incendiu, privind combustibilitatea structurii şi modalitatea de evacuare.





■ ***Fig. 9.*** *Şarpanta din Maiad, judeţul Mureş a fost restaurată în anul 2001 în cadrul proiectului BHCT (Built Heritage Conservation Training).*

■ ***Fig. 9.*** *Roof structure in Maiad, Mureş County, was restored in 2001 within the BHCT (Built Heritage Conservation Training) program.*

a forum dedicated only to engineers. Thus, in 1997 the Conference on Historic Load-Bearing Structures was organized for the first time,[24] [25] independently and with no data about the SAHC series launched in 1995.

This symposium has created an appropriate framework for addressing issues that have been little explored in specialized undergraduate education relating to the study of traditional materials and technologies, as well as the theory and calculation of historic load-bearing structures. Its third edition has already been devoted to historic roof structures. The publication launched at the 1999 Conference contains a first classification and definition of the roof structures. Since then, and concurrently, the topic has become exciting for many others, but the work has been carried out in parallel, without any information about the work of different research teams or universities.

To ensure the quality and durability of interventions, considering both authenticity and historical-aesthetic criteria, civil engineers specialized in the rehabilitation of historic load-bearing structures are needed, both in the assessment phase and in the design and execution phases. The organization and continuation of this symposium were necessary to know the results obtained in the country and to compare the different approaches.

The information gathered through the documentation of abandoned churches or churches with valuable artistic components allowed the ordering of the roofs into different categories and groups. An important milestone was the visit of the team led by Professor SZABÓ to Great Britain in 1999,[26] with the opportunity to compare continental and coastal structures. The latter, as open roof structures, without tie-beams, could be thought of as upturned boats, effectively braced for dynamic actions. To the contrary, continental roof structures, especially from Transylvania, abound in timber - sectional sizes, long lengths and almost no open roof structures even today.

When looking at older examples of roof interventions, it is common to replace the entire roof structure because, in the absence of timely and quality maintenance, water seepage from rainfall through the degraded covering causes wide biological decay. As there was no trust in the historic roof structures, many of them were entirely replaced. Some elements of the old structures were sometimes retained, justified by roof imprints on the wall or joints on the preserved elements. Other approaches involve reusing only some elements accordcioplirea alburnului în cazul elementului de stejar. Se prevăd din ce în ce mai puţine scoabe la rigidizarea nodurilor şi nici piesele metalice nu mai sunt obligatorii la rigidizarea acestora.

Un proiect de cercetare de amploare a avut loc în 2006, cu scopul de a sublinia protecţia valorilor proprii de patrimoniu ale structurilor portante istorice din lemn, al cărui rezultat este formularea unui chestionar pentru analiza detaliată a şarpantelor istorice. Au urmat proiectele *Patrimoniu Ascuns* 1-2, care, cu participarea studenţilor arhitecţi, au surprins şi imagini artistice ale şarpantelor prezentându-le într-o expoziţie.

3. Șarpantele istorice europene și din Transilvania

3.1. Tipologii de şarpante, clasificarea şarpantelor

Nu există o clasificare unitar acceptată pentru şarpante la nivel mondial, dar nici la nivel european. OSTENDORF în cartea lui vorbeşte despre şarpante germanice sau romane. BINDING analizează tipurile de şarpante, în special în funcţie de perioada în care acestea au fost construite şi diferenţiază şarpantele pe căpriori (Sparrendach) şi cele pe pane (Pfettendach). HOFFSUMMER şi echipa lui din Belgia analizează şarpantele în funcţie de anul construirii şi de forma fermelor principale, în special. Site-ul roofs.cz şi cartea recent publicată a colegilor din Cehia[29] prezintă şarpantele pe ferme şi şarpantele pe sisteme planare, unde este important şi modul în care se realizează rigidizarea. O altă clasificare interesantă este bazată pe influenţa formei acoperişului şi a spaţiului interior.[30]

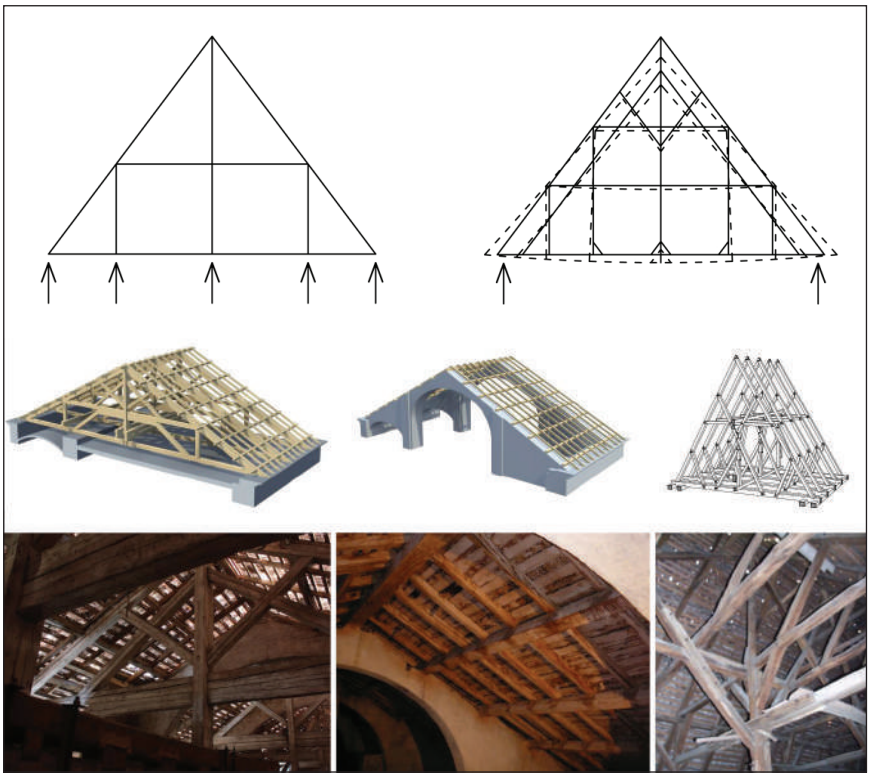
24 The Historic Load-Bearing Structures Conference Series started two years after the launch of the first SAHC series - an international conference focused on the conservation of heritage structures.

25 The scheme was submitted during the annual meeting of ISCARSAH, which took place in Bucharest in 2024, by Eng. Imola KIRIZSÁN PhD, Eng. Dorottya MAKAY PhD: Historic Load-Bearing Structures (Based on Empirical-Intuitive Concepts) – Between the Expectations of Conservators and Standardization Requirements in Romania.

26 In the framework of the ACTT – Aiud Conservation Transnational Training Programme, from 10 July to 8 August 1999.

29 Jiří BLÁHA et al., *Atlas historických krovů České Republiky* (ITAM ARCCHIP, Telc 2020).

30 Andrée CORVOL-DESSERT et al., *Les charpentes du XIe au XIXe siècle: typologie et* évolution *en France du Nord et en Belgique* (Paris: Cahiers du patrimoine, 1962).



■ ***Fig. 10.*** *Comparația celor două sisteme, ingineresc și istoric, respectiv pe pane și pe ferme cu traverse.*
■ ***Fig. 10.*** *Comparison between the two systems, engineered and historical, on purlins and collars.*



■ ***Fig. 11.*** *Şarpante cu caracter romanic, gotic, baroc şi eclectic.*
■ ***Fig. 11.*** *Romanesque, Gothic, Baroque and eclectic roof structures.*

A fost iniţiată[31] [32] crearea unei baze de date pentru analiza şi evaluarea şarpantelor istorice, având rolul de a colecta cantităţi semnificative de date despre daune şi vulnerabilităţi tipice, de a defini tipurile structurale (luând în considerare patrimoniul construit european) şi de a stabili o taxonomie a daunelor. Aceasta urmăreşte să ofere o abordare unificată a evaluării degradărilor structurale, să sprijine analiza pe mai multe niveluri (inspecţie vizuală, teste *in situ*, teste de laborator etc.) şi să distingă între degradarea materialului şi daunele mecanice.

Însă o clasificare fundamentală este cea în şarpante istorice şi inginereşti.

Şarpantele istorice sunt realizate din lemn după o concepţie de structură portantă empirico-intuitivă, fără suport teoretic ingineresc, sunt caracterizate prin rezemarea exclusivă pe subansamblurile portante de susţinere (pereţi portanţi, stâlpi, coloane), dispuse de regulă pe conturul exterior al clădirilor, fără să fie sprijinite pe subansambluri portante de planşee.

În Transilvania, sunt caracteristice tipurile de şarpante istorice specifice regiunilor aflate la nord de Alpi, şarpante preponderent continentale, care pot fi încadrate, conform unor criterii stabilite, în patru sisteme istorice de şarpante, cu influenţe romanice, gotice, baroce şi eclectice. Denumirile folosite sunt cele specifice şcolii coordonate de prof SZABÓ, şi le-am comparat şi prin prisma publicaţiilor mai multor autori.[33] (Tabel 2)

31 În cadrul unui proiect de cercetare COST Action.

32 Anna SERAFINI, M. RIGGIO şi C. GONZÁLEZ-LONGO, „A database model for the analysis and assessment of historic timber roof structures," *International Wood Products Journal* (2017): 3-8.

33 Într-un fel, această abordare răspunde criticilor unor istorici de artă care contestă utilizarea stilurilor arhitecturale pe structuri construite mult după perioada în care aceste stiluri erau contemporane.

ing to the historic roof structure concept or doubling elements and introducing auxiliary structures. Another "excess" is when no intervention is made at all, and the covering is replaced without revising the structure.

As there was no specialized forum between 1977 and 1989 and religions were denied during the communist period, church roof works were done without permits, without any design or structural calculations. Also, as they were not visible, the interventions were carried out locally, without considering the artistic value of the roof structures, after which no minimal maintenance was carried out, as the bird deposits and their remains constituted a favourable breeding ground for biotic agents - fungi and xylophagous insects.

Raised awareness and intuitive understanding of roof structures is mirrored in current designs and ongoing executions, as well as more and more international literature on the topic[27]. Large-scale restorations in EU-funded projects also focus on enhancing the roof structures and making them accessible to a limited public[28]. The way of interven-

27 After 2010, research on the topic also appears at other faculties in Romania, for example the doctoral theses supervised by Prof. Eng. Marius MOŞOARCĂ PhD of UP Timişoara, or structural research of wooden churches.

28 During the *Les toits de l'Europe* project there was an intention to create a network of European roof structures open to the public. Opening the roof structures to the public raises fire safety issues related to the combustibility of the structure and evacuation possibilities.

tion on the roof structures differs depending on the team preparing or implementing the intervention. The principle of minimal intervention remains a valid rule. Thus, the historic material is preserved as much as possible, with or without removing the degraded portions and ensuring the continuity of the removed element through different types of extension joints. Initially, biological studies and/or surveys provided for the removal of the degraded portion by chipping. Today there is an even stronger emphasis on the intangible components of the roof structure, i.e., tool marks, signs, markings, and it is no longer recommended, for example, to chip the sapwood in the case of the oak element. Fewer and fewer staples are used when bracing the joints, and metal parts are no longer mandatory when reinforcing them either.

A large-scale research project took place in 2006. Its aim was to emphasize the protection of the heritage values of historic timber load-bearing structures themselves. The project output was the drafting of a questionnaire form for the detailed analysis of historic roof structures. This was followed by the Hidden Heritage 1 and 2 projects. With the participation of student architects, artistic images of the roof structures were captured and displayed in an exhibition under these projects.

3. European and Transylvanian historic roof structures

3.1. Roof structure typologies, roof structure classification

There is no generally accepted classification for roof structures worldwide or at least at the European level. OSTENDORF in his book talks about Germanic or Romanesque roofs. BINDING analyses the types of roof structures based on the period in which they were built and differentiates between common rafter (Sparrendach) and purlin (Pfettendach) roof structures. HOFFSUMMER and his team in Belgium analyse roof structures mainly according to the year of construction and the shape of the main trusses. The roofs.cz website and the recently published book by colleagues in the Czech Republic[29] talk about roof structures on trusses and roof structures on bracing frames, where there is a focus also on the way in which the bracing is achieved. Another interesting classification is based on the influence of the shape of the roof and of the interior space.[30]

The creation of a database for the analysis and assessment of historic roof structures has been initiated[31] [32] to collect significant amounts of data on typical damage and vulnerabilities, to define structural types

29 Jiří BLÁHA et al., *Atlas historických krovů České Republiky* (ITAM ARCCHIP, Telc 2020).

30 Andrée CORVOL-DESSERT et al., *Les charpentes du XIe au XIXe siècle: typologie et évolution en France du Nord et en Belgique* (Paris: Cahiers du patrimoine, 1962).

31 Under a COST Action research project.

32 Anna SERAFINI, M. RIGGIO and C. GONZÁLEZ-LONGO, "A database model for the analysis and assessment of historic timber roof structures," *International Wood Products Journal* (2017): 3-8.

Aceste tipuri de şarpante diferă în funcţie de forma fermelor, de modul în care se realizează rigidizarea transversală şi de soluţiile adoptate pentru rigidizarea longitudinală a ansamblului.

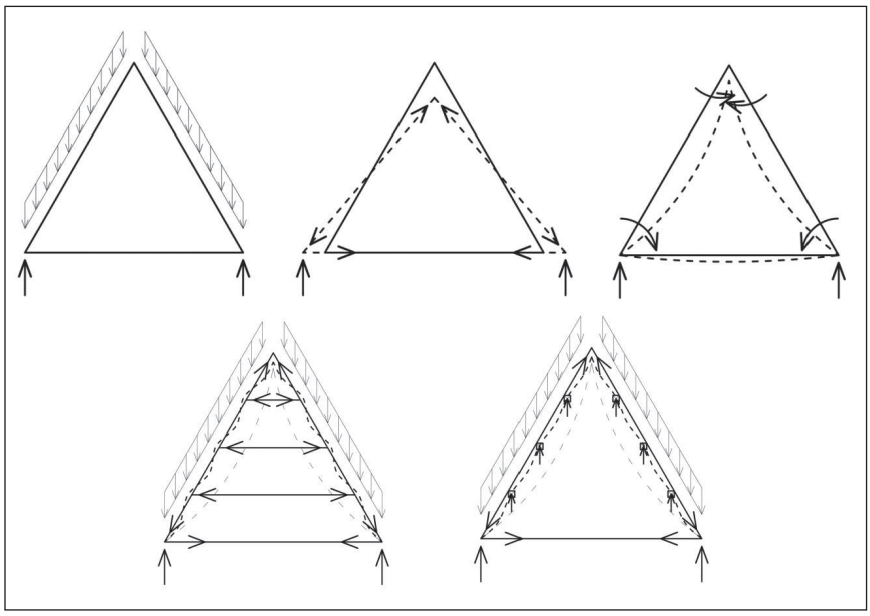
Şarpantele pe căpriori şi corzi sunt de complexitate pronunţată, apte pentru acoperirea tramelor de dimensiuni mari. Acestea sunt structuri portante spaţiale cu împingeri, formate din bare dispuse pe contururi triunghiulare (căprior – coardă – căprior), acţiunile gravitaţionale fiind defalcate în componente înclinate de compresiune – pe direcţia căpriorilor – echilibrate de întinderea corzii şi de reacţiunea cosoroabelor.

Şarpantele pe pane sunt acele şarpante care asigură reducerea încovoierii căpriorilor prin reazeme intermediare asigurate de pane, care, prin rigiditatea lor la încovoiere, transmit acţiunile căpriorilor către dispozitivele de tensionare sau de tensionare-suspendare. În cadrul acestora, fermele secundare fără corzi (auto-echilibrarea nefiind posibilă) se descarcă pe fermele principale inclusiv prin pane. Este sistemul preferat al şarpantelor de coastă, inclusiv al şarpantelor continentale cu caracter eclectic.

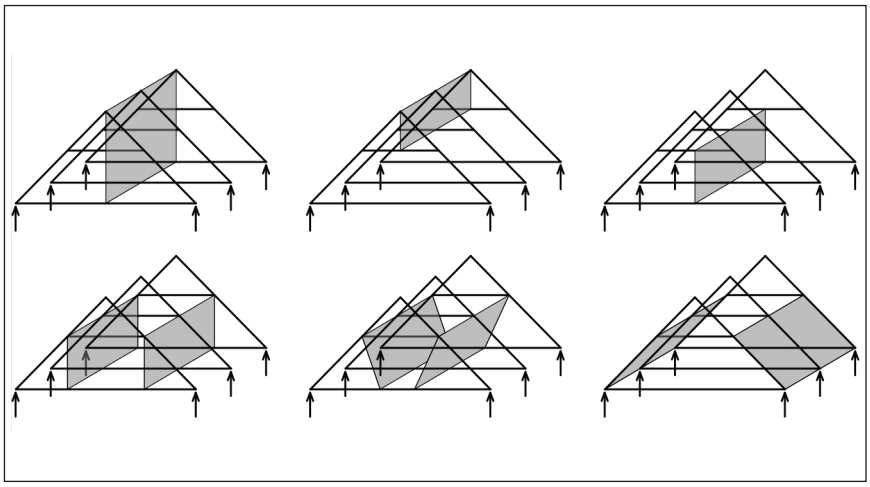
Şarpantele istorice pe grinzi sunt de complexitate redusă, susţinând acoperişuri într-o apă sau în două ape, sunt realizate din grinzi principale dispuse longitudinal, rezemate pe subansambluri portante de susţinere transversale. Aceste ferme din urmă sunt alcătuite astfel încât să permită grinzilor principale asigurarea inclusiv a pantei sau a coamei acoperişului. Subansamblurile portante de susţinere sunt realizate din pereţi, din cadre de lemn sau din zidărie. Grinzile principale pot susţine elemente portante secundare dispuse după direcţia pantei acoperişului. Sistemul lucrează prin încovoierea grinzilor principale.

Şarpanta istorică pe traverse are şi aceste elemente orizontale pe lângă căpriori şi corzi, în care deschiderea căpriorilor este diminuată prin traverse dispuse între căpriori, încovoierea căpriorilor fiind redusă prin rigiditatea la compresiune a traverselor. Fermele secundare – dispunând de regulă de corzi – sunt capabile de auto-echilibrare şi astfel este posibil ca cei doi căpriori să se echilibreze reciproc, fără a se descărca pe fermele principale. Acesta este sistemul preferat al şarpantelor continentale cu caracter romanic, gotic şi baroc. Studiul acestor tipuri de şarpante se realizează folosind diferite proporţii ale fermelor[34] sau studii comparative

34 Peter KRUSINSKY publică articole care se axează pe analiza geometrică şi statică a fermelor şarpantelor din Slovacia şi Cehia.



■ ***Fig. 12.*** *Scheme de tipuri de șarpante, șarpante specifice pe traverse și pe pane, modul de lucru.*
■ ***Fig. 12.*** *Layouts of different roof structure types, specific roof structures on collars and on purlins, structural behaviour.*



■ ***Fig. 13.*** *Scheme de rigidizare longitudinală.*
■ ***Fig. 13.*** *Longitudinal bracing schemes.*

ale şarpantelor reprezentate prin axe, ferme principale, secundare şi rigidizarea longitudinală în cazul şarpantelor din Franţa, Belgia,[35] Austria,[36] Slovacia, Republică Cehă[37] sau regiuni ale Europei Centrale cu vorbitori de limbă germană.[38]

Rigidizarea cea mai simplă a perechii de căpriori se realizează prin introducerea de legături pe orizontală – prin traverse a căror poziţie depinde şi de panta şi de deschiderea acoperişurilor. Prin intermediul unui „joc intelectual", reasamblarea şarpantelor presupune identificarea rolului fiecărui element, de la fermele goale până la poziţionarea diverselor componente orizontale şi înclinate, în vederea reducerii deformării căpriorului.

3.3. Intervenţii la şarpante istorice

La fel cum clasificarea şarpantelor nu este unitară, nu există o abordare unanim acceptată în ceea ce priveşte intervenţiile asupra acestora. Când discutăm despre intervenţii la şarpante, acestea trebuie considerate ca parte a structurii portante, având specificităţi datorate materialului lemnos, susceptibil la degradare, şi purtând valori de patrimoniu. Reglementările tehnice apar şi ele după anii 1990 sub diferite forme pentru acest domeniu – norme, ghiduri, standarde. În lipsa unor reglementări naţionale specifice „apelăm" la reglementări internaţionale[39] sau, din 2007, la reglementări europene, unele chiar recent traduse în limba română şi adaptate.[40]

35 Andrée CORVOL-DESSERT et al., „Roof Frames from the 11th to the 19th Century." în *Typology and Development in Northern France and in Belgium Analysis of CRMH Documentation*, ed. Patrick HOFFSUMMER, Architectura Medii Aevi Vol. III (Turnhout: Brepols Publishers, 2009).

36 Hermann FUCHSBERGER, *Mittelalterliche Dachkonstruktionen in Österreich* (Steiermark, 2020).

37 www.roofs.cz şi Jiří BLÁHA et al., *Atlas historických krovů* České *Republiky* (ITAM ARCCHIP, Telc 2020).

