BELÜGYI SZEMLE

PROFESSIONAL AND SCIENTIFIC PERIODICAL OF THE MINISTRY OF INTERIOR



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BELÜGYI SZEMLE

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I would like to welcome our readers on the occasion that the 68 years old Belügyi Szemle, the professional and scientific periodical of the Ministry of Interior, reached another milestone this year. As we formulated it in the preface of our issue 7-8 of 2019 the representation of the professional and scientific values, the maintenance of its role in the scientific world and the high-level service of the authors, destined by previous editorships of Belügyi Szemle, will not change. Further we intend to continue on-time publishing of the manuscripts entrusted to our editorship in high-standard surroundings. Last year several developments were carried out to make our periodical more interesting and more compatible with new scientific challenges. It is evident for us that the development of Belügyi Szemle and the satisfaction of scientific expectations and a continuously widening digital space involve a long process. We are professionally absolutely convinced that under appreciation of the values set by our ancestors and by papers of researchers of interior affairs a scientific periodical in English can further widen domestic scientific life, by domestic scientific life, by presenting proudly both for domestic and especially for foreign public the first special issue of 2020 in English.

In this year's first special online issue in English our authors pay attention to the following important domestic and international topics.

Author Gábor Éberhardt examines in his paper '*Identification of overloaded migration concept in migration theory*' the effect of irregular migration at Hungary's Schengen external border sections. He verifies the validity of his scientific theory model with source research and data analysis following the theses of classical and modern migration theories.

Authors Bianka Speidl and Hanga Horváth-Sánta aim to examine with their paper 'Jihadist attacks on Critical Infrastructure' the religious arguments to proof jihadist terrorist attacks on critical infrastructure. The authors point out in their research the vulnerability of European critical infrastructures and the importance of their protection.

Author Nándor Makkos draws attention in his paper 'Instruction in a holistic approach to discrimination' to the discriminatory erosions that sometimes appear

as a hiding place in public administration, which may appear as minor deviations in childhood but may lead to disintegration of organisational unit in adulthood.

Author Ferenc Molnár also deals in his paper '*Instruction in a holistic approach to discrimination*' with protection of critical infrastructure but his researches aim challenges of energy supply systems instead of terror threats. The author identifies in his paper possible exterior dangers because of vulnerability of energy supply systems and describes the available solution possibilities in this correlation.

In his research '*The Scope of Body Mass Index (BMI) and other body component measurements*', author Viktor Nemeth presents and compares the applicability of the current body mass index measurement methods and techniques. He also presents and compares methods based on bio-electrometric impedance. The aim of the research is to review the methods of measuring body components one by one and to compare their most important properties in order to understand their usability better.

Agnieszka Rogozińska, the researcher of the Jan Kochanowski University in Kielce looks for answers in her paper '*The role of NATO in shaping the global security system. Reflections on the 70th anniversary of the founding of the organization*' on questions like: What is the role of NATO in forming of a global safety system?, What are the presently identified challenges for NATO? and further In which direction is changing the NATO policy of US president Donald Trump?

Author László András Szabó examines in his paper '*The impact of the 2015 refugee crisis on Hungarian criminal policy*' the Hungarian approach of migration policy in the frame of the theory of criminal policy. The author presents the changes in the Hungarian organisations of public administration, of law enforcement organisations and of the Hungarian Defence Force, as a consequence of the irregular migration in 2015. The author places Police and public administration in the center of attention, while also focusing on complementary police forces.

Author Erzsébet Tőzsér compares in her research 'Organizational psychological studies in a county of the Hungarian Police – comparison of two departments' the results of psychological surveys made in two police departments in the countryside, emphasising social pointers and presenting in connection with them how X and Y theory of McGregor on manager's negative approach to employees can influence work teams in the Police. Adrián Csajka-Vándor, the author of the paper '*The relationship between the Islamic legal system Sharia and European continental law*', examines in his research basic differences between European legal systems and the Islamic legal system Sharia. He points out differences between secular and sacral legal systems, differences in valuation and assessment of criminal offences and sentences and the Islamic legal system and sanctions applied there.

I hope you will enjoy our first online issue in English this year, where our authors are looking for answers on several interesting scientific questions.

> Dr. Valér Dános PhD/CSc ret. pol. major general associate professor, editor-in-chief

Gábor Éberhardt

Identification of overloaded migration concept in migration theory

'Those are at advantage in life, who start solving problems before others are only talking about them.' John Fitzgerald Kennedy

Abstract

The study examines the effects of regular and irregular migration on the Schengen external borders of Hungary, following the principles of classical and modern migration theories, using their analysis, applying the theory of science theory (Hautzinger, 2018, 11-21). From the data analysis evaluation it becomes possible to identify a feature that has not previously appeared in the European context, nor has it touched the nations of other continents in such a complexity as it has Hungary in 2014 and 2015, as well as with the requirements of the existing national Schengen regulatory frameworks. From the evaluation of the relationship between data analysis and the related elements, a new, previously unexplored and unpublished approach to the effects of migration has been identified, its description and the creation of a new concept. The results of the methodological research on the overload characteristic of regular and irregular migration may be the subject of independent studies.

Keywords: asylum, border control, migration theory, migration, overload, policing

Introduction

Migration and its research-based scientifically evaluated occurrences appear and are identified on the grounds of several different approaches and interpretations. The available considerable amount of Hungarian and foreign literature, while looking at historical perspectives, examine the social, economical, sociological, and psychological effects of the phenomenon and draw conclusions based on research data. Currently reference to the effects of regular and irregular migration (Chimienti & Solomos, 2011, 344-345.) does not seem to be in the focus of research attention (Finszter, 2016, 61.), those studies mainly examine impingement on human migration from both the perpetrator's and offender's side. One of the consequences of globalised world (Ritecz & Sallai, 2016, 169.) from both regular and irregular migration perspectives is the pressure on the authorities responsible for performing controlling and executing tasks which exceeds their operational capacity. Overloaded migration occurring at state borders (Bruhács, 1999, 81.) (border crossing point) is a concentrated phenomenon characteristic of the globalized world, whose objective element(s) can be threatened by its spatially and temporally defined attributes, with the aim of creating a security deficit in the performance of the procedural tasks delegated to it by performing an inflexible reactive task. Consequently, the authority responsible for law enforcement of migration related issues can only perform in a limited and inflexible way when executing controlling and professional tasks.

The effect of migration overload appears parallel or following events that generate social movements and migration. Settlement populations (Balogh, 2008, 414-426.), whole nations died out during migration or fleeing at a stage of their migration where the hosting nation's authorities did not want to or were not able to provide appropriate care and accommodation or could not maintain relevant measures. Such a sequence of events occurs nowadays in Myanmar related to Rohingya refugee crisis and the identifiable ignorant reactions of neighbouring countries. Globalised world can be characterised by development in its most segments, including treatment of migration phenomena. The effect can be related to Giddens, 'Globalisation can thus be defined as the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa. This is a dialectical process because such local happenings may move in an obverse direction from the very distanciated relations that shape them. Local transformation is as much a part of globalisation as the lateral extension of social connections across time and space.' (Giddens, 1990, 64.) In countries with developed constitutionality these effects are treated with observing international and local law depending on ethical norms and economical capacity, but in an objectively assessable way.

Typically the concentrated appearance of social process narrows in space and its time can be identified. It is possible to identify the territory of each dedicated border crossing point in international regular border passenger and cargo traffic flow, or with respect to the countries on the other side of the border if the intensive border traffic affects more border crossing points. Depending on the deployed method, but in vast majority of cases, the irregular migrants attempt to cross the border on the area between border crossing points. These crossing points or zones can be mapped using data based on professional analysis and evaluation. Bearing in mind the magnitude of irregular migration, border crossing points appear may be as scenes of policing measures, number and length of on the green border, as well as the number of people in those areas who are staying illegally and undergo policing measures. Knowing the information can increase the effectiveness of border control and reduce the number of irregular crossings.