38 Philip CASTON, „Historic Roof Trusses between 1500 and 1700 in German-speaking Central Europe: Documentation, Analysis, and Development," *Proceedings of the Second International Congress on Construction History,* Vol. 1 (Cambridge, 2006): 579-597.

39 Pe parte de patrimoniu, Carta de la Veneţia (1964), Carta de la Nara (1994) privind autenticitatea, Principiul intervenţiilor la structuri de lemn (1999) sau Patrimoniul din lemn (2017), setul de standarde italieneşti UNI – 111138, 11119, 11161; proiecte COST etc.

40 SR EN 17121/2020 – Conservarea patrimoniului cultural. Structuri de patrimoniu din lemn. Linii directoare referitoare la evaluarea *in situ* a structurilor portante din lemn, SR 13561/2013 Patrimoniu cultural. Artefacte din lemn. Structuri portante. Inspecţii *in situ* pentru diagnosticarea elementelor de lemn.

(considering the European built heritage) and to establish a taxonomy of damage. It aims to provide a unified approach to the assessment of structural damage, to support multi-level analysis (visual inspection, *in situ* tests, laboratory tests, etc.) and to distinguish between material degradation and mechanical damage.

However, a fundamental classification is that into historic and engineered roof structures.

The historic roof structures are built of timber according to an empirical-intuitive load-bearing structure concept, without engineered theoretic support. They are characterised by their resting exclusively on the supporting load-bearing sub-units (load-bearing walls, pillars, columns), usually placed on the external outline of the buildings, without resting on slab load-bearing sub-units.

The historic roof structures that can be found in Transylvania are the types specific to the regions north to the Alps, i.e., mainly continental, which can be classified, based on established criteria, in four historic frame systems for roof structures, with Romanesque, Gothic, Baroque and eclectic influences. The names used are those specific to the school coordinated by Prof. SZABÓ, and we have also compared them based on the publications of several authors.[33] (Table 2) These types of roof structures differ according to the shape of the frames, the way in which the transverse bracing is achieved and the solutions adopted for the longitudinal bracing of the ensemble.

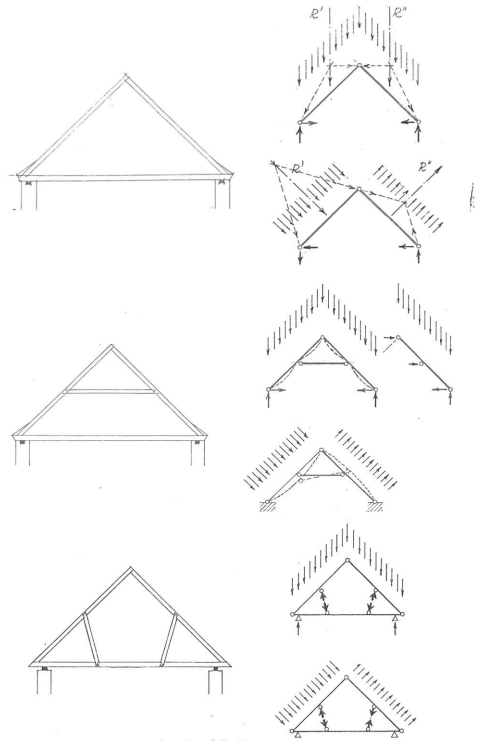
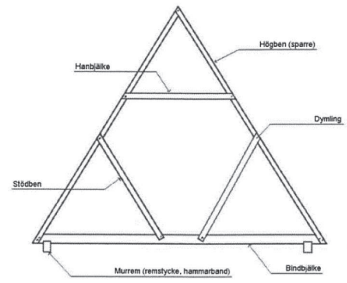
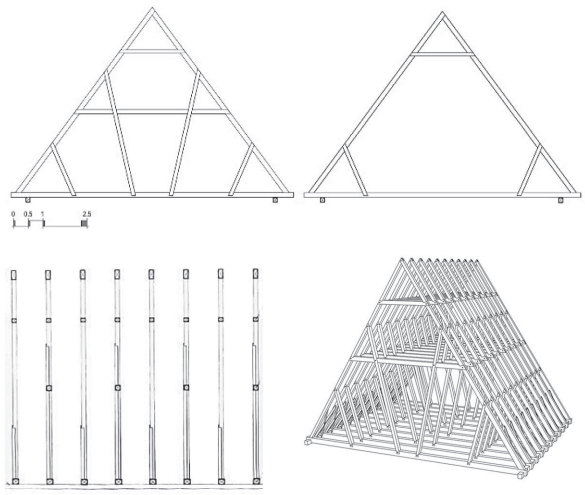
The historic roof structures on common rafters and tie-beams are of high complexity, able to cover layouts of large sizes. They are spatial load-bearing structures with thrusts, made up of elements placed according to triangular outlines (common rafter – tie-beam – common rafter), gravity actions being divided into slanted compression components – on the common rafter direction – balanced by the stretching of the tie-beam and by the wall plate reaction.

Historic roof structures on purlins are roof structures that ensure the reduction of bending in the common rafters through intermediate supports ensured by purlins, which, being rigid to bending, transmit the actions from the common rafters to the straining trusses or straining-hanging trusses. The secondary trusses lacking tie-beams (their self-balancing not being possible) discharge on the main trusses including also through purlins. This is the system favored in coastal-type roof structures, and also in continental eclectic roof structures.

The historic roof structures on beams are of low complexity, supporting half-pitched or pitched roofs, made of main beams placed longitudinally, and resting on cross supporting load-bearing sub-units. These latter trusses are conformed to allow the main beams to ensure both the pitch and the ridge of the roof. The supporting load-

33 In a way, this approach responds to the criticism of some art historians who question the use of architectural styles on structures built long after the period when these styles were contemporary.

■ ***Tabel 1.*** *Tipuri de șarpante.*
■ ***Table 1.*** *Roof structure type.*

Roof structure type Tip șarpante	**Author*/ References** Autor*/ Referință bibliografică	**Features, description** Caracteristici, descriere	**Represention** Reprezentare
Romanesque (Roof structures of Romanesque buildings) Romanice (șarpantele clădirilor romanice)	PATTANTYUS-ÁBRAHÁM Ádám / (27)	**Roof structures built between the 11th and the 16th centuries, with pitch varying from one century to another between 35º to 50º. As the span increases, so do the stresses in the component elements, so increases in sectional dimensions are also required. They become inefficient, thus new bracing elements such as collar beams, angle braces or compound rafters are required.** Șarpante construite în perioada sec. XI-XVI, iar panta lor variază de la un secol la altul de la 35º până la 50º. Odată cu creșterea deschiderii cresc inclusiv solicitările în elementele componente, deci se impun și creșteri ale dimensiunilor secționale. Acestea devin ineficiente, astfel se impune introducerea unor noi elemente de rigidizare, precum traverse, colțari sau arbaletrieri.	
	Carl THELIN / (36)	**Roof structures made of trusses consisting of a pair of common rafters, tie-beam and additional transverse bracing through collar beams, angle braces. They have no additional longitudinal bracing.** Șarpante alcătuite din ferme formate din pereche de căpriori, coardă și rigidizare suplimentară transversală prin traverse, colțari. Nu dispun de rigidizare longitudinală suplimentară.	
Romanesque, with Romanesque character Romanice, cu caracter romanic	SZABÓ Bálint, et al./ (2, 22, 30, 31, 32)	**Roof structures that are made of a single type of frame, without longitudinal bracing, which is achieved through the lathes, or the planking that supports the covering. The roof pitch is about 30-50º. As bracing of the triangle formed by common rafters and tie-beam, collar beams, angle braces, and compound rafters appear. This concept persists until the 19th century in vernacular buildings.** Șarpante care sunt realizate dintr-un singur tip de fermă, fără rigidizare longitudinală, aceasta fiind realizată prin șipcile, respectiv astereala care susține învelitoarea. Panta acoperișului este de cca 30-50º. Ca rigidizare a triunghiului format din căpriori și coardă apar traverse, colțari, arbaletrieri. Acest concept persistă până în secolul al XIX-lea, la construcții vernaculare.	

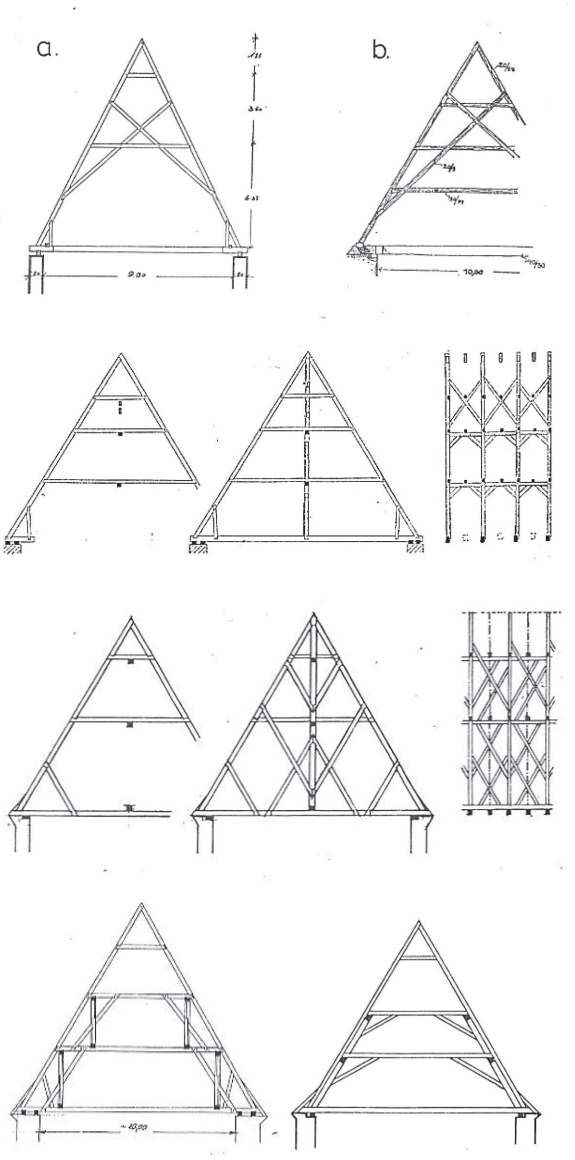
* Sunt analizate tratatele, publicațiile acelor autori care abordează diferitele tipuri de șarpante. De exemplu, nu se menționează separat teza de doctorat a lui György FÁTRAI, din 2004, pentru că preia denumirile de șarpante gotice sau cu caracter gotic, baroce sau cu caracter baroc, și eclectice după dr. Bálint SZABÓ.
* The treatises, publications of those authors who deal with the different types of roofs are analysed. For example, the doctoral thesis by György FÁTRAI (2004) is not mentioned separately, because it uses the terms Gothic, Baroque, and eclectic roof structures after Bálint SZABÓ PhD.

Gothic
Roof structures built during the Gothic period, Gotice
Șarpante construite în perioada gotică

PATTANTYUS-ÁBRAHÁM Ádám/ (27)

Gothic roof structures are of several kinds: steeper-pitched roofs with X bracing, but with only one type of frame, Gothic roof structures with independent longitudinal bracing systems (13th-15th centuries), the roof structures of hall churches (14th-16th centuries), early roof structures on chairs and collar beams (15th-16th centuries), roof structures with slanted chairs (15th-16th centuries)

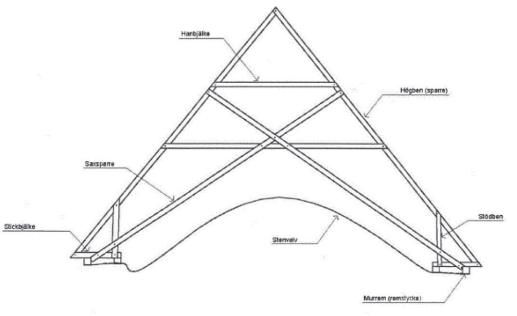
Șarpantele gotice sunt de mai multe feluri: șarpante cu pante mai mari cu contravântuire în X, dar cu un singur tip de fermă, șarpante gotice cu sisteme de rigidizare longitudinale independente (sec. XIII-XV), șarpantele bisericilor hală (sec. XIV-XVI), șarpantele timpurii pe scaune și traverse (sec. XV-XVI), șarpante cu scaune înclinate (sec. XV-XVI)



Carl THELIN/ (36)

Roof structures made of trusses and a pair of common rafters, without tie-beam due to the geometry of the walled vault, and additional transverse bracing through collar beams, angle braces, St. Andrew's cross brace. The difference with the Romanesque roof structures is the absence of the tie-beam.

Șarpante alcătuite din ferme și din pereche de căpriori, fără coardă din cauza geometriei bolții zidite, și rigidizare suplimentară transversală prin traverse, colțari, contravântuire în cruce Sf. Andrei. Diferența față de șarpantele romanice este inexistența corzii.

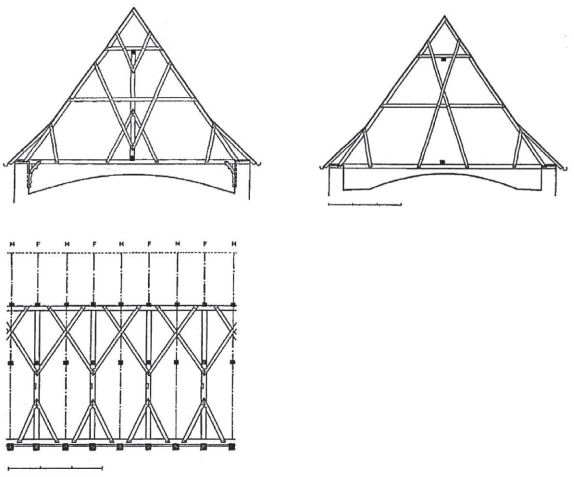


Gothic
Gotice, cu caracter gotic

POMOZI István/ (28)

Gothic roof structures are rigid load-bearing structures composed of trusses placed perpendicular to the longitudinal axis of the building, with the longitudinal bracing system perpendicular to them. These structures can be studied according to the arrangement of the trusses and their type, the number of longitudinal grids and the mode of bracing.

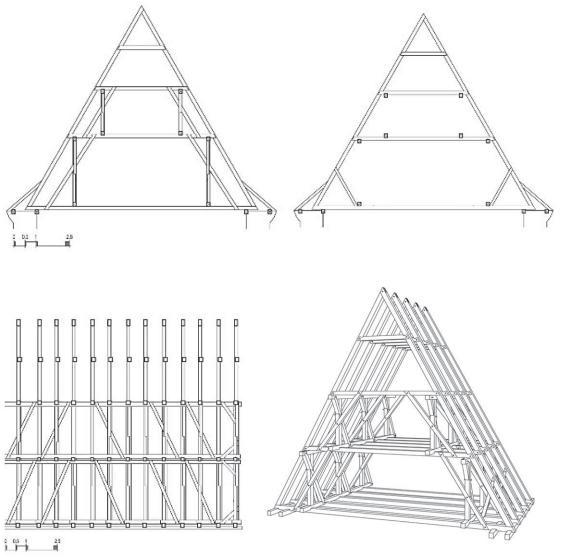
Șarpantele gotice sau cu caracter gotic sunt structuri portante rigide, compuse din ferme așezate perpendicular pe axul longitudinal al clădirii, cu sistemul de rigidizare longitudinal, perpendicular pe acestea. Aceste structuri pot fi studiate după dispunerea fermelor și tipul acestora, după numărul rețelelor longitudinale și modul de rigidizare.



SZABÓ Bálint, et al./ (2,22,30,31,32)

Roof structure made up of trusses - main and secondary trusses - and a vertical longitudinal bracing system in the volume of the roof structure. The vertical longitudinal bracing consists of lower and longitudinal plates, between which there are king/queen posts of the trusses, as well as angle braces, compound rafters or St. Andrew's cross.
The roof pitch is steeper - 50-60º. The effect of the wind is thus more important than the effect of the snow.

Șarpantă alcătuită din ferme – principale și secundare – și sistem longitudinal de rigidizare vertical amplasat în volumul șarpantei. Rigidizarea longitudinală verticală este alcătuită din tălpi inferioare și longitudinale, între care se amplasează barele de agățare ale fermelor și suplimentar colțari, arbaletrieri sau crucea Sf. Andrei.
Panta acoperișului este mai abruptă – 50-60º, efectul vântului fiind mai important decât cel al zăpezii.

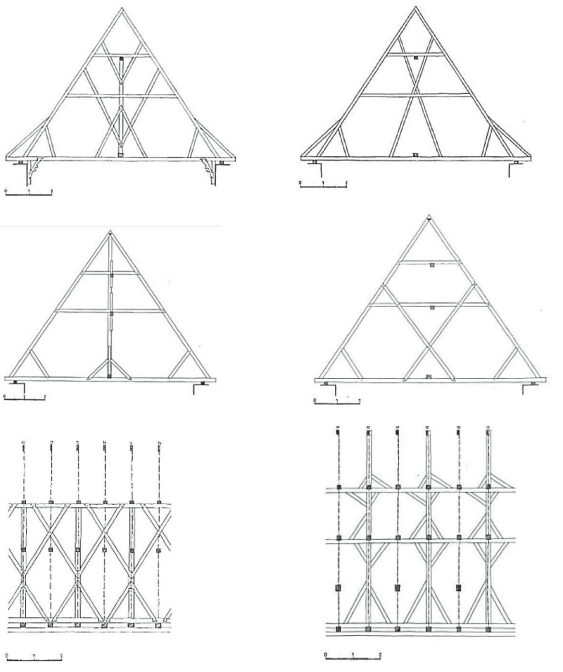


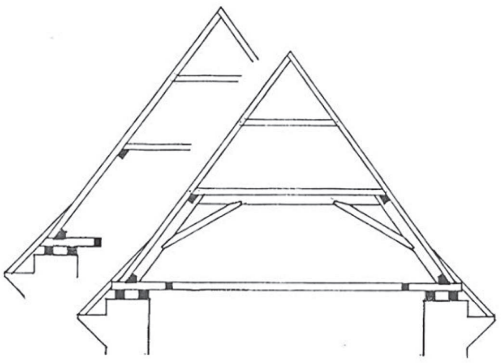
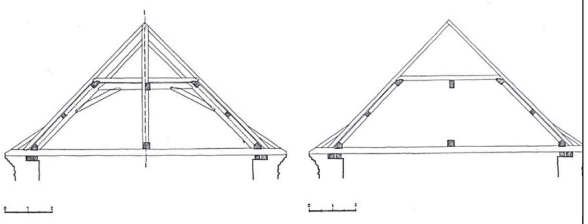
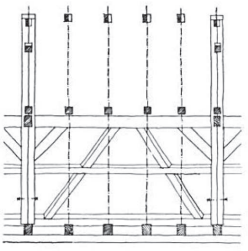
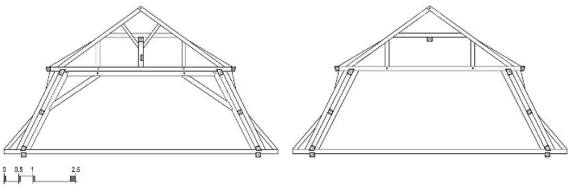
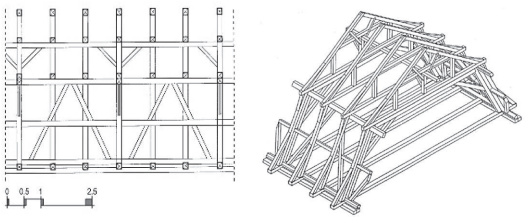
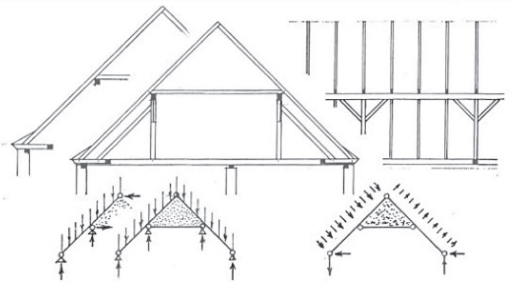
Medieval
Medievale

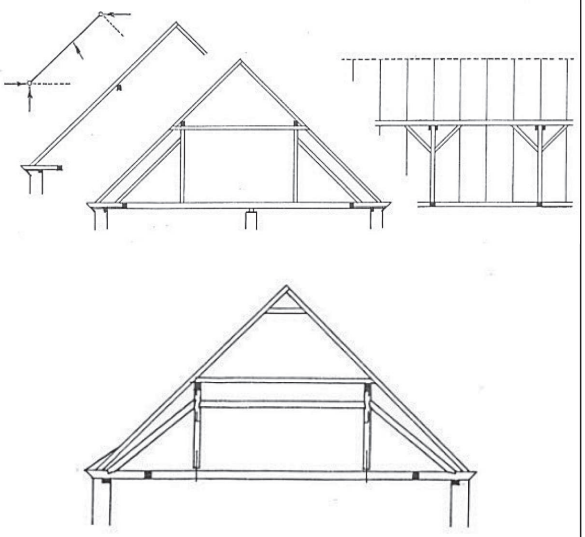
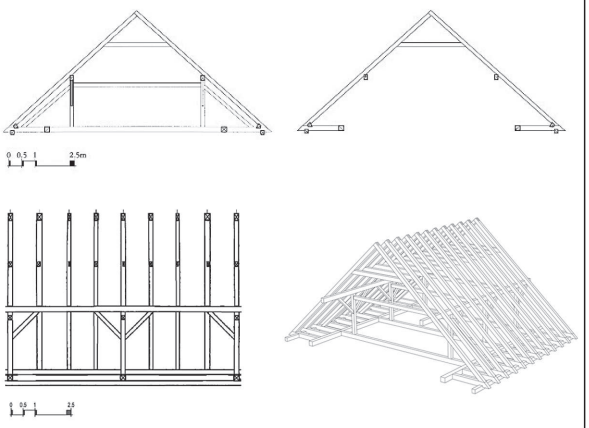
VÁNDOR András/ (38, 39)