Overloaded migration can occur in both regular and irregular types of border crossing. According to the State border law provisions, border crossing is only possible under authorized circumstances (BL, 2007), the obligation is denoted by the Fundamental Law of Hungary for the police forces (FL). According to the Police Force Law border point control and protection comprise the border crossing policing tasks (AP, 1994). Significantly delayed border crossing can be observed at certain border crossing points due to problems, related to insufficient organisational measures, such as in the case of appearance of law-abiding behaviour of those, wishing to cross the border, or if the increasing tendency of border traffic is not organised properly; or there are more passengers and vehicles in a short period of time than the expected average. Migration pressure can appear on organisations responsible for guarding the state border, preventing and stopping illegal and irregular border crossing, which comprise part of their basic tasks, and as a consequence, they are only partly or not at all able, even if employing all own full-scale resources at their disposal, to execute tasks as assigned by law.

In case of migration type as referred to state border and identifiable according to its way of control (Hautzinger, 2018, 11-21.), identification of corrections required as a result of its organized feature, conscious analysis of the variables of the processes due to external effect, is possible following the principle of effect – counter effect and employing appropriate methodology, which makes it possible. Typically, overload can occur in the case of regular migration on the passenger traffic part as a result of initial information related to presumably higher quality service (e.g. travelling on a motorway, passenger service facilities, traffic circumstances or public security, etc.), or related to administrative measures issued by the government (e.g. route permits, restrictions related to border crossing point opening times, indication of border crossing points entitled to issue visas, improving traffic system, etc.). These objective influencing factors are beyond the individual decision of the migrant one by one or consecutively and can generate intensive well-defined changes as far as time is concerned increasing the consequence effects (e.g. roadblock on a motorway crossing the state border as a result of a road accident, events or sequence of events on the territory of a country which are of international interest, etc.). The negative influence in quality of organisational activity is caused by the increase of passengers under control and provision. The state institutions established to handle migration perform their tasks according to law as far as organisational structure, number of staff and financial issues are concerned, which are built on trend analysis and that is why it is possible to realise internal mid and long term corrections. These short term features with intensive effect related to border crossing and migration flow can be handled by the state according to the law in a reactive way, following the methodology of recognition, identification and treatment of its organised features.

Failure of observation process changes by law implementation and institution regulations that would require correction can influence legitimate functioning in task performance of executive organisations. In developed countries execution of provisions, especially restrictions related to subjects' rights under provision (e.g. screening clothing and luggage, recorded hearing, fingerprint registration, arrest, etc.) is only possible in the framework as prescribed by law. If the law enforcement organ or its member either totally or partly does not attend to this task, they are guilty of negligence and subject to criminal law disadvantage. As long as the regulations of normative circumstances are infringed, the consequence is law violation as well. These postponed reactions on the operational part can be exploited by those organisers who realise the pitfalls of the system and whose goal is to develop situations which hinder totally, partly or by norm violation the execution of obligations of responsible authorities. This conscious activity endangers the social system of a given country, its security, hinders the legal activity of law enforcement organs and other government parties involved by decreasing the migration control; their correction ability decreases, the preventive and flexible reaction to evolved or evolving situations is also affected.

Migration, migration theory

The phenomenon of migration, its concept framework, results of migration research, theories related to migration, their effects have been in the focus of attention in almost all walks of social coexistence recently and have gained more and more emphasis on both national and international grounds. The majority of society members know, or suppose to know, who migrants are, where and why they are going and what their reasons are to flee from home. This projected the picture of social reactions in the 2015s and 2016s, which made it possible to influence, divide the individuals, smaller communities, inhabitants of bigger societies and even whole countries in understanding, or at least judging the question of migration. According to Kerezsi, 'Conflicts that were born along the social gaps and not treated as required threaten social integration gravely. Globalisation processes serve as a framework for possible integration and are influenced by uncertainty, in which marginalisation plays a big role, the so called identity problems, migration, and religious and ethnic conflicts as well.' (Kerezsi, 2018, 16.) Apart from being complex and globalised, migration is mainly a social phenomenon with several accompanying features that can easily serve as a basis for conflicts. As long as these conflicts are spread over in space and last for some time as a result of insufficient prevention or lack of maintenance, they can generate serious social and economical tension.

On account of the history of migration being as old as mankind, there are several definitions and interpretations related to the phenomenon. On the other hand, people's changing their places is in the centre of sociological character of the phenomenon whose prime triggering reason can be well defined as ... migration is a result of individual or common will, which are determined by general social, economical or political processes, the individual intention and everyday ambitions altogether and at the same time. '(Tóth, 2001, 20.) I can only partly agree with the approach Tóth puts forward, as behind the referred will, wish and ambition there is no mention of the motivation generated by pressure, the effect of 'must' is not mentioned; however, in the case of migrants the external reinforcement for leaving their home is present as a strong motivational feature beyond the 'I want' decision. The data provided by UNHCR point out the fact that people leaving their home are wandering under pressure, but as soon as the circumstances get back to normal, they return to their homeland. (URL1) As Hautzinger claims, 'Migration, as human behaviour related to changing place of residence, is basically a value neutral phenomenon, which has rational reasons and provides feedback for the country of origin, transit and target as far as governmental, financial and social situation is concerned. (Hautzinger, 2018, 213.)

Migration has always been a critical element in the evolutional history of human race, in filling the Earth with people; the process has brought to surface significant changes in each and every human being and society involved in migration. During history there were migrations on large scale, looking back and exploring the details, they cannot be evaluated as ethically and morally laudable events of heroic conquerors, discoverers and pioneers. These events can rather be characterised with violence, devastation, mass death and massacre, and immense human suffering.

Source materials related to migration can and have to be treated from different aspects of analysis; however, in the Hungarian literature it is recommended to avoid the term '*migrant/migration*' and in the foreign literature the term should be narrowed down to '*human*' related search. Social evolution has not left the term migrant without modification. In agreement with Hautzinger, going beyond the basic interpretation, the term has been extended in accordance with the national and international legal terminology as follows, '*Nowadays, in the European Union Member States it is not necessarily sufficient to employ the terms 'stranger' or 'foreigner'. I should differentiate within these terms those* who and whose family members have the right for free movement and stay at *their disposal, as well as those from a third country, who cannot be categorised to belong to this circle. Moreover, those foreigners coming from a third country, who are acknowledged as refugees by the refugee authority or court of a given country, or are entitled to any other additional protection, are specially adjudicated.* '(Hautzinger, 2014, 69-78.)

According to Ördög, 'Migration is a social phenomenon, thus it is a value neutral term. In itself it is neither good nor bad. It has clear positive features (effects related to population decrease, decrease in economic recession, providing international protection for those who need), and it also has some drawbacks (people trafficking, supply providing tourism)' (Ördög, 2013, 74-77.). The UN Secretary-General claims that '...migration is courageous expression of individual's will to overcome adversity and live a better life.' (URL2) The International Organisation for Migration defines a migrant as any person who is moving or has moved across an international border or within a state away from his/her habitual place of residence, regardless of the person's legal status; whether the movement is voluntary or involuntary; what the causes for the movement are; or what the length of the stay is. (URL3) This current and sound interpretation suggests that actual politics empower the phenomenon and the process of migration with simplified features, which hinder social development and mediates it towards the members of society.

Recognition of the phenomenon of migration resulted in appearance of national regulation amongst laws and admonitions in the Hungarian history of law by István I, the founder of Hungarian state. (URL4) One of the most decisive periods was the beginning of the 20th century, when the legislative body had to control the processes in a comprehensible way, the rights of those affected by migration, their responsibilities and the procedure protocol (Sallai, 2013, 61-63.). Sallai in his study explains that in the middle of the 20th the fathers of Hungarian law enforcement history drew attention to the dangers and risk factors of the migration phenomenon (Sallai, 2015, 135.).