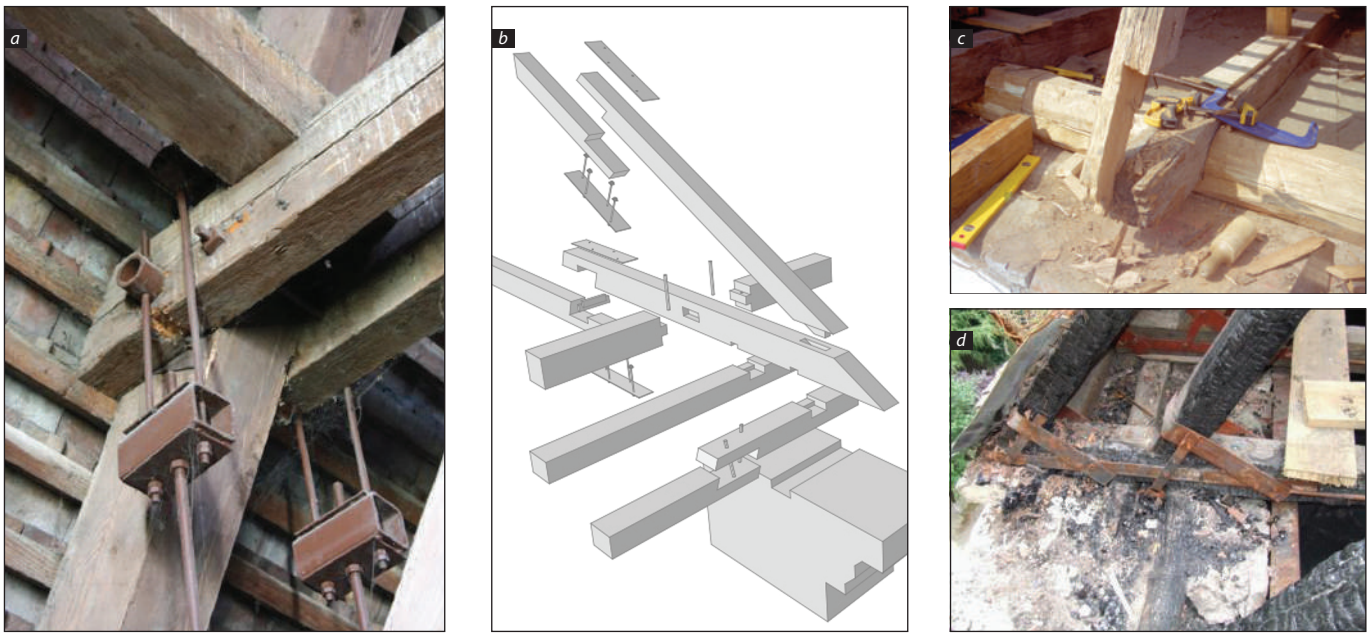
The main constituent elements of these roof structures are two planar, self-bearing, orthogonal, statically indeterminate structures. By connecting them, their spatiality is ensured. The transverse structure is perpendicular to the longitudinal axis of the building. It consists of triangles with sides pitched at more than 45 degrees, which are self-bearing. The longitudinal structure is parallel to the longitudinal axis of the building. It is unloaded on the plates, contains columns, angle braces and compound rafters.

Elementele constitutive principale ale acestor șarpante sunt două structuri plane, autoportante, ortogonale static nedeterminate. Prin conectarea acestora se asigură spațialitatea lor. Structura transversală este perpendiculară pe axa longitudinală a clădirii și constă din triunghiuri cu laturile cu pante de peste 45 de grade, autoportante. Structura longitudinală este paralelă cu axul longitudinal al clădirii. Se descarcă pe tălpi, conține stâlpi, colțari și arbaletrieri.



Baroque Baroc	PATTANTYUS-ÁBRAHÁM Ádám/ (27)	**Baroque roof structures with struts, 17th-18th centuries, containing main and secondary trusses. The collar beams of the secondary trusses are supported by "purlins", and the purlins are supported by the main trusses located at every fourth or fifth truss. The purlins are smaller in size due to the V, X-shaped longitudinal bracing.** Șarpante baroce cu popi înclinați, sec. XVII-XVIII, care dețin ferme principale și secundare. Traversele celor secundare sunt susținute de „pane" iar panele sunt susținute de fermele principale amplasate la fiecare a patra sau a cincea fermă. Panele au dimensiuni mai mici din cauza rigidizărilor din direcția longitudinală, în formă de V, X.	
Baroque Baroc, având caracter baroc	VÁNDOR András/ (38, 39)	**The Baroque roof structure emerged in Hungary at the beginning of the 17th century. It consists of two distinct components - the structure itself and the common rafters, whose simple role is to support the covering. The structure itself consists of a tie-beam, and in the case of large spans, of a double king/queen post, straining beams and collar beams, compound rafters.** Șarpanta barocă apare în Ungaria începând din secolul al XVII-lea. Conține două componente distincte – structura propriu-zisă și căpriorii care au doar rol de susținere a învelitorii. Structura propriu-zisă este alcătuită din coardă, iar în cazul deschiderii mari, dintr-o bară de agățare dublă, antretoaze și traverse, arbaletrieri.	 
	SZABÓ Bálint/ (2,22,30,31,32)	**Built in Romania in the 18th century and at the beginning of the 19th century, it consists of longitudinal bracing frames placed in the common rafter plane, and of a special straining system in the main trusses, made of compound rafters – straining beams and angle braces.** Realizată în România în secolul XVIII și la începutul secolului XIX, caracterizată prin sisteme longitudinale de rigidizare dispuse în planul căpriorilor, respectiv prin dispozitiv special de tensionare din fermele principale, alcătuite din arbaletrieri – antretoaze și colțari.	 
Eclectic Eclectic	PATTANTYUS-ÁBRAHÁM Ádám/ (27)	**Mid-19th century roof structures** **Roof structures on double chairs and straining trusses** **New structures develop between the Dualist period and the Great Depression of 1929 i.e., the so-called roof structures on two or three purlins with struts.** Șarpantele din mijlocul sec. al XIX-lea Șarpante pe scaune duble și sisteme de tensionare	

		Perioada dualismului până la Marea criză economică din 1929 aduce structuri noi, așa-numitele șarpante pe două sau trei pane și cu popi înclinați.	
	VÁNDOR András/ (38, 39)	**The Baroque roof structures are followed by early 19th-century structures on purlins. These elements subjected to bending support the common rafters, which take over the load from the covering. In this case, the term "roof structure on chairs" can be used. The struts unload on the tie-beams, they can be vertical or slanted. In the historicist period, they are combined with pairs of tongs, straining beams, etc** Șarpantele baroce sunt urmate de structuri pe pane, de la începutul secolului al XIX-lea. Aceste elemente solicitate la încovoiere susțin căpriorii care preiau încărcarea din învelitoare. Aici se poate folosi denumirea de șarpantă pe scaune. Popii descarcă pe corzi și pot fi verticali sau înclinați. În perioada istorismului, se combină cu perechi de clești, antretoaze etc.	
Eclectic Eclectic, având caracter eclectic	SZABÓ Bálint, et al./ (2, 22, 30, 31, 32)	**Built in Romania in the 19th century (including World War I) with *straining-hanging trusses* using *purlins* to support the *secondary* trusses. It involves longitudinal bracing frames arranged in a vertical or inclined plane, applicable only to the main trusses. The main trusses have tie-beams, and the secondary trusses have trimmers tied into header beams instead of tie-beams.** Executată în România în secolul XIX (inclusiv în Primul Război Mondial) cu dispozitive de agățare de tensionare utilizând pane în susținerea fermelor secundare. Presupune sisteme longitudinale de rigidizare dispuse în planul vertical sau înclinat, aplicabile numai fermelor principale. Fermele principale dețin corzi, iar cele secundare au grinzișoare legate în longeroane, în locul corzilor.	



■ ***Fig. 14.*** *Consolidare cu sau fără piese metalice, piese metalice ca elemente auxiliare* ***(a, d)*** *cu eliminarea zonelor degradate și realizarea continuității între elementele păstrate și nou introduse.*

■ ***Fig. 14.*** *Intervention categories. With or without metal pieces as auxiliary elements (**a, d**), replacing decayed areas and ensuring continuity between the preserved and newly introduced elements*

La începutul anilor 90, majoritatea lucrărilor de construcţii la monumente istorice se concentrau pe stoparea degradărilor şi efectuarea unor intervenţii urgente minime, în funcţie de bugetul alocat. Pentru a asigura o durată lungă de viaţă unei clădiri, este esenţială îndepărtarea apei provenite din precipitaţii, ceea ce se realizează prin completarea sau înlocuirea învelitorii. În cazul şarpantelor existau două situaţii extreme: fie se înlocuia învelitoarea fără a interveni asupra şarpantei, lăsând elementele degradate, fie se înlocuia integral şarpanta, fără a ţine cont de valoarea acesteia.

Lucrările de intervenţie la şarpantele istorice includ mai multe categorii, în funcţie de amploarea şi caracterul intervenţiilor: conservare, restaurare, consolidare şi reconstruire. Restaurarea şarpantelor presupune readucerea subansamblului de structură portantă la conceptul iniţial, utilizând materiale cu proprietăţi similare celor originale şi tehnologii tradiţionale asemănătoare celor iniţiale. În cadrul acestei categorii de intervenţie, conceptul mecanic iniţial este corect (şarpanta istorică respectă cerinţele actuale de performanţă), iar intervenţia implică înlocuiri locale ale materialelor, ori de câte ori acestea s-au degradat din cauze biologice sau din cauza supraîncărcărilor locale ori a acţiunilor extraordinare (incendii, trăsnet, explozii etc.).

În locul intervenţiilor iniţiale, care se axau pe înlocuirea integrală sau a unor elemente ale şarpantei, au apărut soluţii alternative, cum ar fi introducerea unor structuri auxiliare, introducerea de elemente suplimentare de rigidizare din lemn sau metal, sau juxtapunerea unor piese de lemn în zonele degradate. Aceste soluţii au fost înlocuite cu implementarea principiilor de intervenţii minimale, care presupun eliminarea doar a zonelor degradate biologic şi refacerea continuităţii cu sau fără utilizarea pieselor metalice, sau introducerea unor piese suplimentare metalice sau de lemn.

Principiile sunt ilustrate prin exemple de şarpante restaurate din Transilvania, România, realizate în ultimele decenii, dar şi prin unele exemple „istorice”.

Unele intervenţii pot fi considerate istorice, chiar dacă acestea schimbă substanţial modul de lucru al şarpantelor. Aici ne gândim la consolidarea fermelor de la Biserica romano-catolică Sf. Mihail din

bearing units are made of masonry walls, timber frames or masonry frames. The main beams can support secondary load-bearing elements placed in the direction of the roof pitch. This system works through the bending of the main beams.

The historic roof structure on collar beams includes these elements in addition to the common rafters and the tie-beams. In this case, the span of the common rafters is diminished by collar beams placed between the common rafters, the bending of which is reduced due to the compression rigidity of the collar beams. The secondary trusses – usually having tie-beams – can self-balance themselves and thus it is possible for the two common rafters to balance each other, without discharging on the main trusses. This is the system favoured in continental Romanesque, Gothic and Baroque roof structures. The study of these types of roof structures is carried out using different proportions of trusses[34] or comparative studies of roof structures represented by axes, main trusses, secondary trusses and longitudinal bracing in the case of roof structures in France, Belgium,[35] Austria,[36] Slovakia[37]

34 Peter KRUSINSKY publishes papers focusing on the geometrical and static analysis of roof structure trusses in Slovakia and the Czech Republic.

35 Andrée CORVOL-DESSERT et al., “Roof Frames from the 11th to the 19th Century.” în *Typology and Development in Northern France and in Belgium Analysis of CRMH Documentation*, ed. Patrick HOFFSUMMER, Architectura Medii Aevi Vol. III (Turnhout: Brepols Publishers, 2009).

36 Hermann FUCHSBERGER, *Mittelalterliche Dachkonstruktionen in Österreich* (Steiermark, 2020).

37 www.roofs.cz and Jiří BLÁHA et al., *Atlas historických krovů České Republiky* (ITAM ARCCHIP, Telc 2020).

or German-speaking Central European regions.[38]

The simplest bracing of the pair of common rafters is achieved by inserting horizontal ties - through collar beams whose position also depends on the roof pitch and span. By means of an "intellectual game", the reassembly of the roof structures involves identifying the role of each element, from the hollow trusses to the positioning of the various horizontal and bent components, in order to reduce the deformation of the common rafter.

3.3. Interventions on historic roof structures

Just as there is no uniform classification of roof structures, there is no universally accepted approach to the interventions on them. When we talk about interventions on roof structures, they must be considered as part of the whole structure, with specificities due to the wood material, susceptible to degradation, and bearing heritage values. After the 1990s, technical regulations also appear in various forms in this area – rules, guidelines, standards. In the absence of specific national regulations, we "resort" to international regulations[39] or, since 2007, to European regulations, some of which have even recently been translated into Romanian and adapted.[40]

In the early 1990s, most construction work on historic buildings focused on stopping decay and carrying out minimal emergency interventions, depending on the budget. To ensure the long life of a building, it is essential to remove rainwater, which is achieved by filling in or replacing the covering. In the case of roof structures, there were two extreme situations: either replace the covering without any work on the roof structure, leaving the degraded elements, or replace the entire roof structure, regardless of its value.

Intervention works on historic roof structures include several categories, depending on the intervention extent and nature: conservation, restoration, consolidation and reconstruction. Roof structure restoration involves bringing the load-bearing structure sub-unit back to its original concept, using materials with properties similar to the original ones and traditional technologies similar to the original ones. Under this intervention category, the original mechanical concept is correct (the historic roof structure meets current performance requirements) and the intervention involves local replacements of materials whenever they have degraded due to biologi-

38 Philip CASTON, "Historic Roof Trusses between 1500 and 1700 in German-speaking Central Europe: Documentation, Analysis, and Development," *Proceedings of the Second International Congress on Construction History*, Vol. 1 (Cambridge, 2006): 579-597.

39 Concerning the heritage, the Venice Charter (1964), the Nara Charter (1994) on authenticity, the Principle of interventions on timber structures (1999) or Wooden Heritage (2017), the set of Italian UNI standards - 111138, 11119, 11161; COST projects, etc.

40 SR EN 17121/2020 – Conservation of cultural heritage. Historic timber structures. Guidelines for the on-site assessment of load-bearing timber structures, SR 13561/2013 Cultural heritage. Wooden artefacts. Load-bearing structures. On site inspections for the diagnosis of timber elements.

Cluj[41], a fermelor şarpantei navei Bisericii evanghelice din Bistriţa[42] sau a şarpantei cu caracter gotic a bisericii reformate din Cetatea Târgu Mureş.[43] Cea din urmă intervenţie a fost implementată de către László DEBRECZENI în anul 1941. Pentru introducerea unor elemente suplimentare noi, din alt tip de lemn, au fost eliminate unele elemente iniţiale.

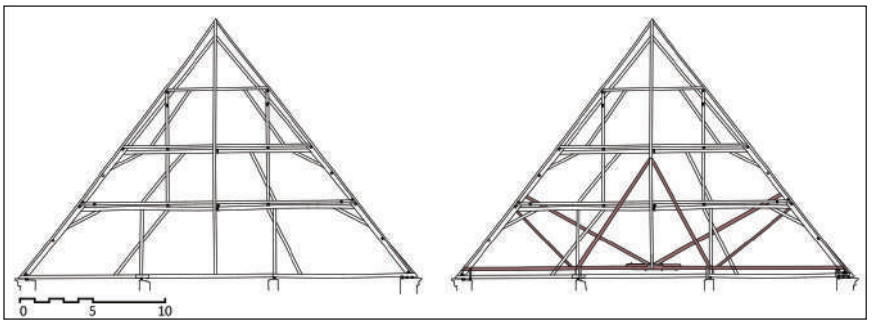
În evoluţia atitudinii faţă de şarpantele transilvănene, un reper important îl constituie programul ACTT, organizat sub îndrumarea maiştrilor dulgheri din Anglia începând din 1999, urmat de vizita la şantierele din Cehia coordonate de maistrul dulgher Peter RUZICKA în anii 2002 şi-2004.[44] Ambele au influenţat percepţia asupra şarpantelor prin soluţiile mai noi, implementate în locul celor de supraconsolidare sau

41 Analiza intervenţiei istorice, dar şi consolidarea a fost proiectată de echipa condusă de dr. ing. Dorottya MAKAY.

42 Şarpanta a fost expertizată pentru prima dată de către prof. SZABÓ în anul 1992. Intervenţiile de atunci au presupus inserţii de piese metalice în noduri, dar şi în dreptul corzilor. Şarpanta a fost reanalizată după incendiul din 2008, expertizată tot de prof. SZABÓ, iar echipa de proiectare a fost condusă de autor. Lucrările cu introducerea unei platforme de vizitare a şarpantei au fost finalizate în 2023.

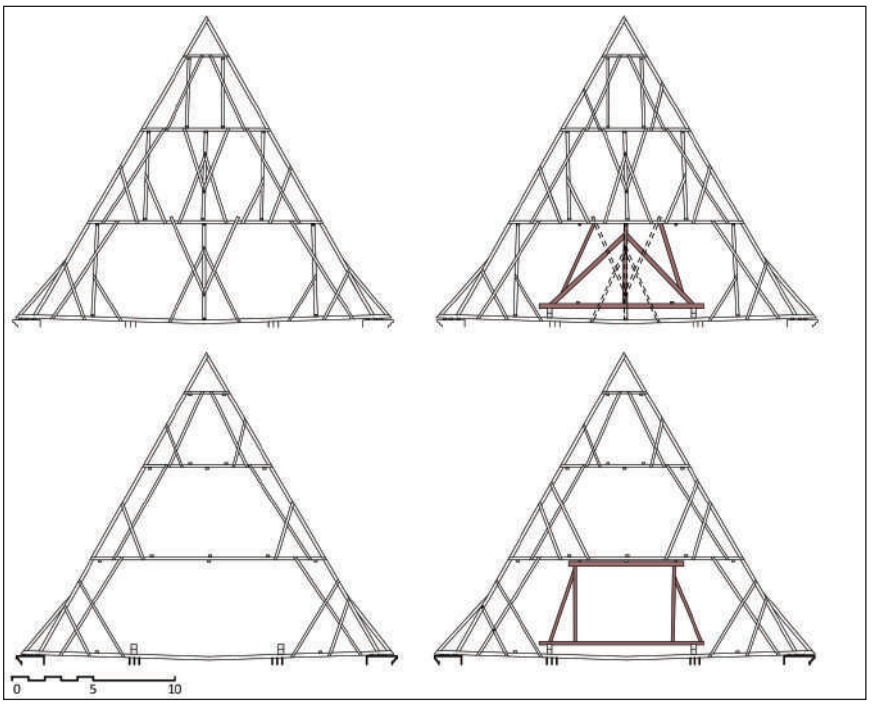
43 Autorul a participat la această lucrare ca diriginte de şantier.

44 În cadrul a două programe de ARCCHIP organizate de ITAM, institut al Academiei de Ştiinţe din Cehia.



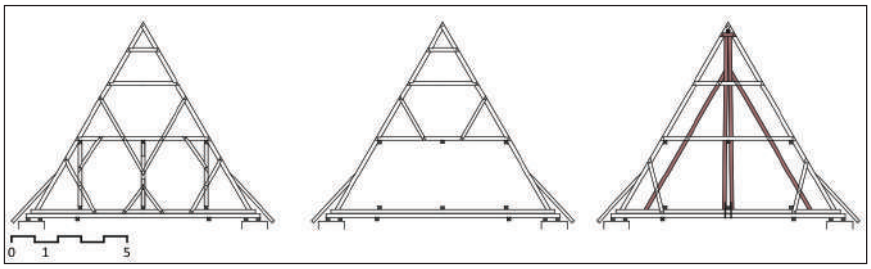
■ ***Fig. 15.*** *Fermele Bisericii romano-catolice din Cluj inițial (1775d) și cu intervenții istorice de consolidare din anii 1830. © IrodM*

■ ***Fig. 15.*** *Trusses of the Roman-Catholic church in Cluj – initially (1775d) and with interventions in the 1830s. © IrodM*



■ ***Fig. 16.*** *Fermele Bisericii evanghelice din Bistrița – inițial (1560d) și cu intervenții din 1897 în fermele principale și secolul al XX-lea din cele secundare.*

■ ***Fig. 16.*** *Trusses of the Evangelical church in Bistrița – initially (1560d) and with interventions from 1897.*



■ ***Fig. 17.*** *Fermele Bisericii reformate din Cetatea Târgu Mureș – inițial (secolul XVd) și cu intervențiile lui László DEBRECZENI (proiectul din 1941).*
■ ***Fig. 17****. Trusses of the Reformed church in the Citadel of Târgu Mureș – initially and with interventions (designed by László DEBRECZENI in 1941).*

înlocuire totală. Însă există şi azi o serie de intervenţii controversate, rezultând din neînţelegerea structurilor de lemn sau din teama faţă de aceste structuri. Fără a menţiona explicit şarpantele, regăsiţi o paletă largă de astfel de intervenţii în fotografiile ataşate.

Şarpantele, după o relevare geometrică detaliată şi expertizare biologică[45] a materialului lemnos, trec şi printr-o evaluare structurală şi modelare pe calculator. Chiar dacă nu întotdeauna cantitativ, este surprins modul de lucru calitativ al şarpantelor. De la modelarea în plan a fermelor, se trece la modelarea spaţială şi la investigarea detaliată a materialului, şi la analiza la nivel de tipuri de noduri. Însă, deoarece şarpantele nu sunt vizibile, intervenţiile nu sunt întotdeauna de calitate – nici din punct de vedere conceptual, nici al materialelor utilizate.

Intervenţiile de restaurare şi consolidare depăşesc simpla asigurare a stabilităţii şi durabilităţii, incluzând şi platforme de întreţinere sau chiar de vizitare, precum şi cerinţe de siguranţă în exploatare. Acesta este un alt aspect controversat. Platformele, parapetele şi mâna curentă realizate din lemn şi dimensionate pentru a rezista la forţele laterale duc la obţinerea unor dimensiuni secţionale considerabile, care pot afecta claritatea şi imaginea istorică a şarpantelor. Este oare permis ca aceste imagini ale podului, care conţin valori intangibile – cum ar fi semnele de asamblare – să fie alterate prin introducerea unor elemente masive de lemn? Sau, în cazul în care elementele sunt din metal, nu devine acesta prea străin de materialul lemnos istoric? Protecţia tavanelor casetate pictate, valori inestimabile ale patrimoniului bisericesc transilvănean, impune, în anumite cazuri, soluţii de construire a unui acoperiş în acoperiş.

4. În loc de concluzii

■ În cazul unui domeniu precum şarpanta istorică, colaborarea între specialişti în cadrul unei echipe, dar şi între cercetători din întreaga lume, este încă doar o dorinţă. Mulţi arhitecţi şi ingineri nu acordă suficientă atenţie acestei părţi, adesea ascunse, a clădirii. De asemenea, legislaţia nu vine în ajutorul specialiştilor. Obligaţia realizării unor studii care să includă şi şarpantele ar contribui semnificativ la înţelegerea acestora ca structură, dar şi ca resurse culturale. În prezent, este la latitudinea expertului tehnic să decidă ce studii şi teste suplimentare sunt necesare.

Numărul tot mai mare al cercetărilor şi al tezelor de doctorat din România indică faptul că şarpantele au şansa să supravieţuiască. La această supravieţuire şi promovare a şarpantelor, un rol important l-a avut profesorul SZABÓ, care a alocat timp şi resurse financiare pentru studierea acestora.

45 Rolul doamnei conf. dr. Livia BUCŞA este important în această activitate, dânsa făcând parte din echipa care intervine la şarpantele din România de după anul 1990.



■ ***Fig. 18.*** *Exemplu de bună practici executat și nodul în curs de execuție, Cehia (vizitat în 2002), 2003.*
■ ***Fig. 18.*** *Best practice example and joint in progress, Czech Republic (visited in 2002), 2003.*

cal causes or local overloads or extraordinary actions (fire, lightning, explosions, etc.).

Instead of the initial interventions, which focused on replacing all or parts of the roof structure elements, alternative solutions emerged, such as the introduction of auxiliary structures, the introduction of additional bracing elements made of wood or metal, or the juxtaposition of wooden pieces in degraded areas. These solutions have been replaced by the implementation of the principles of minimum intervention, which imply removing only the biologically degraded areas and restoring continuity with or without the use of metal parts, or the introduction of metal or wooden parts.

The principles are illustrated by examples of restored roof structures from Transylvania, Romania, achieved in the last decades, as well as by some "historic" examples.

Some interventions can be considered as historic, even if they substantially change the way in which the roof structures work. Here we are thinking of the consolidation of the trusses of the Roman-Catholic church of St. Michael in Cluj,[41] of the trusses of the nave roof structure of the Evangelical church in

41 The analysis of the historic intervention and the consolidation was designed by the team led by Eng. Dorottya MAKAY PhD.



■ ***Fig. 19.*** *Colecții de intervenții discutabile. Utilizarea tablei metalice pentru rigidizarea nodurilor, propteli din lemn rotund, îmbrăcarea in șosete de nylon a capetelor de corzi și căpriori, juxtapuneri și bride metalice, sau tije filetate lângă cuiele din lemn*

■ ***Fig. 19.*** *Collections of questionable interventions. The use of metal plates for joint reinforcement, timber props, wrapping the ends of tie beam and rafters in nylon socks, juxtapositions and metal clamps, or threaded rods alongside wooden pegs.*

Lui îi datorăm cărţi, dicţionare, dar şi multe proiecte care, la rândul lor, au cunoscut o schimbare şi o aprofundare în timp. Poate că nici el nu ar fi mulţumit de primele intervenţii la şarpante sau de primele formulări. Recent am recitit concluziile după a doua deplasare a noastră la şarpantele colegilor din Cehia din 2004 (acum 20 de ani) şi cred că încă sunt valabile: „Abordarea ştiinţifică a structurii acoperişului nu ar trebui să ia în considerare doar aspectele legate de istoria artei şi dendrocronologie, deoarece aceste structuri nu sunt în primul rând purtătoare de urme dulghereşti şi de inele anuale, ci mai ales de acţiuni care conduc la scurgerea corectă a eforturilor. Acestea sunt elementele esenţiale; restul este doar cireaşa de pe tort. Ar trebui să revenim la propunerea făcută în prezentarea noastră, conform căreia 5-50 de structuri de acoperiş din ţară să fie incluse într-o bază de date reprezentativă la nivel european."

Mulţumiri

■ Autorul îşi exprimă gratitudinea atât faţă de generaţiile de dulgheri care au realizat minunatele şarpante istorice, cât şi faţă de specialiştii care au contribuit la cunoaşterea şi promovarea acestor capodopere. De asemenea, mulţumiri speciale se îndreaptă către colectivul Centrului de cercetare-proiectare în domeniul reabilitării patrimoniului construit UTILITAS din Cluj-Napoca, precum şi către participanţii la programele *Patrimoniu ascuns* din 2011 şi 2012.

Majoritatea ilustraţiilor provin din arhiva UTILITAS, fiind marcate distinct doar acelea care au alte surse. Începând cu sfârşitul anilor 1990, s-a alocat timp cercetării de fond şi colectării informaţiilor, iar odată cu lansarea proiectelor de anvergură finanţate din fonduri naţionale sau europene, a devenit posibilă elaborarea unor proiecte de restaurare a şarpantelor istorice, fie conform principiilor bunei practici, fie în baza conceptelor proprii ale inginerilor.

Prin răspândirea pe scară largă a restaurării participative, iniţiată pentru prima dată de Fundaţia Transylvania Trust prin programele ACTT şi BHCT, iar mai târziu continuată şi de alte organizaţii neguvernamentale de protejarea monumentelor, noile generaţii de arhitecţi, ingineri şi istorici de artă sunt implicate activ în salvarea acestor valori ascunse.

Bibliografie / Bibliography

1. AVRAM, Constantin. *Betonul armat în România*. Vol. II. Bucureşti: Editura Tehnică, 1987.
2. Bálint SZABÓ şi Imola KIRIZSÁN. „Transylvanian historic roof structures database." In *SHATIS – Structural Health Assessment of Timber Structures* (2011).
3. BINDING, Günther. *Das Dachwerk auf Kirchen im deutschen Sprachraum vom Mittelalter bis zum 18. Jahrhundert*. München: Deutscher Kunstverlag, 1991.
4. BLÁHA, Jiří, Jaroslav BUZEK şi Tomáš KYNCL. *Atlas historických krovů* České *Republiky*. ITAM ARCCHIP, Telc 2020.
5. CANDELAS-GUTIÉRREZ, Angel şi Milagrosa BORRALLO-JIMENEZ. „Methodology of Restoration of Historical Timber Roof Frames. Application to Traditional Spanish Structural Carpentry," *International Journal of Architectural Heritage. Conservation, Analysis, and Restoration* (2018): 51-74.
6. CASTON, Philip. „Historic Roof Trusses between 1500 and 1700 in German-speaking Central Europe: Documentation, Analysis, and Development," *Proceedings of the Second International Congress on Construction History,* Vol. 1, Cambridge (2006): 579-597.

7. CORVOL-DESSERT, Andrée, Patrick HOFFSUMMER, David HOURBRECHTS, Georges-Noël LAMBERT, Chatherine LAVIER, Christine LOCATELLI, Jannie MAYER, Alain PRÉVET, Jean-Louis TAUPIN şi Yvonne TRENARD, „Roof Frames from the 11th to the 19th Century." În *Typology and Development in Northern France and in Belgium Analysis of CRMH Documentation*, editat de Patrick HOFFSUMMER. Architectura Medii Aevi Vol. III. Turnhout: Brepols Publishers, 2009.
8. CORVOL-DESSERT, Andrée, Patrick HOFFSUMMER, David HOURBRECHTS, Georges-Noël LAMBERT, Chatherine LAVIER, Christine LOCATELLI, Jannie MAYER, Alain PRÉVET, Jean-Louis TAUPIN şi Yvonne TRENARD. *Les charpantes du XIe au XIXe siècle, Typologie et évolution en France du Nord et an Belgique*. Paris: Cahiers du patrimoine, 1962.
9. CRUZ, Helena, David YEOMANS, Eleftheria TSAKANIKA, Nicola MACCHIONI, Andre JORISSEN, Manuel TOUZA, Massimo MANNUCCI, Paulo B. LOURENÇO. *Guidelines for the on-site assessment of historic timber structures*. Article in International Journal of Architectural Heritage. November 2014.
10. DRDÁCKÝ, Miloš, ed. *European Research on Cultural Heritage, State-of-the-Arts Studies*. Vol. III. Prague: ARCCHIP, 2004.
11. DRDÁCKÝ, Miloš, ed. *European Research on Cultural Heritage, State-of-the-Art Studies*. Vol. IV. Prague: ARCCHIP, 2006.
12. EIßING, Thomas. *Kirchendächer in Thüringen und dem südlichen Sachsen-Anhalt- Dendrochronologie-Flößerei-Konstruktion*. Band 1. Neue Folge 32, 2009.
13. FÁTRAI, György. *Történeti tetőszerkezetek*. Budapesta: TERC Kft, 2008.
14. FROIDEVAUX, Yves-Marie. *Techniques de l'architecture ancienne. Construction et restauration*. Pierre Mardaga éditeur, 1986.
15. FUCHSBERGER, Hermann Fuchsberger. *Mittelalterliche Dachkonstruktionen in Österreich*. Steiermark, 2020.
16. HOFFSUMMER, Patrick şi Jérôme EECKHOUT. *Materials of Architecture Heritage and Historical Roofs of Europe*. Les Dossiers de l'IPW, 6. Institut du Patrimoine Wallon, 2008.
17. HOFFSUMMER, Patrick, N. ALCOCK, P. BERNARDI, J. BLAHA, P. CASTON, S. CREMER, C. CURRIE, P. DERINALDIS, F. EPAUD, D. MACZYNSKI, J. MAYER, E. PREßLER, O. STORSLETTEN, G. TAMPONE. *Charpentes d'Europe* editat de Patrick HOFFSUMMER. Namur: Institut du Patrimoine wallon (IPW), 2009.
18. HOFFSUMMER, Patrick. „Les charpantes du XIe au XIXe siècle, Grand Ouest de La France." În *Typologie et* évolution, *analyse de la documentation de la Médiath*èque *de l'architecture et du patrimoine*, editat de Patrick HOFFSUMMER. Architectura Medii Aevi Vol. V. Turnhout: Brepols Publishers, 2011.
19. KELLER, Alexandra Iasmina şi Marius MOŞOROACĂ. „Historic timber roof structure vulnerability assessment procedures – Critical analysis and comparison," *Journal of Cultural Heritage* (2024): 132-141.
20. KIRIZSÁN Imola, SZABÓ Bálint şi KIRIZSÁN Ildikó. "Critical Analysis of Gothic Roof Structure Conformation - The Role of Composing Elements and Devices," *Proceedings of the International Conference on Structural Analysis of Historical Constructions*, Poland (2012).
21. KIRIZSÁN Imola, SZABÓ Bálint şi VASS László. "Interventions on the Gothic Roof Structure of the Nave at the Lutheran Church in Bistriţa (Romania)," *Advanced Materials Research 133-134* (2010): 1051–56.

Bistriţa[42] or of the Gothic roof structure of the Reformed church in the Citadel of Târgu Mureş.[43] The latter intervention was implemented by László DEBRECZENI in 1941. To insert additional new elements, made of a different type of wood, some original elements were removed.

In the evolution of the attitude towards the Transylvanian roof structures, an important landmark is the ACTT programme, organized under the guidance of master carpenters in England since 1999, followed by the visit to Czech sites coordinated by master carpenter Peter RUZICKA in 2002-2004[44]. Both influenced the perception of roof structures through newer solutions, implemented instead of over-consolidation or total replacement solutions. But there are still today several controversial interventions, resulting from misunderstanding or fear of timber structures. Without explicitly mentioning the roof structures, you can find a wide range of such interventions in the attached photos.

After a detailed geometric survey and biological examination[45] of the wood material, roof structures also undergo a structural assessment and computer modelling. Even if not always quantitatively, the qualitative working of the roof structures is captured. After in-plane modelling of the trusses, spatial modelling and detailed material investigation are performed, as well as analysis of the joint types. However, because the roof structures are not visible, the interventions are not always of high quality - either conceptually or in terms of the materials used.

Restoration and consolidation interventions go beyond simply ensuring stability and durability, to include maintenance or even visiting platforms, as well as operational safety requirements. This is another controversial issue. Platforms, parapets and handrails made of wood and sized to withstand lateral forces result in considerable sectional dimensions, which can affect the clarity and historical image of the roof structures. Is it permissible to alter these images of the attic, which contain intangible values - such as assembly marks - by the introduction of massive timber elements? Or, if the elements are made of metal, does this not become too alien to the historical timber material? The protection of painted coffered ceilings, priceless treasures of Transylvanian ecclesiastical heritage, requires, in certain cases, roof-in-roof solutions.

4. Instead of conclusions

■ In an area such as historic roof structures, collaboration between specialists within a

42 The roof structure was first assessed by Prof. SZABÓ in 1992. The interventions at that time involved insertions of metal parts in the joints, as well as at the level of the tie-beams. After the fire in 2008, the roof structure was re-assessed by Prof. SZABÓ and the design team was led by the author. The works including a roof structure visiting platform were completed in 2023.

43 The author participated in this project as site supervisor.

44 Within two ARCCHIP programmes organized by ITAM, an institute of the Czech Academy of Sciences.

45 The role of Prof. Livia BUCŞA PhD is important in this activity, as she is part of the team that intervenes on the roof structures in Romania after 1990.

team, as well as between researchers around the world, is still just wishful thinking. Many architects and engineers do not pay enough attention to this, often hidden, part of the building. Legislation is also not helping the specialists. Requiring studies to include the roof structure would significantly contribute to understanding it as a structure, as well as a cultural resource. It is currently up to the technical expert to decide what further studies and tests are needed.

The growing number of research and doctoral theses in Romania indicates that the roof structures have a chance to survive. Prof. SZABÓ has played an important role in the survival and promotion of roof structures, as he has devoted time and financial resources to their study.

To him we owe books, dictionaries, and many projects that have also changed and deepened over time. Perhaps he would not be happy with the first interventions on roof structures or with the initial wording himself. I have recently re-read the conclusions after our second trip to the roof structures of our colleagues in the Czech Republic in 2004 (20 years ago) and I think they are still valid: "The scientific approach to the roof structure should not only consider aspects of art history and dendrochronology, because these structures are not primarily bearers of carpenter's marks and annual rings, but mainly of actions that lead to the correct load pass. These are the essentials; the rest is just icing on the cake. We should go back to the proposal made in our presentation that 5-50 roof structures in Romania should be included in a European representative database."

Acknowledgments

■ The author expresses deep gratitude to the generations of carpenters who crafted the magnificent historic roof structures, as well as to the specialists who contributed to the recognition and promotion of these masterpieces. Special thanks are also extended to the team of the UTILITAS Research and Design Center for Built Heritage Rehabilitation in Cluj-Napoca and the participants of the *Hidden Heritage* programs in 2011 and 2012.

Most of the illustrations come from the UTILITAS archive, with only those from other sources being specifically marked. Since the late 1990s, time has been dedicated to fundamental research and data collection. Later, with the launch of large-scale projects funded by national or European sources, it became possible to develop restoration projects for historic roof structures – either following best practice principles or based on engineers' own design concepts.

Through the widespread adoption of participatory restoration – first introduced by the Transylvania Trust Foundation through the ACTT and BHCT programs, and later continued by other NGO's in the field of heritage protection – the younger generation of architects, engineers, and art historians is actively contributing to the preservation of these hidden treasures.

22. KIRIZSÁN Imola, SZABÓ Bálint. *Patrimoniu Ascuns*. Cluj-Napoca: Editura Utilitas, 2012.
23. KIRIZSÁN, Imola şi SZABÓ Bálint. *Protecţia valorilor proprii de patrimoniu ale structurilor portante istorice din lemn*. Cluj-Napoca: Editura UTILITAS, 2006.
24. KIRIZSÁN, Imola. „On Historic Roof Structures in Europe Launch of a new column," *Historic Roof Structures. Transsylvania Nostra* (2013).
25. MARK, Robert. *Architectural Technology up to the Scientific Revolution, The Art and Structure of Large-Scale Buildings*. The MIT Press, 1993.
26. OSTENDORF, Friedrich. *Die Geschichte des Dachwerks*. Leipzig: B.G. Treubner, 1987.
27. PATTANTYUS-ÁBRAHÁM Ádám. *Tetőszerkezetek, a rómaiak korától a XX. század végéig*. Editura autorului, 2011.
28. POMOZI István. *Şarpante gotice./ Gothic roof structures.*, pp. 77-82 in Historic Structures Conferences – 1999. Cluj-Napoca, 1999.
29. SERAFINI, Anna, M. RIGGIO şi C. GONZÁLEZ-LONGO. „A database model for the analysis and assessment of historic timber roof structures," *International Wood Products Journal* (2017): 3-8.
30. SZABÓ Bálint şi KIRIZSÁN Imola. „European Historic Roof Structures: Concepts of Composition and Interventions," *Proceedings of the International Conference on Structural Analysis of Historic Constructions*. Poland (2012).
31. SZABÓ Bálint şi KIRIZSÁN Imola. *Dicţionar ilustrat de şarpante istorice*. Cluj-Napoca: Utilitas, 2011.
32. SZABÓ Bálint. *Illustrated Dictionary of Historic Load-Bearing Structures*. Cluj-Napoca: Kriterion/Utilitas, 2005.
33. SZABÓ Bálint. *Illustrated Dictionary of Intervention on Historic Load-Bearing Structures*. Vol. 1,2. Cluj-Napoca: Utilitas, 2008.
34. SZABÓ Bálint. *Introducere în teoria reabilitării structurilor de rezistenţă istorice*. Cluj-Napoca: Editura Utilitas, 1998.
35. TAMPONE, Gennaro. *Il Restauro Delle Strutture Di Legno*. Milano: Editore Ulrico Hoepli, 1996.
36. THELIN, Carl. „Medieval Timber Roof Structures: Conceptual methods for investigation and evaluation of structural behaviour, with the horizontal thrust problem as an application." Teză de doctorat, Universitatea Tehnică Chalmers, 2006.
37. TÓTH Boglárka şi FEHÉR János. *Sepsiszék templomainak történeti fa- és tetőszerkezetei*. Cluj-Napoca: Exit Kiadó, 2024.
38. VÁNDOR András. „16-19. századi ácsolt tetőszerkezetek Magyarországon." În *Különlenyomat a Magyar Műemlékvédelem 1980-1990 kiadványból*. Budapesta, 1996.
39. VÁNDOR András. *Structuri de Şarpante./ Roof structures.*, pp. 47-60 in Historic Structures Conferences – 1999. Cluj-Napoca, 1999.
40. VARGA, Livia. *A szászsebesi evangélikus templom középkori építéstörténete*. Művészettörténeti füzetek 16. Cahiers d'histoire de l'art. Budapesta: Akadémiai Kiadó, 1984.
41. VIOLLET-LE-DUC, Eugène Emmanuel. *Dictionnaire raisonné de l'architecture française du XI^e au XVI^e siècle*. Paris: B.Bange Editeur, 1859.
42. YEOMANS, David T.. *The Trussed Roof: Its History and Development*. Scolar Press, 1992.