Hautzinger in his study describes a field, recognised by researchers and legislative bodies of nation states that needs some regulation and has been declared in Hungary entitled 'First Hungarian law of aliens' rights' (Hautzinger, 2013, 179-183.).

Owing to these historical processes, several theoretical approaches have appeared in the literature, each of which can be valid in its own system; however, they also can be rejected or corrected on the basis of a thesis built on a different aspect. On the other hand, just because of the existence of a theory or its absence cannot exclude new and different theoretical approaches or interpretations and explanations based on scientific grounds. Accelerated migration characterised by globalisation in the world nowadays has brought new terms and definitions to the surface (Tóth, 2015, 159-169.). Migration as a phenomenon primarily belongs to sociological issues, as it is a complex entity of problems and is based on different types of population movement, the features of which can be researched on their own, or bearing in mind their effects. These different phenomenon entities require the examination of international migration, their defining features and consequences, including the definition, in relation to the countries affected bearing in mind their characteristic features. Differences can be observed among researchers as far as interpretation of the phenomenon, which serves as the object of study, is concerned: the question is whether it has appeared as a theory resulted from inner examination of migration process, or it constitutes a general scientific field dealing with theories related to the phenomenon and examining its effects. Hárs in her study (Hárs, 1992, 132-137.) gives a detailed overview of the migration theories which can be categorised in a system. Sik as an editor compiles those scientific works (Sik, 2007, 2011), which reflect several researchers' views. As opposed to Hárs, I agree with the approach put forward by Sik, as researchers of migration examine the theoretical basis of the phenomenon, its triggering features, interpret and explain the evolution of migration with migration theories. They research the processes and the circumstances following the arrival from different perspectives and in relation to each other, as opposed to explaining one phenomenon, migration, based on different approaches and interpretations. As a result of research, it can be categorised in accordance with the approach to the social phenomenon and its interpretation lexically or encyclopaedically, its theoretical and historical periods and the historical-structural features. It is also possible to identify the relationship between migration and spiritual theories, its interpretation according to world religions. There are several professional elements in the population

geography approach which require genuine answers to the questions raised by the phenomenon. I can't neglect and should consider the fact that most modern migration theories can be traced back to the basic thoughts generated by behaviourist and balanced traditions of classical migration theories, the theory of repulsion and attraction, balanced and neoclassical migration models, and further migration theories with economic content. There are additional interpretations based on sociological migration theories, as well as possibilities of more interpretations of migration (politics, anthropology and climate changes), and migration theory relationships (melting pot, cultural pluralism, nativism and parallel feature of accommodation and assimilation). Modern migration theories (boomerang effect theory, chaos theory, and identitarian and majority populism), crimmigration (Stumpf, 2006, 367-419.) and securitization (Nagy, 2016, 1041.) provide approaches, the appearance of which is built on characteristics of the migration events originating in the 21st century, on large scale and being irregular. The triggering reason and the goal to achieve can be identified anytime and anywhere for both regular and irregular migration phenomenon. Behind (before?) the appearance, development and evolution of vast number of migration theories, the analysis of its elements, their further division, the actual social, economic and political relationship there is always the basic question: Why and where are going those who set off? These basic questions always take us back to Ravenstein's pull and push factors. While analysing historical events and migration processes we have to realise that migration and its both varieties can be limited, or influenced to a certain degree; however, until there are significant differences on social levels in our globalised world, we cannot cease or abolish it, we should provide regulated and controlled framework for it.