■ ***Tabel 2.*** *Fişa de colectarea datelor* in situ
■ ***Table 2.*** *Investigation sheet*

1. RELEVEUL SUBANSAMBLULUI ACOPERIŞ

1. SURVEY OF THE ROOF SUB-UNIT

Forma acoperişului
Roof shape



Panta, număr, valoare
Slope, nr of slope, and value

Căprior dintr-un element, întrerupt din 2 sau 3
With rafter in one piece, or 2, 3

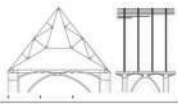


Frontoane
Gable(s)

Dimensiunile principale ale clădirii acoperite
Dimension of the layout covered

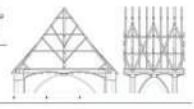
Materialul de învelitoare: ţigle, şindrilă, tablă, altul
Roofing material : tile, wooden shingle, tin, other

Concepţia şarpantei
Concept of roof



Inginerească
Enginered

Istorică
Historical



- continental
- continental



- de coastă
- coastal

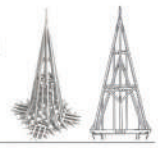


Conformare structurală
Structural conformation



Scindabil în structuri planare
Divided into plane structures

Structură spaţială
Spatial structure



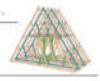
Structură pe căpriori şi traverse
Structure with rafters and collars



Structură pe grinzi/ pane
Structure with beams/ purlin



Ferme principale şi secundare
Main and secondary truss



Sistem longitudinal de rigidizare
Longitudinal bracing system



Materialele
Materials

Lemn - răşinos şi foios
Wood - soft, hard

Piese metalice
Metal

Modul de prelucrare
Way of processing

Noduri, îmbinări
Joints



Datare
Dating

Directă prin metoda dendrocronologiei
Direct - dendrocronologically

Indirect - arhivă, inscripţii pe elemente, altele conexe
Indirect - archive, inscription on elements, others

Relaţia cu alte subansambluri structurale
Connection with other structural subunits

Cosoroabe de la partea superioară a zidului, sau încastrate
Wall plates on the top of the wall, or embeded

Tavan de lemn
Timber ceilings

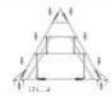


Sisteme de suspendare
Hanging devices

2. INVENTARIEREA VALORILOR DE PATRIMONIU

2. INVENTORY OF THE HERITAGE VALUE

Elemente sau ansamblu/ concept empirico-intuitiv aferent şarpantei iniţiale
Elements or units/ empirical-intuitive concept from the initial roof structure



Materiale istorice aferente şarpantei iniţiale
Historic materials from the initial roof structure

Tehnologii tradiţionale aferente şarpantei iniţial
Traditional technologies from the initial roof structure

Semne dulghereşti, de asamblare, transport, etc.
Carpenter's signs/marks, assembly marks

3. INTERVENŢII ANTERIOARE LA ŞARPANTE

3. INTERVENTIONS CARRIED OUT ON THE ROOF

Localizarea intervenţiei
The localization of the intervention

Rezultatul intervenţiei
The result of the intervention

Motivarea intervenţiei (cauze posibile)
The motivation of the intervention (possible causes)

Transformare funcţională
Functional transformations in the past

4. INVENTARIEREA INSUFICIENŢELOR STRUCTURALE

4. THE INVENTORY OF THE STRUCTURAL INSUFFICIENCIES

Degradări de elemente, subansambluri din material lemnos
Deterioration of the wooden elements

Geometrică
Geometrical

Mecanică
Mechanical

Biologică
Biological decay

Eliminare de material lemnos (elemente, subansambluri) sau alte părţi din structură
Elimination of wooden material (elements, sub-units) or other part of the structure

Utilizare nouă
New use

5. RECOMANDARE

5. RECOMANDATIONS

Intervenţii urgente - scoaterea din pericol
Emergency intervention

Reparaţii
Repair



Conservare/restaurare
Conservation/restoration

Consolidare
Strengthening

Desfiinţare parţială sau totală
Partial or total dismantling

■ FURU Árpád[1]

In memoriam BENCZÉDI Sándor (1952–2024)



■ ***Fig. 1.*** *Sándor BENCZÉDI. © Asociația „Kelemen Lajos" pentru Ocrotirea Monumentelor*
■ ***Fig. 1.*** *Sándor BENCZÉDI. © Kelemen Lajos Society for Historic Building Protection*
■ ***1. ábra.*** *BENCZÉDI Sándor. © Kelemen Lajos Műemlékvédő Társaság*

■ He loved his profession and served the cause of built heritage protection with passion. His profound, examining gaze, his massive stature, his measured, pause-laden sentences often carrying an underlying message emanated authority. He could be at the same time deeply concerned and smilingly cheerful, rigorous and affectionate. In his grey vest, holding a cigarette, he was present at the drawing table, at meetings, on the building sites, at surveys, at archaeological excavations, in the lecture hall. He paid attention, listened to others, voiced his opinion. He quoted his masters, whom he had come to know, or who had lived centuries before him, he referenced sources, both written and carved in stone. He listened and paid attention to his colleagues, students and workers alike, he paid attention to historic buildings, details, tiny aspects which seemed irrelevant to many. He was present. Through his attitude, thinking and his sincere, often harsh opinion, he had an intense presence in the field of built heritage protection in Transylvania and the Székely Land, reborn after 1990.

Just like all good heritage conservationists, Sándor BENCZÉDI also became one out of vocation. He was bothered by the fact that others altered and disfigured his environment. Thus, he stood up even when it was forbidden, or "it was not timely". Between 1976 and 1989, taking advantage of the available

1 PhD, engineer, historic building conservation specialist, ethnographer, historic building conservation consultant for the Hungarian Unitarian Church, Cluj-Napoca, Romania.

■ Şi-a iubit profesia, a slujit cauza protecţiei monumentelor istorice cu pasiune. Privirea sa pătrunzătoare cu care tatona în jur, statura sa robustă, colţuroasă, propoziţiile sale chibzuite, punctate, adesea cu subînţeles, emanau autoritate. Putea fi aproape simultan îngrijorat, neliniştit, dar şi zâmbitor şi vesel, sever sau plin de afecţiune. Purtând o vestă gri şi ţigară între degete, a fost prezent lângă planşetă, la şedinţă, pe şantier, la relevare, la săpătură arheologică, în sala de curs. Era atent, asculta, îşi formula părerea. Îi cita pe maeştrii săi, pe care i-a cunoscut, sau pe cei de care îl despărţeau sute de ani, s-a referit la izvoare scrise şi edificate în piatră. Îşi dădea interesul şi se preocupa de colegi, de studenţi şi de muncitori. Îşi dădea interesul şi se preocupa de monumentul istoric şi de cele mai mici detalii, care, multora le păreau nesemnificative. Era prezent. Prin atitudinea sa spirituală, prin opinia sa, adesea aparent nemiloasă, dar sinceră, el a fost o prezenţă fermă în activitatea de protecţie a monumentelor istorice din Ţinutul Secuiesc[2] şi din Transilvania, renăscută după 1990.

Sándor BENCZÉDI a devenit specialist în protejarea monumentelor istorice datorită vocaţiei sale, asemenea celor mai de seamă din acest domeniu. Îl deranja faptul că habitatul său era alterat şi distrus de

1 Dr., inginer, specialist în conservarea clădirilor istorice, etnograf, consultant în conservarea clădirilor istorice pentru Biserica Unitariană Maghiară, Cluj-Napoca, România.
2 În maghiară: Székelyföld, în germană: Szeklerland.

■ Szenvedélyesen szerette szakmáját, és szenvedélyesen szolgálta a műemlékvédelem ügyét. Átható, vizsgáló tekintete, robusztus, csontos alkata, megfontolt, szünetekkel szabdalt, legtöbbször mögöttes üzenetet is közvetítő mondatai tekintélyt sugároztak. Egyszerre volt aggódóan gondterhelt és mosolygósan derűs, szigorú és szeretetteljes. Szürke mellényben, cigarettát tartva ujjai között, jelen volt tervezőasztal mellett, gyűlésen, építőtelepen, felmérésen, régészeti feltáráson, előadóteremben. Figyelt, meghallgatott, véleményt mondott. Idézett mestereitől, azoktól, akiket Ő még ismert, vagy akiktől már több száz év választotta el, hivatkozott forrásokra, írottakra és kőből rakottakra. Figyelt és odafigyelt kollégára, diákra, munkásra, figyelt és odafigyelt a műemlékre, a részletekre, a sokak számára jelentéktelennek tűnő, apró részletekre. Jelen volt. Habitusa, szemlélete és sokszor kíméletlennek tűnő, őszinte

1 Dr., mérnök, műemlékvédelmi szakmérnök, néprajzkutató, a Magyar Unitárius Egyház műemlékvédelmi tanácsadója, Kolozsvár, Románia.

opportunities, he took part in designing activities related to historic buildings, then, starting from 1980, on the eve of the implementation of the Romanian rural systematization programme[2], together with his colleagues from the Design Institute of Covasna County, he undertook assessments and research of vernacular architecture in Covasna County and Moldova region. At that time the authorities responded to this activity, interpretable as a political protest, with interrogations and persecution. In 1991 the ministry of the Government of Hungary responsible for the built heritage honoured his activity with the Kós Károly Award. The assessments of vernacular architecture, carried out with Attila ZAKARIÁS, Árpád KOVÁCS and László MÁTHÉ, through their outstanding quality, mindful execution and aesthetic value that could be admired by the public after 1989, anticipated that the expert trained in a technical field aspired to a work filled with spirituality and connected to the culture of our community, and that his personality shaped by early professional experiences aimed to unleash his constantly growing spiritual drive in this direction.

The more professional experience good conservationists have, the more aware they become of how much they do not know. Sándor BENCZÉDI was one of such conservationists, as an adult, he was learning constantly and with determination. He was always absorbing information, reading, inquiring. As soon as he had

2 The Romanian rural systematization program was a social engineering program undertaken by Nicolae CEAUŞESCU's Romania primarily at the end of the 1980s. The legal framework for this program was established as early as 1974, followed by a long preparatory and design phase, but demolishment only began in earnest in March 1988. The declared aim of this program was to eliminate the differences between urban and rural, by the means of razing half of Romania's 13,000 villages and moving their residents into hundreds of new "agro-industrial centers" by 2000 (https://en.wikipedia.org/wiki/Romanian_rural_systematization_program, accessed on: 13 November 2024). [ed. note].

alţii. De aceea a început să acţioneze, chiar şi atunci când acest lucru era interzis sau „nu era oportun". Între anii 1976–89, profitând de diferite ocazii, a participat la activităţi de proiectare legate de clădiri istorice, iar din 1980, în ajunul punerii în practică a sistematizării[3], împreună cu colegii săi de la Institutul de Proiectare al Judeţului Covasna a inventariat patrimoniul arhitectural rural în judeţul Covasna şi în Moldova. Această activitate, de altfel strict culturală, a fost interpretată de către autorităţile vremii şi ca protest politic, fiind răsplătită cu interogări şi hărţuire. Până la urmă, după căderea regimului totalitar, documentarea şi publicarea acestor relevee a fost distinsă cu premiul „Kós Károly" de către Ministerul Culturii al Guvernului Maghiar în 1991. Calitatea excelentă, execuţia minuţioasă şi frumuseţea artistică a releveelor efectuate de el împreună cu Attila ZAKARIÁS, Árpád KOVÁCS şi László MÁTHÉ, care după căderea comunismului au putut fi admirate şi de publicul larg, ne-au arătat că specialistul educat în domeniul tehnic este însetat să desfăşoare activităţi pline de conţinut spiritual, legate de cultura comunităţii proprii, iar personalitatea sa, îmbogăţită cu experienţe profesionale timpurii, tinde să investească din ce în ce mai multă energie intelectuală pentru a da roade în această direcţie.

Un bun specialist, cu cât îşi sporeşte experienţa profesională, îşi dă seama cât de multe lucruri încă nu-i sunt cunoscute. Aşa a procedat şi Sándor BENCZÉDI, a învăţat per-

3 Programul românesc de sistematizare rurală a fost un program de inginerie socială întreprins de România lui Nicolae CEAUŞESCU în principal la sfârşitul anilor 1980. Cadrul legal al acestui program a fost adoptat încă din 1974, însă aplicarea lui efectivă a început în martie 1988, pregătirile, lucrările de proiectare derulându-se deja în anii optzeci. Scopul declarat al acestui program a fost de a elimina diferenţele dintre urban şi rural, prin raderea a jumătate din cele 13.000 de sate din România şi mutarea locuitorilor în sute de „centre agroindustriale" noi până în anul 2000 (https://en.wikipedia.org/wiki/Romanian_rural_systematization_program, accesat la 13 noiembrie 2024)..

véleménye által erőteljesen jelen volt Székelyföld és Erdély 1990 után újjászülető műemlékvédelmi életében.

Mint minden jó műemlékvédő, BENCZÉDI Sándor is hivatástudatból lett műemlékvédő. Zavarta, hogy életterét mások megváltoztatják, elrondítják. Ezért cselekedni kezdett. Tette ezt akkor is, ha éppen tilos volt, vagy „nem volt időszerű". 1976–89 között, kihasználva az adódó lehetőséget, műemlék épületekkel kapcsolatos tervezési tevékenységekben is részt vett, majd 1980-tól, a falurombolás gyakorlatba ültetésének előestéjén, a Kovászna megyei tervezőintézeti kollegáival együtt Háromszéken és Moldvában népi építészeti felmérésekbe és kutatásokba kezdett. Ezt a politikai tiltakozásként is értelmezhető tevékenységet, melyre az akkori hatóságok kihallgatásokkal, zaklatással válaszoltak, 1991-ben a magyar kormány szakminisztériuma Kós Károly-díjjal tüntette ki. A ZAKARIÁS Attilával, KOVÁCS Árpáddal és MÁTHÉ Lászlóval egy csapatban végzett népi építészeti felmérések kiváló minősége, gondos kivitelezése és azok művészi szépsége, melyre a változások után a nagyközönség is rácsodálkozhatott, előrevetítette, hogy a műszaki pályán iskolázott szakember szellemi tartalommal telített, közösségünk kultúrájához kapcsolódó munka elvégzéséért sóvárog, korai szakmai tapasztalatokkal izmosodó egyénisége ebbe az irányba kívánja gyümölcsöztetni egyre növekvő szellemi energiáját.

A jó műemlékvédő minél inkább növeli szakmai tapasztalatát, annál inkább tudatosítja, hogy nagyon sok mindent nem tud. Így tett BENCZÉDI Sándor is, céltudatosan tanult, felnőttként, folyamatosan. Tájékozódott, olvasott, érdeklődött. Amint erre lehetőség adódott, azaz 1990-ben, tegyük hozzá, 38 évesen, a Budapesti Műszaki Egyetem Építészeti Karán szaktanulmányokba kezdett. A tanulmányait lezáró műemlékvédelmi szakmérnöki oklevelét 1992-ben szerezte meg, majd ezt követően a hazai Kulturális Minisz-

the chance to, that was in 1990, at 38, he started his studies at the Faculty of Architecture of the Technical University in Budapest. He obtained his degree as architect specialized in historic building conservation in 1992, after which he obtained all the necessary certificates from the Romanian Ministry of Culture to become a certified expert. He knew that learning did not come to an end, as each new project was a new challenge, allowing for new formal and informal learning.

As a good conservationist, Sándor BENCZÉDI understood that historic building conservation was teamwork and he acted accordingly. He paid attention to his colleagues: structural engineers, conservators, archaeologists, art historians, builders, craftsmen.[3] He took responsibility with courage. He knew that the essence was in the details, in finding adequate, namely perfect solutions for them. Everything needs to be done well; no detail should be ignored – he accepted no compromise in this. He created opportunities for learning and training for others as well, he organized conferences, and he taught. He shared his experience, and knew that this would not make him less. From 1992, working together with Bálint Szabó, he was the vice-president of the organizing committee and we might say it, the soul of the series of professional events entitled Tuşnad, started as a course, then turned into a conference. We must add that he not only organized professional conferences, but he also listened carefully to every lecture in them. His professional relationship

manent şi cu determinare în toate perioadele vieţii sale. S-a informat, a citit, s-a interesat. Imediat ce s-a ivit ocazia, adică în 1990, la vârsta de 38 de ani, a început studiile de specialitate la Facultatea de Arhitectură a Universităţii Tehnice din Budapesta, pe care le-a finalizat în 1992, obţinând diploma de arhitect specialist în protecţia monumentelor istorice, iar ulterior a devenit specialist atestat al Ministerului Culturii din România. El ştia că educaţia sa nu a ajuns la final şi că fiecare proiect nou va însemna noi provocări, noi ocazii de studiu formal şi informal.

Ca bun specialist al monumentelor istorice, Sándor BENCZÉDI a înţeles şi a trăit efortul de echipă pentru protecţia acestora. A acordat atenţie colegilor săi: ingineri structurişti, restauratori, arheologi, istorici de artă, antreprenori, meşteri.[4] Îşi asuma responsabilitatea cu curaj. El ştia că esenţa stă în detalii, în soluţionarea corespunzătoare, adică perfectă a detaliilor. Totul trebuie rezolvat corect, nimic nu poate fi neglijat, astfel nu lăsa loc pentru niciun compromis. De asemenea, a creat oportunităţi de învăţare şi formare pentru alţii, a organizat conferinţe şi a predat. Şi-a împărtăşit experienţa, ştiind că aceasta nu-i va diminua, ci îi va îmbogăţi posibilităţile. Din 1992, activând împreună cu Bálint SZABÓ, a fost vicepreşedintele comitetului de organizare – putem afirma că totodată a fost şi sufletul şi conştiinţa vie – a seriei de evenimente profesionale marcate de numele Tuşnad, care a început ca un curs de specializare şi apoi s-a continuat şi s-a împlinit într-o vastă conferinţă profesională. Să adăugăm



■ ***Fig. 2.*** *Sándor BENCZÉDI, 2013. © Árpád FURU*
■ ***Fig. 2.*** *Sándor BENCZÉDI, 2013. © Árpád FURU*
■ ***2. ábra.*** *BENCZÉDI Sándor, 2013. © FURU Árpád*

térium keretein belül a megfelelő szakértői jogosítványok birtokosa lett. Tudta, hogy ezzel a tanulásnak nincs vége, minden újabb terv újabb kihívásra, újabb formális és informális tanulmányokra ad lehetőséget.

BENCZÉDI Sándor jó műemlékvédőként értette és élte, hogy a műemlékvédelem csapatmunka. Odafigyelt csapattársaira: a statikusokra, restaurátorokra, régészekre, művészettörténészekre, kivitelezőkre, mesteremberekre.[2] Bátran felelősséget vállalt. Tudta, hogy a lényeg a részletekben rejtőzik, a részletek megfelelő, azaz tökéletes megoldásában. Mindent jól kell megoldani, semmi fölött nem szabad

3 He worked together with his wife, Erika BENCZÉDI, architect Márta FEKETE, structural engineer Csaba BODOR, architects István BALÁZS and László MÁTHÉ, structural engineer Sámuel FERENCZI Z., economic expert Károly HLAVATHY, the late electrical engineer Géza TÓDOR, building services engineer Ervin FEKEÁS. He worked closely with the late historic building expert Izabella HLAVATHY, conservators Ferenc MIHÁLY and Lóránd KISS and their teams, with art historians, archaeologists Daniela MARCU-ISTRATE and Zsigmond Lóránd BORDI and others.

4 Colaboratorii săi direcţi au fost soţia sa, Erika BENCZÉDI, arh. Márta FEKETE, ing. expert structuri de rezistenţă Csaba BODOR, arhitecţii István BALÁZS, László MÁTHÉ, ing. Sámuel FERENCZI Z., ec. Károly HLAVATHY, regretatul ing. electrician Géza TÓDOR şi ing. instalaţii apă-canal, încălzire Ervin FEKEÁS. A lucrat îndeaproape cu regretata Izabella HLAVATHY, specialist în protecţia monumentelor, restauratorii Ferenc MIHÁLY şi Lóránd KISS cu echipele lor, istorici de artă, arheologii Daniela MARCU-ISTRATE şi Zsigmond Lóránd BORDI şi alţii.

2 Munkáiban közvetlen munkatársai voltak: felesége, BENCZÉDI Erika, FEKETE Márta építész, BODOR Csaba tartószerkezet-szakértő mérnök, BALÁZS István, MÁTHÉ László építészek, FERENCZI Z. Sámuel mérnök, HLAVATHY Károly gazdaságidokumentáció-készítő, néhai TÓDOR Géza épületvillamossági mérnök és FEKEÁS Ervin épületgépész mérnök. Szorosan együttműködött néhai HLAVATHY Izabella műemlékvédelmi szakreferenssel, MIHÁLY Ferenc és KISS Lóránd restaurátorokkal és ezek csapatával, művészettörténészekkel, MARCU-ISTRATE Daniela és BORDI Zsigmond Lóránd régésszel és másokkal.

and friendship with Bálint SZABÓ were decisive of his activity in built heritage protection. They were both determined, remarkable characters, and although their viewpoints differed a lot, they were complementary to each other due to their professional attitude. While the strength of Bálint SZABÓ was his overarching, synthesizing, system-building attitude, Sándor BENCZÉDI reinforced approaches mindful of every detail and in search for solutions to all specific issues. They mutually valued and respected each other, they cared for each other's opinion, help and strong support.[4]

From 1998 he gave lectures regularly and acted as thesis supervisor within the postgraduate course in historic building conservation organized jointly by the Babeş-Bolyai University and the Transylvania Trust Foundation. He paid attention to novices and taught them by formulating questions. His statements were meaningful, the pauses between his lengthily exposed thoughts prompted the young generation used to a fast-paced world to slow down, allowing them to better understand and think over what they had heard. In his last years, despite his illness, he took part in the assessment and defence of theses.

He had a major role in creating NGOs, he took part in their work and bodies. He was the programme coordinator of the Keöpeczi Sebestyén József Monument Protection Association, he was a member of the Romanian and Hungarian National Committees of the ICOMOS,[5] and of the ECOVAST.[6] He was a founding member, then vice-president of the Transylvania Trust Foundation and of the Society of Historic Building Conservators in Transylvania. He was a member of various national and local historic building committees for several terms. He was re-

4 It is a sad coincidence that Sándor BENCZÉDI passed away three weeks after the demise of Bálint SZABÓ.

5 ICOMOS – International Council of Monuments and Sites.

6 ECOVAST – European Council for the Village and Small Town.

că nu doar a organizat aceste conferinţe, dar asculta cu atenţie şi prelegerile acestora. Relaţia sa profesională şi prietenia cu Bálint SZABÓ au fost determinante pentru activitatea sa de protecţie a monumentelor istorice. Amândoi erau personalităţi hotărâte, puternice, deşi punctele lor de vedere erau foarte diferite, se completau reciproc datorită spiritului lor profesional. În timp ce punctul forte al lui Bálint SZABÓ a fost abordarea globală, sintetizatoare, de creare a sistemelor, Sándor BENCZÉDI consolida abordarea atentă la toate detaliile şi de căutare a soluţiilor pentru fiecare problemă individuală. S-au respectat şi s-au apreciat reciproc, s-au bazat pe opinia, ajutorul şi sprijinul puternic al celuilalt.[5]

În cadrul cursului postuniversitar de specializare în reabilitarea patrimoniului construit din Cluj-Napoca, organizat în comun de către Universitatea „Babeş-Bolyai" şi Fundaţia Transylvania Trust, începând din 1998, a ţinut în mod continuu prelegeri şi a condus lucrări de specialitate. A fost atent la începători, i-a învăţat prin întrebări. Vorbele lui aveau greutate, cu pauze lungi între idei, pentru a determina tânăra generaţie obişnuită cu lumea noastră accelerată să încetinească, oferind posibilitatea de a înţelege mai bine cuvântul rostit şi de a-l gândi mai departe. În ultimii ani, în ciuda bolii sale, a luat parte la susţinerea şi evaluarea lucrărilor examenelor de stat.

A avut un rol fundamental în crearea unor organizaţii ale societăţii civile, participând în consiliile şi la lucrările acestora. A fost coordonatorul de programe al Asociaţiei pentru Protecţia Monumentelor „Keöpeczi Sebestyén József", membru al Comitetelor Naţionale ICOMOS[6] din România şi Ungaria, precum şi al ECOVAST[7]. A fost membru fondator şi apoi vicepreşedinte al Fundaţiei

5 Este o tristă coincidenţă că decesul lui Sándor BENCZÉDI a urmat la trei săptămâni după cel al lui Bálint SZABÓ.

6 ICOMOS – International Council on Monuments and Sites – Consiliul Internaţional al Monumentelor şi Siturilor.

7 ECOVAST – European Council for the Village and Small Town – Consiliul European al Satelor şi Oraşelor mici.

elsiklani, ebben nem ismert kompromisszumot. Mások számára is lehetőséget teremtett a tanulásra, képzésre, konferenciát szervezett, tanított. Megosztotta tapasztalatait, és tudta, hogy ezáltal nem lesz szegényebb, sőt gazdagodott. SZABÓ Bálinttal 1992-től közösen dolgozva, szervezőbizottsági alelnöke, és tegyük hozzá, lelke, valamint élő lelkiismerete volt a kezdetben tanfolyamként induló, majd szakmai konferenciaként kiteljesedő, *Tusnád* nevével fémjelzett szakmai rendezvénysorozatnak. Nemcsak szervezte a szakmai konferenciákat, de figyelmesen meg is hallgatta az előadásokat. SZABÓ Bálinttal való szakmai kapcsolata és barátsága meghatározta műemlékvédelmi tevékenységét. Mindketten határozott, erőteljes egyéniségek voltak, és bár nézőpontjuk nagyon különbözött, de szakmai habitusuk által kiegészítették egymást. Míg SZABÓ Bálintnak az átfogó, szintetizáló, rendszerteremtő megközelítés volt az erőssége, BENCZÉDI Sándor a minden részletre gondosan odafigyelő és minden egyedi kérdésre megoldást kereső szemléletet erősítette. Tisztelték és nagyra becsülték egymást, számítottak egymás véleményére, segítségére és erősítő támogatására.[3]

A Babeş–Bolyai Tudományegyetem és a Transylvania Trust Alapítvány által közösen szervezett kolozsvári műemlékvédelmi posztgraduális képzésen 1998-tól folyamatosan előadásokat tartott, szakdolgozatokat vezetett. Odafigyelt a kezdőkre, kérdésekkel tanított. Mondatainak súlya volt, hosszú gondolatok közötti hatásszünetei rohanó világunkhoz szokott, sietős fiatal nemzedéknek lassítást parancsoltak, mintegy lehetőséget teremtve a kimondott szó jobb megértésére, továbbgondolására. Utolsó éveiben betegsége dacára is részt vett az államvizsga-dolgozatok megvédésén, kiértékelésében.

3 Szomorú egybeesés, hogy BENCZÉDI Sándor három héttel SZABÓ Bálint halála után hunyt el.

spected and valued by experts in the field in Bucharest; the members of national historic building protection departments and institutions in Bucharest listened to his opinions and he had good professional relationships with the representatives of the international ICOMOS organizations as well. From 2006 he was engaged in the activities of the Committee for Religious Art of the Roman-Catholic Archdiocese of Alba Iulia. He was active in politics as well, since between 1992 and 2004, he was an elected member of the County Council of Covasna, within which he was the president of the Committee for Buildings, Urban Planning and Historic Building Protection.

If we look at the list of the works undertaken by Sándor BENCZÉDI, it becomes clear that the list, impressive both in terms of quantity and content, implies highly demanding tasks. The role of chief architect did not mean in his case that he would simply sign for works carried out by others, but he truly coordinated the design process, took an active part in the team, aligned the work of different special fields, and in the meantime, he was aware of every detail of the plan, undertaking the responsibility for each partial solution.

As chief architect and designer, he took part in the restoration of the Roman Catholic churches of Armăşeni and Lemnia, of the Reformed churches of Mugeni, Dalnic and Albiş, of the Unitarian church of Vârghiş, and in the restoration of Sfântu Gheorghe Town Hall.

He was chief architect or co-architect at the restoration of the Monastery Church in Sighişoara, the fortified Lutheran church in Saschiz, the Orthodox church and parish in Târgu Secuiesc, the House with Arcades and the Bod Péter County Library in Sfântu Gheorghe, and of the Apor castle in Turia de Jos. He also participated in the scientific preliminary studies to the Master Plans of Sfântu Gheorghe and Târgu Secuiesc.

He was a consultant in historic buildings and site supervisor at the conservation of the Unitarian churches of Chilieni, Chichiş, Sân-Transylvania Trust, Asociaţia Restauratorilor de Monumente Istorice din Transilvania. A fost membru al diferitelor comisii naţionale şi locale pentru monumente istorice, pentru mai multe mandate. A fost respectat şi apreciat de reprezentanţii cercurilor profesionale din Bucureşti, îi acordau atenţie personalul oficiilor şi instituţiilor de protecţie a monumentelor istorice din Budapesta, a avut bune relaţii profesionale şi cu organizaţiile internaţionale Icomos. Din 2006, a activat în Comitetul de artă bisericească al Arhiepiscopiei Romano-Catolice de la Alba Iulia. A participat şi la viaţa politică, între 1992 şi 2004 fiind membru ales al Consiliului Judeţean Covasna, activând şi ca preşedinte al Comisiei pentru construcţii, urbanism şi protecţia monumentelor istorice.

Dacă ne uităm pe lista lucrărilor lui Sándor BENCZÉDI, putem constata că la rădăcinile acestei liste prestigioase atât ca număr, cât şi conţinut, stau provocări dificile. În calitatea sa de şef de proiect complex, el nu doar semna o lucrare realizată de alţii, ci coordona într-adevăr proiectarea, munca fiecărui specialist, participând activ în echipă, cunoscând în acelaşi timp proiectul în toate detaliile lui, asumându-şi responsabilitatea în sensul cel mai nobil al cuvântului, pentru soluţia fiecărui detaliu.

În calitatea sa de şef de proiect şi proiectant, a luat parte la restaurarea bisericilor romano-catolice din Armăşeni, Lemnia, bisericilor reformate din Mugeni, Dalnic, Albiş şi a bisericii unitariene din Vârghiş, precum şi a primăriei din Sfântu Gheorghe.

În calitate de şef de proiect şi co-proiectant, a participat la restaurarea bisericii Mănăstirii din Sighişoara, a bisericii fortificate luterane din Saschiz, a bisericii şi casei parohiale ortodoxe din Târgu Secuiesc, a Casei cu Arcade şi a Bibliotecii Judeţene „Bod Péter” din Sfântu Gheorghe, a castelului „Apor” din Turia de Jos, precum şi la studiile ştiinţifice preliminare ale planurilor urbanistice generale pentru municipiile Sfântu Gheorghe şi Târgu Secuiesc.

Civil szervezetek létrehozásakor is alapvetően fontos szerepet játszott, részt vett ezek munkájában, testületeiben. Programkoordinátora volt a Keöpeczi Sebestyén József Műemlékvédelmi Egyesületnek, tagja a Román és a Magyar ICOMOS[4] Nemzeti Bizottságoknak, valamint az ECOVAST-nak.[5] Alapító tagja, majd alelnöke volt a Transylvania Trust Alapítványnak, az Erdélyi Műemlék-restaurátorok Egyesületének. Több cikluson keresztül tagja volt számos országos és helyi műemléki bizottságnak. Tisztelték, becsülték Bukarest szakmai köreinek képviselői, odafigyeltek rá a budapesti országos műemlékvédelmi hivatalok és intézmények munkatársai, és jó szakmai kapcsolatot ápolt a nemzetközi ICOMOS szervezetek képviselőivel is. 2006-tól részt vett a Gyulafehérvári Római Katolikus Érsekség Egyházművészeti Bizottságának munkájában. Részt vállalt a politikai életben is: 1992–2004 között Kovászna Megye Tanácsának választott képviselője volt, ezen belül az építkezési, urbanisztikai és műemlékvédelmi szakbizottság elnöke.

Ha rátekintünk BENCZÉDI Sándor munkáinak jegyzékére, megállapíthatjuk, hogy a számban és tartalmában is tekintélyes lista mögött embert próbáló feladatok álltak. A komplex tervfőnöki minőség nála nem azt jelentette, hogy aláír egy mások által elvégzett munkát, hanem valóban koordinálta a tervezést, részt vett tevékenyen a csapatban, összehangolta az egyes szakágak munkáját, és ugyanakkor minden részletében ismerte a tervet, a szó legnemesebb értelmében felelősséget vállalva minden részletmegoldásért.

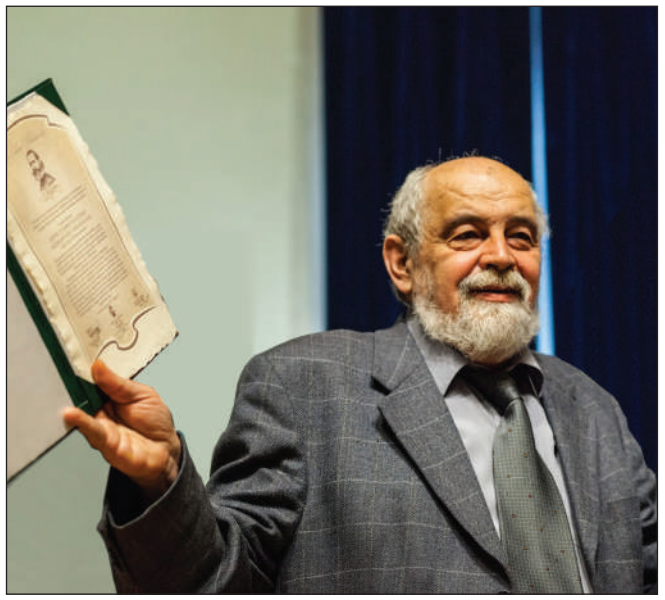
Tervfőnökként és építészeti tervezőként vett részt a csíkmenasági, lemhényi római katolikus, a bögözi, dálnoki, albisi református, a vargyasi unitárius templomok, valamint

4 ICOMOS – International Council on Monuments and Sites.

5 ECOVAST – European Council for the Village and Small Town – Falvak és Kis Települések Európai Tanácsa.



■ ***Fig. 3.*** *Sándor BENCZÉDI primește Marele Premiu Europa Nostra de la Prinţul Henrik al Danemarcei la Bergen, 2004. © colecția lui Sándor BENCZÉDI*
■ ***Fig. 3.*** *Sándor BENCZÉDI receives the Europa Nostra Grand Prix from Crown Prince Henrik of Denmark in Bergen in 2004. © the collection of Sándor BENCZÉDI*
■ ***3. ábra.*** *BENCZÉDI Sándor átveszi az Europa Nostra nagydíjat Henrik dán koronahercegtől, Bergenben, 2004-ben. © BENCZÉDI Sándor gyűjteménye*



■ ***Fig. 4.*** *Sándor BENCZÉDI primește Premiul „Orbán Balázs”. © colecția lui Sándor BENCZÉDI*
■ ***Fig. 4.*** *Sándor BENCZÉDI receives the az Orbán Balázs Prix. © the collection of Sándor BENCZÉDI*
■ ***4. ábra.*** *BENCZÉDI Sándor átveszi az Orbán Balázs-díjat. © BENCZÉDI Sándor gyűjteménye*

craiu (Covasna County) and Aita Mare, the Roman Catholic church of Ghelinţa, the Reformed churches of Ghidfalău and Calnic, the Kálnoky Castle in Micloşoara, the Székely National Museum, the Bene House, the Beör Palace, the first Romanian school and parish and the building of the former bazar in Sfântu Gheorghe, the Hollaky Mansion in Dobolii de Jos and the Boda Mansion in Filia.

The conservation of the Hilltop Church in Sighişoara was awarded with Europa Nostra Grand Prix and Grigore Ionescu Award, and the conservation of the Stag House in Sighişoara, was honoured with the Nicolae Ghica-Budeşti Award. These two assignments in Sighişoara were undoubtedly important milestones in his career. Both projects could be completed due to a broad international cooperation, the joint work of professionals from Romania, Hungary and Germany, led by him as chief architect and the main coordinator of the conservation works. The two conservation projects lasted for several years. First the Hilltop Church, then the Stag House were of outstanding quality in the context of the achievements of this field in Romania at the turn of the millen-

A fost consultant de specialitate şi verificator de proiect pentru bisericile unitariene din Chilieni, Chichiş, Sâncraiu şi Aita Mare, biserica romano-catolică din Ghelinţa, bisericile reformate din Ghidfalău şi Calnic, Castelul „Kálnoky” din Micloşoara, Muzeul Naţional Secuiesc, Casa „Bene”, Palatul „Beör”, prima şcoală şi casă parohială românească şi clădirea fostului Bazar din Sfântu Gheorghe, respectiv Conacul „Hollaky” din Dobolii de Jos şi Conacul „Boda” din Filia.

Lucrările sale cele mai recunoscute sunt reabilitarea Bisericii din Deal de la Sighişoara, distinsă cu Marele Premiu Europa Nostra şi Premiul „Grigore Ionescu”, apoi restaurarea Casei cu Cerb, tot din Sighişoara, care a obţinut Premiul „Nicolae Ghica-Budeşti”. Fără îndoială, aceste două lucrări sunt cele mai importante repere în cariera sa profesională. Ambele proiecte au fost realizate cu cooperare internaţională, prin munca comună a specialiştilor din România, Ungaria şi Germania, sub conducerea sa în calitate de arhitect proiectant şi coordonator principal al reabilitărilor. Lucrările s-au desfăşurat de-a lungul mai multor ani, iar Biserica

Sepsiszentgyörgy polgármesteri hivatala helyreállításában.

Tervfőnökként és társtervezőként vett részt a segesvári Kolostortemplom, a szászkézdi evangélikus erődtemplom, a kézdivásárhelyi ortodox templom és parókia, a sepsiszentgyörgyi Lábasház, a Bod Péter Megyei Könyvtár és az altorjai Apor-kastély helyreállításában, valamint Sepsiszentgyörgy és Kézdivásárhely területrendezési tervének tudományos előtanulmányaiban.

Műemlékvédelmi tanácsadó és tervellenőr volt a kilyéni, kökösi, sepsiszentkirályi és nagyajtai unitárius, gelencei római katolikus, gidófalvi és kálnoki református templomok, a miklósvári Kálnoky-kastély, a sepsiszentgyörgyi Székely Nemzeti Múzeum, Bene-ház, Beör-palota, az első román iskola és parókia és a volt Bazár épületének, valamint az aldobolyi Hollaky- és az erdőfülei Boda-kúria helyreállításában.

Díjakkal is elismert munkái az Europa Nostra nagydíjjal és Grigore Ionescu-díjjal kitüntetett segesvári Hegyi templom, valamint a Nicolae Ghica-Budeşti-díjas, szintén segesvári Szarvas-ház helyreállítása. E két segesvári munka kétségkívül

nium. The partnership with German organizations facilitated by to the Transylvanian Saxon emigrants[7] played a crucial role, since besides securing funds, it made possible the deployment of important technological feats. However, the primary asset was the thoroughness, persistence, determination of Sándor BENCZÉDI, and the high professional level of the team of architects, structural engineers, archaeologists and conservators he set up.

In 2001 the Ministry of the National Cultural Heritage of Hungary distinguished his work with the Schönvisner István Award. In 2013 he received the professional award of the Kelemen Lajos Society for Historic Building Protection, and in the same year the Orbán Balázs Award for the historic building protection activity in the Székely Land on behalf of the Keöpeczi Sebestyén József Society for Historic Building Protection.

During the 1990s, he took part in the international programme dedicated to the recording of the Saxon cultural heritage, then in the programme of surveying the mansions of the Covasna area carried out by the Keöpeczi Sebestyén József Society for Historic Building Protection. He published a monography together with Árpád CSÁKI on the history of the Mikó Castle in Olteni. He published more than thirty scientific articles in specialist journals and delivered over thirty lectures at scientific conferences. He exhibited his works at ten exhibitions.

Sándor BENCZÉDI experienced his profession as a heritage preservationist through the lens of a performing artist; he did not play his own works, but brought others' creations to life. He understood that his work was successful when he could bring the works of masters from the past into the spotlight, making them visible, understandable and tangible. Like all artists, he was sensitive, perhaps too much. Certain things annoyed him. Things he could do noth-

7 Cristoph MACHAT, who had moved to Germany from Sighişoara, had an important contribution to this process.

din Deal şi apoi Casa cu Cerb au reprezentat o calitate remarcabilă faţă de condiţiile profesionale autohtone existente la începutul mileniului. Un rol însemnat în această realizare l-a avut parteneriatul german stabilit cu ajutorul emigranţilor saşi[8], care, pe lângă securitatea financiară, a creat şi oportunitatea de aplicare a unor soluţii tehnice valoroase. Totuşi, de o importanţă primordială au fost minuţiozitatea, perseverenţa şi determinarea lui Sándor BENCZÉDI, precum şi profesionalismul de înaltă calitate al echipei de arhitecţi, ingineri, arheologi şi restauratori alcătuită de el.

Activitatea sa a fost onorată în 2001 cu premiul „Schönvisner István" de către Ministerul Patrimoniului Cultural al Ungariei. În 2013, a primit premiul profesional al Asociaţiei „Kelemen Lajos" pentru Ocrotirea Monumentelor. Tot în 2013, Societatea „Keöpeczi Sebestyén József" pentru Protecţia Monumentelor a distins activitatea sa de protecţie a monumentelor istorice din Ţinutul Secuiesc cu Premiul „Orbán Balázs".