Aristide Zolberg, Brettell B. Caroline, Douglas S. Massey, Ernst Georg Ravenstein, Georg Borjas, Gunnar Myrdal, Lydia Potts, Helmuth Von Glasenapp, Henry Pratt Fairchild, James F. Hollifield, Karl Pearson, Katja Franko Aas, O'Reilly Karen, Radcliffe Brown, A. R., Wilbur Zelinsky, William Petersen are only some migration researchers, who examine not only the triggering issues, but the generated problems on international level from the perspective of the native and the host country as well. The publication of research and its results on the so-called 'Kosovo crisis', which has affected the whole Europe since 2014, with its additional, latent and perceptual features is still mostly kept waiting; on the other hand, several genuine studies have already been published. The phenomena related to migration have several elements, which have not or have been only partly researched. The research aimed at law and order, public security and public health characteristically examine the cause and effect relationships, and the research on elements unknown or latent to the responsible government authorities (interview, questionnaire or focus group for people and organisation affected locally) has not gained enough attention yet. The recommended and applied solutions are characteristically reactive; they do not treat the effects of regular and irregular migration in a complex way. They ignore the fact that apart from negative, direct and indirect effects on members of societies, there are positive ones as well, although their cost effectiveness and real results are debatable.

Approach to and types of overloaded migration

The deployment of the term overloaded does not exist in the current research of theoretical aspects of migration process; however, as a consequence of the evolved phenomenon has appeared and deployed as a legal category in Hungarian jurisdiction, declared as being mass (LA, 2007). Interpretation of mass immigration appears as an itemized account by legislative body. Although the normative description discontinued it with the appearance of irregular migration phenomenon at the outside borders of Hungary, not being characterised with that intensiveness before, it has been deployed within regular framework of events referred to border crossing, with no reference to citizenship. The essential element of the term is the appearance and the physical coercion measures and their justification and order taken towards citizens, not native to the country, who are moving inside the country, in a significant number, for a short time, characteristically irregularly and would like to stay; in effect this phenomenon is essentially different from the features of migration data of the country. The intention of the legislative body is that, '...in the cases of the need of taking official measures as the country's protection requires, beyond the needed measures no other provision should be carried out. It also assures that all costs of the official measures should be covered by the state. 'The legislative body's aim by the law as justified in section 4 is '...to tighten up the warranty of state of crisis announcement in the case of mass migration. It increases the staff numbers which makes this measure feasible; in addition, removes from the law the possibility of taking such measure considering general situation. ... It renders the scope of powers from the Government to the scope of power of the Parliament in the case of state of crisis. The justification is that the executive power cannot be entitled to carry out decisions that make the situation of the citizens of a country more difficult. '(TCL, 2007)

Overload in everyday context means the phenomena which appear following process-like changes in a given system and postulate an increase of effect on such scale, characteristically as a result of external impact, which can result in critical consequence(s) without appropriate intervention (prevention, averting and reconstruction).

On Hungarian borders from both regular and irregular migration aspects a condition is identifiable, which brought the situation for authorities in charge to critical level; in order to settle it fast, secure and civilized, and as the framework of guarding borders has become overloaded, the police were not able to cope with it legally, professionally and cost effectively within their boundaries. Over and above the measures carried out by law enforcement forces the Hungarian Army has been assigned to participate in tasks related to state border guarding (LDA, 2011).

Reasons leading to overloaded migration

The efficiency system of the generated factors related to volume, intensity and influence of migration can be identified and forecasted with risk analysis. In a period with no extreme circumstances it can serve as an effective background for responsible authorities in handling it regarding factors of time, distance and the estimated number of migrants. As long as it can only be estimated with low precision, and little known or unknown factors appear, their effects can exercise significant extra burden not only on emitting and transit areas alike, but on host countries as well.

There are factors related to regular migration (religious and state holidays, school breaks, bigger sales, etc.), which are occasional, but are of unusual intensity regarding the number of people intending to cross the border which, apart from the increase in passenger traffic data, generate further significant increases in border traffic control. These expanding data can cause such overload for the authorities responsible for border control, which can be sufficiently maintained only with numerous sequences of compensating measures, as far as their number and costs are concerned, until the magnitude of border traffic gets back to its previous and generally characteristic level. Following that the process starts from the beginning whose estimated and feasible endpoint can be identified according to the description above.