În anii 90 a participat la programul internaţional de inventariere a patrimoniului săsesc, iar apoi la programul de relevare a conacelor din jud. Covasna, organizat de Societatea „Keöpeczi Sebestyén József" pentru Protecţia Monumentelor. Împreună cu Árpád CSÁKI, a publicat un volum de monografie despre istoria Castelului „Mikó" din Olteni. A publicat peste treizeci de articole ştiinţifice în reviste de specialitate şi a ţinut peste treizeci de prelegeri la conferinţe ştiinţifice. A participat cu lucrările sale la zece expoziţii.

Sándor BENCZÉDI şi-a trăit vocaţia de restaurator de monumente istorice ca artist interpret, care nu şi-a prezentat propriile lucrări, ci a interpretat creaţiile altora. Ştia că munca sa are succes doar dacă pune în evidenţă munca maeştrilor din trecut, făcând-o vizibilă, înţeleasă şi simţită. Precum fiecare artist, era

8 Un factor important a fost implicarea lui Cristoph MACHAT, emigrant din Sighişoara.

szakmai karrierjének fontos állomása volt. Mindkét projekt széles nemzetközi együttműködés, romániai, magyarországi és németországi szakemberek közös munkája által valósult meg, melyeket tervező építészként és a helyreállítás fő koordinátoraként vezetett. A hosszú éveken át kibontakozó két helyreállítás, először a Hegyi templom, majd ennek folytatásaként a Szarvas-ház az ezredforduló romániai szakmai viszonyaihoz képest kiemelkedő minőséget képviselt. Szerepet játszott ebben a szász emigráció segítségével[6] létrejövő német partnerség, mely az anyagiak biztonsága mellett komoly technológiai bravúrok felvonultatására is lehetőséget teremtett, de elsődlegesen fontos volt BENCZÉDI Sándor alaposssága, kitartása, határozottsága és az általa összeállított építész-, statikus-, régész-, restaurátorcsapat magas színvonalú szakmaisága.

Munkásságát 2001-ben a Nemzeti Kulturális Örökség Minisztériuma Schönvisner István-díjjal tüntette ki. 2013-ban a Kelemen Lajos Műemlékvédelmi Társaság szakmai díját, majd szintén 2013-ban a Keöpeczi Sebestyén József Műemlékvédelmi Társaság székelyföldi műemlékvédelmi tevékenységéért az Orbán Balázs-díjat vehette át.

A kilencvenes években részt vett a szász örökség felmérését célzó nemzetközi programban, majd a Keöpeczi Sebestyén József Műemlékvédő Társaság által szervezett háromszéki kúriafelmérő programban. Az oltszemi Mikó-kastély történetéről CSÁKI Árpáddal közösen monográfiakötetet adott ki. Szakmai folyóiratokban több mint harminc tudományos cikket közölt, tudományos konferenciákon több mint harminc előadást tartott. Munkáival mintegy tíz kiállításon vett részt.

BENCZÉDI Sándor műemlékvédő hivatását előadóművészként élte meg, nem saját művét játszotta, hanem más alkotását szólaltatta meg. Tudta azt, hogy munkája akkor si-

6 A Segesvárról elszármazott MACHAT Cristoph szerepe fontos tényező volt.

ing about, and things against which he thought he could do something. His own sense of perfection was his standard, which he himself could rarely satisfy, or at least this is what he believed, and for this reason, he often tormented himself. He was annoyed when his fellows or colleagues did not act as good conservationists, when personal or other interests prevailed over the professional interests. He engaged in debates for the success and principles of built heritage conservation and fought persistently. He knew he might lose sometimes. It is painful to lose certain things, and it is even more painful to lose professional partners and friends. He learned to bear disappointment, and learned to endure, to reconcile, he learned that this was also part of this profession – and against all odds, he never gave up.

He knew and experienced that being a good heritage conservationist was not an easy task. More precisely, that it was extremely difficult. However, he knew that a heritage conservationist is good when they are strong, resilient, and brave – especially if they are Szekler. And they must be witty as well, because this is also needed in the profession. Resourcefulness and sense of humour, even a good amount of it, otherwise one may fail easily. However, what he did best: to love and respect, both the cause and the people, for heritage preservation is not for its own sake, but for the people, the community, and for the honour of each other and ourselves.

“Be brave, be brave!” he said as he waved to us when we were leaving after we visited him for the last time. We were silently stepping down the staircase, getting further and further away from him, though we knew that he was the one about to depart. He did leave us after all; Sándor BENCZÉDI has also left.

sensibil. Poate prea sensibil. Îl deranjau diferite lucruri. Lucruri pe care nu le putea controla şi lucruri pe care credea că le poate controla. Avea ca standard propriile sale exigenţe, pe care rareori le putea satisface, cel puţin aşa credea el; prin urmare, adesea se consuma în sinea lui. Era supărat când partenerii sau colegii săi nu se comportau ca buni specialişti, când interesele lor personale sau de altă natură primau intereselor profesionale. Pentru succesul şi principiile restaurării s-a angajat în dezbateri şi lupta din greu. Ştia că uneori va pierde. Este dureros să pierzi câte ceva, dar este şi mai dureros să pierzi parteneri de profesie şi prieteni. A învăţat să fie dezamăgit şi a învăţat să rabde, a învăţat să se împace, a învăţat că acestea fac parte din meserie şi, în ciuda a tot ce se întâmpla, niciodată nu a renunţat.

A ştiut, a experimentat şi a trăit dificultăţile de a fi un bun profesionist. Mai exact, este foarte greu, iar un restaurator este bun dacă este un om puternic, tenace şi curajos, mai ales dacă este secui. Dibăcia este indispensabilă pentru această meserie. E bine să fii şiret şi să ai simţul umorului, pentru că, fără acestea, omul poate da greş foarte uşor. Şi ceea ce ştia el cel mai bine: să iubească şi să respecte, cauza şi omul, pentru că protecţia monumentelor istorice nu se face pentru sine, ci pentru oameni, pentru comunitate, pentru onoarea proprie şi a fiecăruia dintre noi.

„Curaj, curaj!” ne-a făcut cu mâna, când am ieşit pe uşa lui după ultima noastră vizită. Am coborât în tăcere scările, privind în faţa noastră, îndepărtându-ne, deşi ştiam că El este cel care se pregătea să plece. A plecat... şi Sándor BENCZÉDI a plecat.

keres, ha korábban élt mesterek munkáját előtérbe helyezheti, ezt láthatóvá, érthetővé és érezhetővé teheti. Mint a jó előadóművész, érzékeny volt. Talán túlontúl is. Zavarták dolgok. Olyanok, amik ellen semmit nem tehetett, és olyanok is, amikért azt hitte, hogy ő tehet. Saját igényessége volt a mérce, melyet maga is ritkán elégíthetett ki, legalábbis ezt hitte, és ezért magát is gyakran emésztette. Bosszankodott, amikor társai, kollégái nem jó műemlékvédőkként viselkedtek, amikor a szakma érdekei elé személyes vagy egyéb érdekek kerültek. A műemlék-helyreállítás sikeréért, elveiért vitákat vállalt, és szívósan harcolt. Tudta, hogy időnként veszíteni is fog. Fájdalmas veszni hagyni egyet s mást, és még fájdalmasabb szakmai partnereket és barátokat veszíteni. Megtanult csalódni, és megtanult tűrni, megtanult kibékülni, megtanulta, hogy ez is a szakma osztályrésze, és mindezek ellenére sosem adta fel.

Tudta, tapasztalta, megélte, hogy nem könnyű jó műemlékesnek lenni. Egészen pontosan nagyon nehéz, de akkor jó a műemlékvédő, ha erős, szívós, bátor ember – főleg, ha székely. No meg furfangos is, mert ez is kell a szakmához. Furfang és humorérzék, nem is kevés, mert enélkül könnyen beletörik a bicska. És amit legjobban tudott: szeretni és tisztelni, ügyet és embert, hisz a műemlékvédelem nem önmagáért van, hanem az emberekért, a közösségért, egymás és magunk becsületéért.

„Bátorság, bátorság!”, intett kezével, amint utolsó látogatásunkkor kimentünk az ajtón. Némán lépkedtünk lefelé a lépcsőházban, magunk elé nézve, távolodtunk, holott tudtuk: Ő készült távozni. Elment… BENCZÉDI Sándor is elment.

In memoriam Cristina Carmen COLDEA (1955-2024)



■ ***Fig. 1.*** *Cu ocazia intervențiilor la a sinagoga de pe strada Horea. © Utilitas – Centru de cercetare, proiectare în domeniul reabilitării patrimoniului construit Srl.*
■ ***Fig. 1.*** *During the conservation of the synagogue in Cluj-Napoca. © Utilitas – Built Heritage Conservation Research and Design Centre Ltd.*
■ ***1. ábra.*** *A kolozsvári zsinagóga helyreállításakor. © Utilitas – Épített örökségvédelmi kutató-tervező központ Kft.*

■ Those of us who frequently travelled with Professor Bálint SZABÓ, either for worksite visits for assistance or for organising conferences in various places, often heard stories about the first generation of civil engineering students to whom he taught the Reinforced Concrete subject and for whom he coordinated their dissertations. Being a young teacher, only about ten years older than them, he followed their professional path even after graduation. Cristina MUREŞAN, married COLDEA, was part of that generation.

Born in Cluj, she graduated from the Polytechnic Institute, today the Technical University of Cluj-Napoca, Faculty of Civil Engineering and became a civil engineer in 1979. Her first job was at the precast factory in Aiud. Later, she returned to Cluj-Napoca, to the IRIS porcelain factory, where she became a specialist in industrial kilns, especially porcelain firing kilns, and where she stayed until the factory was closed.

She was our colleague at Utilitas Ltd., then headed by prof. dr. eng. Bálint SZABÓ, between 1 February 2001 and 15 May 2002. We are left with the memory of an optimistic, enthusiastic person, always smiling and ready to lend a helping hand. She was more than what would be called an office manager today, with a great contribution to our work of developing designs, proofreading memoranda and other documents, and providing simultaneous interpretation at the specialised conferences organised. Even though we were from a different, younger generation, many of us had a more than

■ Cei care călătoream frecvent cu dl profesor Bálint SZABÓ, fie pentru vizite de şantier în scop de asistenţă, fie pentru organizarea conferinţelor în diverse locuri, auzeam deseori poveşti despre prima generaţie de studenţi ingineri constructori cărora le-a predat disciplina de beton armat şi pentru care a coordonat lucrările de diplomă. Fiind un cadru didactic tânăr, cu doar aproximativ zece ani diferenţă de vârstă faţă de aceştia, le-a urmărit parcursul profesional chiar şi după finalizarea studiilor. Cristina MUREŞAN, căsătorită COLDEA, făcea parte din acea generaţie.

Născută la Cluj, a fost absolventă a Institutului Politehnic, astăzi Universitatea Tehnică Cluj-Napoca, Facultatea de Construcţii şi a devenit inginer constructor în anul 1979. Primul ei loc de muncă a fost uzina de prefabricate din Aiud. Mai târziu a revenit în Cluj-Napoca la fabrica de porţelan „IRIS”, unde a devenit specialist în cuptoare industriale şi în special în cele de ars porţelanul şi unde a rămas până la desfiinţarea fabricii.

Ulterior, ne-a fost colegă la S.C. Utilitas Srl., atunci condusă de prof. dr. ing. Bálint SZABÓ, între 1 februarie 2001 şi 15 mai 2002, şi am rămas cu amintirea unei persoane optimiste, entuziaste şi mereu cu zâmbetul pe buze şi gata să dea o mână de ajutor. Era chiar mai mult decât ceea ce astăzi s-ar numi „office manager”, cu mare aport în activitatea noastră de elaborare de proiecte, de corectare de memorii şi alte documente, de traducere simultană la conferinţele de specialitate organizate. Mulţi dintre noi, deşi eram dintr-o altă generaţie, mai tânără, a domnului profesor, aveam

■ Gyakran utazva SZABÓ Bálint professzor úrral építőtelepekre vagy különböző helyekre konferencia szervezése céljából, sokszor hallhattunk különféle történeteket az ő első generációs építőmérnöki hallgatóiról, akiknek a vasbeton szerkezetet oktatta, és akiknek irányító tanáruk volt a szakdolgozat megírása során. Fiatal oktató lévén, aki mindössze tíz évvel volt idősebb a hallgatóinál, követte szakmai pályafutásukat a tanulmányaik lezárását követően is. COLDEA Cristina, lánykori nevén MUREŞAN ennek a nemzedéknek volt a tagja.

Cristina Kolozsváron született, és a Műszaki Intézetben (ma Kolozsvári Műszaki Egyetem), az Építőipari Karon végzett építőmérnökként 1979-ben. Első munkahelye a vasbeton előregyártott elemeket előállító nagyenyedi üzemben volt. Később visszatért Kolozsvárra, az IRIS porcelángyárba, ahol az ipari kemencék, főként a porcelán kiégetésére használt kemencék szakértője



■ ***Fig. 2.*** *La conferința internațională Tusnad, 2009. © Utilitas – Centru de cercetare, proiectare în domeniul reabilitării patrimoniului construit Srl.*
■ ***Fig. 2.*** *At the Tusnad international conference 2009. © Utilitas – Built Heritage Conservation Research and Design Centre Ltd.*
■ ***2. ábra.*** *A Tusnad nemzetközi konferencián, 2009-ben. © Utilitas – Épített örökségvédelmi kutató-tervező központ Kft.*

collegial relationship with Cristina. It was a friendly relationship, which she and we all valued highly.

Although she moved to the Farmec factory in 2003, we were in touch, and she continued to support us with editing and proofreading, interpreting at conferences or translating for our publications. As she was also a site supervisor certified by the State Inspectorate for Constructions, we met again on the sites of our various projects.

She was a member of the team of site supervisors at Iulius Mall, a commercial building representative for Cluj-Napoca, and she also contributed to the smooth running of many other construction sites in the city. As a staff member of the University of Art and Design in Cluj-Napoca, she took care of the university's heritage assets with the same earnestness and determination until her retirement. She continued to be active as a site supervisor even after retiring, being a reliable collaborator for many beneficiaries.

During emergency interventions on the roof of the synagogue on Hocu Cristina o relaţie mai mult decât colegială, o relaţie de prietenie, pe care şi ea şi noi o preţuiam mult.

Deşi în 2003 s-a mutat la fabrica „Farmec", am păstrat legătura şi a continuat să ne ofere suport la redactarea şi corectarea textelor, traducând la conferinţe sau pentru publicaţiile noastre. Fiind şi diriginte de şantier atestat ISC, ne-am reîntâlnit pe şantierele diferitelor noastre proiecte.

A fost membră în echipa de diriginţi de şantier la Iulius Mall, construcţie comercială reprezentativă pentru Cluj-Napoca, dar şi-a adus aportul pentru bunul mers al multor altor şantiere de construcţii din oraş. În colectivul Universităţii de Artă şi Design din Cluj-Napoca, s-a ocupat cu aceeaşi conştiinciozitate şi determinare de patrimoniul universităţii, pentru buna ordine a acestuia, până la pensionare. Chiar pensionară fiind, a continuat să fie activă ca şi colaborator de nădejde pentru mulţi beneficiari, în calitate de diriginte de şantier.

Cu ocazia intervenţiilor de urgenţă la acoperişul sinagogii de pe strada Horea am apelat la Cristina ca să reprezinte beneficiarul în calitate de diriginte de şantier, iar după lucrare a devenit referentul tehnic al comunităţii evreieşti din Cluj-Napoca, dedicându-se trup şi suflet restaurării sinagogii şi a Centrului Cultural Evreiesc Cluj de pe strada Horea. De altfel, ultima ei perioadă de activitate a dedicat-o cu tot sufletul patrimoniului comunităţii evreieşti din acest oraş.

S-a implicat activ în restaurarea Castelului „Bánffy" din Bonţida şi în lucrările de conservare a bisericilor din Eparhia Reformată din Ardeal. A coordonat ca diriginte de şantier lucrări mici, cu bugete modeste, din dragoste pentru biserici şi patrimoniul construit. A asigurat dirigenţia de şantier pentru scoaterea din pericol a turnului Catedralei Greco-Catolice din Blaj, a şarpantei Bisericii Romano-Catolice din Turda şi a participat activ la investiţii din fonduri europene, cum ar fi restaurarea Cetăţii din Bologa. Tot de numele ei, ca diriginte de şantier, se leagă şi restaurarea Casei „Hintz", restaurarea şarlett, és ahol a gyár bezárásáig dolgozott.

2001. február 1. és 2002. május 15. között kolléganőnk volt az Utilitasnál, amelyet akkor SZABÓ Bálint professzor úr vezetett; derűlátó, lelkes, mindig mosolygó és segítőkész munkatársként maradt meg mindannyiunk emlékében. Több volt, mint amit ma office managernek, irodavezetőnek neveznénk, jelentősen hozzájárult a közös munkához, legyen szó projektkidolgozásról, a tervdokumentációk és más dokumentumok javításáról vagy akár a szakkonferenciáinkon való szinkrontolmácsolásról. Sokan közülünk, bár a professzor úr keze alatt dolgozók egy másik, fiatalabb nemzedékéhez tartoztunk, a munkatársi viszonynál többet jelentő baráti kapcsolatot ápoltunk Cristinával, amelyet vele együtt nagy becsben tartottunk.

Noha 2003-ban átszerződött a Farmec gyárba, tartottuk vele a kapcsolatot, és továbbra is segített minket a szövegek szerkesztésében és korrektúrájában, a konferenciák vagy a kiadványaink megjelentetése során végzett fordításokkal. Mivel ő az Építőipari Felügyelőség által képesített építésfelügyelő is volt, találkozhattunk vele a különböző terveink kivitelezési helyszínein is.

Tagja volt a Iulius Mall, egy reprezentatív kolozsvári kereskedelmi központ ellenőrzésén dolgozó építésfelügyelői csapatnak, de hozzájárult sok más kolozsvári építkezés zökkenőmentes lebonyolításához is. A kolozsvári Képzőművészeti és Design Egyetem munkaközösségében a rá jellemző felelősségvállalással és odaadással foglalkozott az egyetem tárgyi állományával, annak rendben tartásával, egészen a nyugdíjazásáig. Még ezután is tevékenykedett, építésfelügyelőként megbízható munkatárs volt számos ügyfél számára.

A Horea úti zsinagóga tetőszerkezetén végzett sürgősségi beavatkozások során Cristinához fordultunk, hogy építésfelügyelőként a tulajdonos beruházót képviselje, a munkálatok végeztével pedig a

rea Street, Cluj-Napoca, we asked Cristina to represent the beneficiary as site supervisor. After that work, she became the technical adviser of the Jewish community in Cluj-Napoca. She devoted herself to the conservation of the synagogue and the Cluj Jewish Cultural Centre on Horea Street. Her last period of activity was dedicated to the heritage of the city's Jewish community.

She was actively involved in the conservation of Bánffy Castle in Bonţida and of churches belonging to the Reformed (Calvinist) Diocese of Transylvania. As site supervisor, she coordinated small works with modest budgets out of love for churches and built heritage. She was site supervisor for the rescue works on the tower of the Greek Catholic Cathedral in Blaj and the roof structure of the Roman Catholic Church in Turda. She actively participated in EU-funded investments, such as the conservation of Bologa Castle. Her name, as site supervisor, is also linked to the conservation of the Hintz House, the Franciscan monastery's roof structure, and several building façade rehabilitations in Cluj-Napoca.

Life was harsh with Cristina and challenged her with many health problems, but she never let her suffering show, which she bore with dignity and courage, with an open heart for the people around her, continuing to work with the same passion and enthusiasm. She loved people more than many can or know how to do and was happy to help whenever needed. Sadly, her strong voice with its special tone and optimistic face will never be heard or seen again. She burned like a flame that brightened and warmed the lives of those around her.

May she rest in peace!



■ ***Fig. 3.*** *În timpul lucrărilor pentru scoaterea din pericol a șarpantei Bisericii Romano-Catolice din Turda, 2019. © Utilitas – Centru de cercetare, proiectare în domeniul reabilitării patrimoniului construit Srl.*

■ ***Fig. 3.*** *During the rescue works on the roof structure of the Roman Catholic Church in Turda, 2019. © Utilitas – Built Heritage Conservation Research and Design Centre Ltd.*

■ ***3. ábra.*** *A tordai római katolikus templom tetőszerkezetének állagmegóvási munkálatai során, 2019. © Utilitas – Épített örökségvédelmi kutató-tervező központ Kft.*

pantei claustrului franciscan, dar şi reabilitări de faţade din Cluj-Napoca.

Viaţa a fost nedreaptă cu Cristina şi a supus-o la încercări mari legate de sănătate, dar ea n-a lăsat nicicând să se vadă suferinţa pe care şi-a dus-o cu demnitate şi curaj, cu inima deschisă pentru oamenii din preajma ei, continuând să muncească cu pasiunea şi entuziasmul de odinioară. A iubit oamenii mai mult decât pot şi ştiu mulţi să o facă şi se bucura să ajute ori de câte ori era nevoie. Din păcate, vocea sa puternică, cu un timbru special şi chipul său plin de optimism nu le vom mai auzi şi nu le vom mai vedea. A ars ca o flacără ce a luminat şi încălzit vieţile celor din jurul ei.

Dumnezeu să o odihnească în pace!

kolozsvári zsidó hitközség műszaki referense lett, a zsinagóga helyreállításának és a Horea úti Zsidó Kulturális Központnak szánva tudását. Aktív életszakasza utolsó részét teljes lényével a kolozsvári zsidó közösség kulturális örökségének szentelte.

Tevékenyen bekapcsolódott a bonchidai Bánffy-kastély felújításába és az Erdélyi Református Egyházkerület templomainak és más ingatlanának helyreállítási munkálataiba is. Építésfelügyelőként kisebb, szerény költségvetésű munkálatokat is felügyelt, a templomok és az épített örökség iránti szeretetétől vezérelve. Felügyelte a balázsfalvi görögkatolikus székesegyház tornyának, a tordai római katolikus templom tetőszerkezetének állagmegóvási munkálatait, és tevékeny részt vállalt európai alapok lehívásában, például Sebesvár várának felújításához. Az ő nevéhez, mint építésfelügyelőhöz köthető a kolozsvári Hintz-háznak és a ferences kolostor tetőszerkezetének a felújítása, de számos kolozsvári homlokzat helyreállítása is.

Az élet kegyetlen volt Cristinához, súlyos megpróbáltatások elé állította, ami az egészségét illeti, de ő sohasem mutatta ki a szenvedését, azt önérzetesen és bátran, a körülötte élők iránti nyitottsággal viselte, továbbra is a rá jellemző szenvedéllyel és lelkesedéssel végezve a munkáját. Jobban szerette az embereket, mint amennyire sokan képesek szeretni, és örömmel segített bármikor, amikor szükség volt rá. Sajnálatos módon az erőteljes, karcos hangját nem fogjuk már hallani, és nem láthatjuk többé optimizmustól sugárzó arcát sem. A körülötte élő emberek életét bevilágító és átmelegítő fáklyaként lobogott.

Isten nyugtassa békében!

■ SZILÁGYI-BARTHA Zsuzsánna[1] ■ KIRIZSÁN Imola[2]

In memoriam SZÉNÁSI-PAPP Zsolt (1981–2024)



■ ***Fig. 1.*** *Zsolt SZÉNÁSI-PAPP. © Utilitas – Centru de cercetare, proiectare în domeniul reabilitării patrimoniului construit Srl.*

■ ***Fig. 1.*** *Zsolt SZÉNÁSI-PAPP. © Utilitas – Built Heritage Conservation Research and Design Centre Ltd.*

■ ***1. ábra.*** *SZÉNÁSI-PAPP Zsolt. © Utilitas – Épített örökségvédelmi kutató-tervező központ Kft.*

■ Zsolt joined Utilitas Ltd. as a student, while being a disciple of Professor Bálint SZABÓ at the Faculty of Architecture and Urban Planning, Technical University of Cluj-Napoca. He was a valuable member of our team between 1 August 2002 and 31 August 2010. His mother had already been an employee of the company for a long time, so he started his work in a familiar environment.

At the beginning of his career, he worked as a "draughtsman", then, upon finishing his studies, he completed his "apprenticeship" mentored by the "two Evas" (architects Éva DEZSŐ and Éva EKE, the pillars of the Utilitas architectural team at that time). He integrated exceptionally fast into our team consisting of several generations, he even made friends with whom he would later develop a close professional relationship. He supported the newcomers, gladly helping them navigate design programs, conduct site surveys, and draft their findings, as well as find good architectural solutions. He always explained with patience and dedication, and during our joint work and surveys, we learned a lot from him. His positive and cheerful nature brought a great atmosphere to the office. To-

1 Architect, historic building conservation specialist, team member of the Utilitas – Built Heritage Conservation Research and Design Centre Ltd., Sfântu Gheorghe, Romania.

2 PhD, engineer, historic building conservation specialist, technical expert, associate professor at the Faculty of Architecture and Urban Planning, Technical University Cluj, head of Utilitas – Built Heritage Conservation Research and Design Centre Ltd., Cluj, Romania.

■ Zsolt s-a alăturat echipei S.C. Utilitas Srl. în anii de studenţie, fiind discipolul lui prof. dr. ing. Bálint SZABÓ la Facultatea de Arhitectură şi Urbanism, Universitatea Tehnică din Cluj-Napoca. Mama lui era deja de mult timp angajată a companiei, astfel că şi-a început activitatea într-un mediu bine cunoscut. A fost un membru valoros al echipei noastre Utilitas în perioada dintre 1 august 2002 şi 31 august 2010.

La începutul carierei sale a lucrat ca „desenator tehnic", iar după absolvire şi-a urmat „anii de ucenicie" tot la noi, sub îndrumarea celor „două Eve" (arhitectele Éva DEZSŐ şi Éva EKE, pilonii echipei de arhitectură a societăţii Utilitas din acea perioadă). S-a integrat excepţional de rapid în echipa noastră reprezentată de mai multe generaţii, şi-a găsit şi prieteni, cu care a dezvoltat o relaţie profesională strânsă, continuată şi în viitor. S-a alăturat noilor veniţi şi i-a ajutat cu plăcere să se familiarizeze cu programele de proiectare, să efectueze măsurători pe teren şi să le transpună în planuri, precum şi să găsească soluţii arhitecturale. Întotdeauna explica cu răbdare şi devotament, iar în timpul lucrărilor şi măsurătorilor comune

1 Arhitect, specialist în conservarea clădirilor istorice, membra echipei Utilitas – Centru de cercetare, proiectare în domeniul reabilitării patrimoniului construit Srl., Sfântu Gheorghe, România.

2 Dr., inginer, specialist în conservarea clădirilor istorice, expert tehnic, conferenţiar la Facultatea de Arhitectură şi Urbanism, Universitatea Tehnică Cluj, director al societăţii Utilitas – Centru de cercetare, proiectare în domeniul reabilitării patrimoniului construit Srl., Cluj, România.

■ Zsolt az Utilitas Kft.-hez diákként csatlakozott, dr. SZABÓ Bálint tanítványa is volt a Kolozsvári Műszaki Egyetem Építészeti és Városrendezési Karán. 2002. augusztus 1. és 2010. augusztus 31. között volt csapatunk értékes tagja. Édesanyja már hosszú ideje a cég munkatársa volt, így egy már jól ismert környezetben kezdhette meg munkáját.

Pályafutása elején „műszaki rajzolóként" dolgozott, majd egyetem után az Utilitasnál végezte el az építész „inasképzést" is, a „két Éva néni" (DEZSŐ Éva és EKE Éva építészek, az Utilitas építészcsapatának egykori alappillérei) szárnyai alatt. Kivételesen gyorsan beilleszkedett a különböző generációkat képviselő csapatunkba, sőt barátokra is talált, akikkel később is szoros szakmai kapcsolatot ápolt.

1 Építész, műemlékvédelmi szakmérnök, az Utilitas – Épített örökségvédelmi kutató-tervező központ Kft. munkatársa, Sepsiszentgyörgy, Románia.

2 Dr., mérnök, műemlékvédelmi szakmérnök, tartószerkezeti szakértő, a Kolozsvári Műszaki Egyetem Építészeti és Városrendezési Karának docense, az Utilitas – Épített örökségvédelmi kutató-tervező központ Kft. igazgatója, Kolozsvár, Románia.

gether with his colleagues, he established the Blipsz architecture studio while still being a student, where he continued his design work. Besides his daily tasks, we willingly assigned him various drawings and illustrations. The posters of the International Conference Series on Historic Structures and the illustrations to the dictionaries of historic load-bearing structures developed by Bálint SZABÓ are all due to him.

He was precise but also fast in his work. That was his working style at the County Military Centre in Zalău, at the Báthory Castle in Şimleu Silvaniei, at the Lutheran Church and Corneliu Baba Arts High School in Bistriţa, and at several buildings in Sibiu. After obtaining the right to sign projects as an architect, he dedicated himself mainly to designing new buildings.

Later, unique, subtle porcelain and ceramic objects and jewels he himself crafted and painted became the centre of his life, among which he stood smiling together with his wife, Szidi, at the fairs organised in the city centre.

Zsolt left us on 7 November 2024, much too early and abruptly. He hastened to join his mother, where he found eternal peace.



■ ***Fig. 2.*** *La conferința internațională Tusnad. © Utilitas – Centru de cercetare, proiectare în domeniul reabilitării patrimoniului construit Srl.*
■ ***Fig. 2.*** *At the Tusnad international conference. © Utilitas – Built Heritage Conservation Research and Design Centre Ltd.*
■ ***2. ábra.*** *A Tusnad nemzetközi konferencián. © Utilitas – Épített örökségvédelmi kutató-tervező központ Kft.*



■ ***Fig. 3.*** *În timpul relevării la Bistrița, în 2006. © Utilitas – Centru de cercetare, proiectare în domeniul reabilitării patrimoniului construit Srl.*
■ ***Fig. 3.*** *During a survey in Bistrița, in 2006. © Utilitas – Built Heritage Conservation Research and Design Centre Ltd.*
■ ***3. ábra.*** *Felmérés közben, Besztercén, 2006-ban. © Utilitas – Épített örökségvédelmi kutató-tervező központ Kft.*

am învăţat multe de la el. Firea sa pozitivă şi veselă aducea mereu o atmosferă plăcută în birou.

Încă în anii studenţiei a înfiinţat împreună cu colegii biroul de arhitectură Blipsz, unde şi-a continuat activitatea de proiectare. Pe lângă sarcinile zilnice, i-am încredinţat cu plăcere relevee şi ilustraţii. Îi datorăm afişele Seriei Simpozioanelor Internaţionale de Structuri Portante Istorice, respectiv ilustraţiile dicţionarelor de structuri portante istorice elaborate de Bálint SZABÓ.

Lucra cu precizie şi rapiditate. Aşa a procedat la Centrul Militar Judeţean din Zalău, la Cetatea Báthory din Şimleu Silvaniei, la Biserica Evanghelică şi Liceul de Arte „Corneliu Baba” din Bistriţa, respectiv la imobilele din Sibiu. După ce a obţinut dreptul de semnătură ca arhitect, s-a dedicat cu precădere proiectării de clădiri noi.

Mai apoi, în centrul vieţii sale au stat obiecte şi bijuterii unicat, delicate, din porţelan şi ceramică, lucrate şi pictate manual, printre care l-am regăsit zâmbind alături de soţia sa, Szidi, în târgurile din centrul Clujului.

Zsolt ne-a părăsit pe 7 noiembrie 2024, prea devreme şi prea brusc. S-a grăbit să fie alături de mama sa, unde şi-a găsit odihna veşnică.

Az újoncok mellé állt, szívesen segített nekik a tervezési programok kiismerésében, helyszíni felmérésekben és azok felszerkesztésében, ugyanakkor az építészeti megoldások megtalálásában. Mindig türelemmel és odaadással magyarázott, a közös munkák és felmérések során sokat tanultunk tőle. Pozitív, vidám természete jó hangulatot varázsolt az irodába.

Már egyetemi évei alatt létrehozta társaival a Blipsz építészirodát, ahol azután is folytatta tervezői tevékenységét. A napi feladatai mellett szívesen bíztunk rá felméréseket és illusztrációkat. Az ő nevéhez fűződnek a Történeti Tartószerkezetek Nemzetközi Konferencia-sorozat plakátjai, valamint SZABÓ Bálint történeti tartószerkezeti szótárainak illusztrációi is.

Precíz és gyors munkát végzett. Ezt tette a zilahi kaszárnyánál, a szilágysomlyói Báthory-várnál, Besztercén az evangélikus templomnál, a művészeti iskolánál és a nagyszebeni ingatlanoknál is. Miután megszerezte az építész-aláírási jogosultságát, inkább új épületek tervezésére helyezte a hangsúlyt.

Majd a saját kezével készített és festett egyedi, finom porcelán- és kerámiatárgyak, ékszerek kerültek élete középpontjába, melyek között feleségével együtt, Szidivel mosolygott a főtéri vásárokban.

Zsolt 2024. november 7-én hagyott itt minket, túl korán, túl hirtelen. Édesanyja mellé sietett, ahol végső nyugalomra lelt.

Transsylvania nostra

Content | Cuprins | Tartalom

1 | FURU Árpád ■ KIRIZSÁN Imola ■ MAKAY Dorottya
Farewell to Bálint SZABÓ (1944–2024)
Rămas-bun Bálint SZABÓ! (1944-2024)
Búcsú SZABÓ Bálinttól (1944–2024)

23 | Dragoş Şerban Ion ŢIGĂNAŞ
Bálint György SZABÓ, arhitect al ingineriei patrimoniului construit din Transilvania
Bálint György SZABÓ, Architect of the Built Heritage Engineering in Transylvania

28 | Andrew SHEPHERD
Bálint SZABÓ and Me
Bálint SZABÓ şi eu

29 | Mihaela Ioana AGACHI
Câteva cuvinte despre Bálint SZABÓ – omul şi inginerul
A few words about Bálint SZABÓ – the man and the engineer

30 | Ildiko MITRU
Cine a fost, este şi va fi Bálint SZABÓ
Who Was, Is and Will Be Bálint SZABÓ

38 | KÖLLŐ Miklós
Collage Postcard: my Encounters with Professor Bálint SZABÓ, Bálint bácsi
Colaj carte poştală: întâlnirile mele cu profesorul Bálint SZABÓ, Bálint bácsi
Anzix: találkozásaim SZABÓ Bálint professzor úrral, Bálint bácsival

43 | Miloš DRDÁCKÝ
Note on Diagnostics of Historical Buildings
Notă privind diagnosticarea clădirilor istorice

54 | Teodor Octavian GHEORGHIU
Reuşite şi eşecuri în restaurarea unor biserici fortificate din Transilvania
Success And Failure in Transylvanian Fortified Church Conservation

73 | MÁTÉ Zsolt
A településhálózat fejlődésének történelmi folyamatai Magyarország és a történelmi Erdély területén
Historical Development of the Settlement Network in Hungary and Historical Transylvania

80 | Liliana ROŞIU
Monumentul istoric între tabu şi reconstituire
The Historic Building Between Taboo and Reconstruction

90 | FEJÉRDY Tamás
Érték, védelem – érték, alkotás
Value and Protection – Value and Creation

98 | Andreea-Paraschiva MILEA
Viaţa fortificaţiilor în evoluţia oraşelor. Exemplificări transilvănene
The Life of Fortifications in Urban Evolution. Transylvanian Examples

111 | Daniela MARCU-ISTRATE
Arheologia turnului de sud-est al castelului Károlyi din Ardud:
între nevoile restaurării şi provocările cercetării
Archaeology of the Southeast Tower of the Károlyi Castle in Ardud:
Between Conservation Needs and Research Challenges

126 | Kázmér KOVÁCS
Betonul armat şi clădirile istorice. Note pe marginea unei dezbateri neîncheiate
Reinforced Concrete and Historic Buildings. Marginal notes on an unfinished debate

138 | MEZŐS Tamás
A tudatos műemlékvédelem kialakulása és előzményei
The Development and Background of Mindful Historic Building Conservation

149 | Ioana RUS-CACOVEAN
O restaurare „necorespunzătoare” la sfârşitul secolului al XIX-lea a bisericii reformate din Dej
corectată în anii 1970 de una „productivă”
An “inadequate” late 19th-century conservation of the Calvinist church in Dej
corrected in the 1970s by a “productive” one

168 | MAKAY Dorottya
Számadás – az erdélyi építettörökség-védelem egy kolozsvári műhelyének 20 éves beszámolója.
Ad honorem dr. SZABÓ Bálint (1944–2024)
Account – 20-Year Report of a Transylvanian Built Heritage Conservation Workshop.
Ad Honorem Bálint SZABÓ, PhD (1944-2024)

195 | FURU Árpád ▪ FURU Xénia
Műemlék- és építészeti örökségvédelem a Magyar Unitárius Egyházban 2009–2024 között
Historic Building Preservation in the Hungarian Unitarian Church between 2009 and 2024

220 | Imola KIRIZSÁN
Completări la cercetarea şarpantelor istorice (cu accent pe cele din Transilvania).
(Încercări de a răspunde la întrebările nescrise)
Additions to the Research on Historic Roof Structures (With a Focus on Transylvanian Structures).
(Attempts to Answer Unwritten Questions)

245 | In memoriam BENCZÉDI Sándor (1952–2024)

253 | In memoriam Cristina Carmen COLDEA (1955–2024)

256 | In memoriam SZÉNÁSI-PAPP Zsolt (1981–2024)

ORDINUL ARHITECTILOR DIN ROMÂNIA

Timbrul de arhitectură

Proiect susținut de Ordinul Arhitecților din România din timbrul de arhitectură.
This project is supported by the Romanian Order of Architects, from the Architectural Stamp Duty.
A kiadvány támogatója a Romániai Építész Kamara, az építészeti bélyegből.

RMDSZ COMMUNITAS ALAPÍTVÁNY

Proiect susținut de Uniunea Democrată Maghiară din România și Asociația Communitas.
This project is supported by the Democratic Alliance of Hungarians in Romania and the Communitas Foundation.
Támogató a Romániai Magyar Demokrata Szövetség és a Communitas Alapítvány.

■ Editor in chief / Redactor șef / Főszerkesztő: SZABÓ Bálint | Virgil POP
■ Subeditor in chief / Redactor șef adjunct / Főszerkesztő-helyettes: Vasile MITREA
■ Editorial general secretary / Secretar general de redacție / Szerkesztőségi főtitkár: JÁNOSI Katalin (2020-) | VÁKÁR (TAKÁCS) Enikő (2007-2021)
■ Secretary / Secretar / Titkár: ALBERT Enikő (2017-2018) | MAGÓ Beatrix (2019-2020)
■ Editorial Committee / Colegiul de redacție / Szerkesztőbizottság:
BENCZÉDI Sándor (RO) | Șerban CANTACUZINO (GB) | Mircea CRIȘAN (RO) | Rodica CRIȘAN (RO) | Hanna DERER (RO) | Miloš DRDÁCZKÝ (CZ) | Octavian GHEORGHIU (RO) | FEJÉRDY Tamás (HU) | KIRIZSÁN Imola (RO) | KOVÁCS András (RO) | Christoph MACHAT (DE) | Daniela MARCU ISTRATE (RO) | MIHÁLY Ferenc (RO) | Paul NIEDERMAIER (RO) | Virgil POP (RO) | Liliana ROȘIU (RO) | Andrew SHEPHERD (GB) | Gennaro TAMPONE (IT)
■ Collaborators / Colaboratori / Közreműködők: ANDOR Norbert | ANDRÁS Zselyke | BALÁSSY Csaba | BÁNYAI Éva Eszter | BENEDEK-SZÉKEDY Sándor | BODOR Eszter | Ioana CÂMPEAN | Carmen CLEJA | Cristina COLDEA | Ana COȘOVEANU | Sigrid CRĂSNEAN | Maria DAN-CÂNDEA | DARÓCZI Boglárka | DÉZSI Ildikó | DEZSŐ Éva | Ioana DIACONU-MUREȘAN | EKE Zsuzsanna | GAL Cristina-Dalma | HLAVATHY Péter | INCZE Éva | JAKAB Márta | KOVÁCS Hajnal | Mirela KULIN | MAGÓ Beatrix | MARCZIKA-GYÖNGYÖSI Edith | NAGY Alpár-Csaba | Iza-Maria OANĂ | PÁSZTOR Csenge Bíborka | Alina PELEA |Voica PUȘCAȘIU | RÁCZ Tímea | Ioana Elena RUS | Ioana RUS-CACOVEAN | SÁNDOR Boglárka | SEBŐK Tímea | SIMON Éva Eszter | SÓLYOM István | Iulianna SZABÓ | SZÁSZ Auguszta | SZÁSZ Tibor | Oana TODAȘCĂ | VENCZEL Enikő | VINCZE Orsolya | Alina VLAIC | WEISZ Attila | ZSIGMOND Júlia
■ Layout Design / Concepţia grafică / Grafikai szerkesztés: IDEA PLUS
■ Layout editor / Tehnoredactare / Tördelés: JANKÓ József Attila (2007) | TIPOTÉKA (2008-)

■ Contact / Contact / Kapcsolat: editorial@transsylvanianostra.eu
■ Publisher / Editura / Kiadó: SC. Utilitas SRL. str. Breaza nr. 14, Cluj-Napoca, 400253 RO, Tel: 40-730-909633, e-mail: office@utilitas.ro
■ Publishing-house / Tipografia / Nyomda: GPO Graphics, Cluj-Napoca
■The articles do not reflect in all cases the standpoint of the Transsylvania Nostra Journal. The articles' content, the images and the quality of the images fall under the authors' responsibility.
■ Articolele autorilor nu reflectă în fiecare caz punctul de vedere al revistei Transsylvania Nostra. Responsabilitatea pentru conținutul articolelor, pentru imagini și calitatea imaginilor revine autorilor.
■ A szerzők cikkei nem minden esetben tükrözik a Transsylvania Nostra folyóirat álláspontját. A cikkek tartalmáért, az illusztrációkért és az illusztrációk minőségéért a szerző felel.
■ All rights reserved. The Journal may not be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publishers. 2025 © Fundația Transsylvania Nostra
■ ISSN-L 1842-5631, ISSN 1842-5631 (print), ISSN 2344-5084 (on-line)