Organization of regular migration

Organization appears as an effect of border crossing coordinated by different participants in cases such as organised tours by individuals or travel agencies,

health or educational institutions, employers, service industry, culture and economy. The participants of the phenomenon constitute the theory of sociological system and are researched by Parsons (Parsons, 1951, 17-20.). According to him, the system can mean the special system of expectations and regulations, the observable regularities of behaviour, frequency of interaction, probability of attitude and inclination for interpretation. According to its definition, the system can also comprise some kind of a group or organisation or can mean some sphere or subsystem of a society. Further characteristic feature is in the description of the connection system between the subjects of migration, as in the case of travellers, service providers, law enforcement bodies and others affected, that there is a direct or an indirect relationship as detailed in the network theory by Radcliffe-Brown (Radcliffe-Brown, 1940, 1-12). Access to border crossing points is directed towards fast and good quality road system due to the modern built-in or offhand internet-based or mobile application devices in vehicles, which constitute part of the travelling culture. The state can influence international border crossing with its own resources by ensuring secure, fast, civilized conditions, as well as allocating sufficient proportionate financial resources from the GDP for public security, tourism and other fields as well as with administrative measures. These are the legally regulated activities of immigration authorities: correction of possibilities in obtaining citizenship and residence permit, route licence requirement for transit cargo and bus traffic and sufficient legal sanctions towards travellers violating norms.

As understood by Szalai, organization in migration appears in the case of diaspora migration when the government overlooks or definitely supports migration to ease demographical tension. Consciousness in a government's emigration policy characteristic if the importance of diaspora becomes a significant political or economic factor (Szalai, 2014, 137.). I can only partly agree with this train of thought, as in 2014s and 2015s the statements of European political leaders generated directly (e.g. in the case of Germany), and in the consequent years tried to coordinate, the organised migration of different diasporas aiming at solving demographical problems and issues related to lack of labour force in host countries.

Features of organised irregular migration

Apart from the principles built on pull and push factors, as well as the subsequent economic, social, population geographical and some other ones of classical Ravenstein migration theory there are several theories which study the answer to the interpretation of cause and effect relationships. In 2014 and 2015 in Hungary, the period which constitutes the focus of my current research as a period of overloaded migration, five strikingly well identifiable triggering reasons related to migration theory can be observed in respect of organisation, such as religious affiliation, diaspora migration, political reasons, as well as organised crime and influential activity of civil organisations.

Organisation of migration on political surface characteristically appeared in countries of the European Union with highly developed economic and social security systems in the period of the turn of the second millennium. Leading government politicians communicated in their statements the recognition of problems (ageing society, decrease in population, etc.), which had been indicated much earlier by researchers, drawing attention to the occurred relationships. (URL5) Besides the issues of ageing society, low birth and high death rate, and decrease of native labour force are crucial problems in the case of developed countries. According to process and statistical analysis, periods can be forecasted with hardly any adult people for typically manual and service jobs, in the employment and employed age-group, and the population increase will drop after stagnation to the decrease cycle (Berry, Garcia-Blanco & Moore, 2015, 3-11.).

Typically, organization of irregular migration on religious basis towards Hungary and Europe can be identified with reference to followers of Islamic religion. Analysis of data, provided by the Hungarian Central Statistical Office during mass migration in 2015, shows that arriving and registered asylum seekers who were in majority transferred to another country, declared themselves as being followers of Muslim religion and came from countries stricken with armed conflict. (URL6) The problem of lacking documents, age and religion definition is an exceptionally crucial issue in the complex treatment of task system in migration, even if the declaration maker in the case of absence of authorized checking possibilities, which entitles them to obtain legal residence status, the insufficient knowledge of different religious cultures and lack of tolerance may lead to serious conflicts.

In 2002 Finszter refers in his study to the one of the statements on Marseille conference, which identifies migration as the most serious threat to national public security, 'Poverty, as the main reason for migration, has not decreased, on the other hand, recipient capacity and willingness is getting smaller and smaller. Inevitably, this increases the magnitude of masses, which choose migration. That is why man-trafficking has become one of the most prospering businesses in international organized crime. Additionally, it is a fact that criminal supply can be created from amongst foreigners being defenceless. It is a real vicious circle. Stricter reception increases criminals 'profit. Well-off countries

have crime attracting features, whereas poor world acts as a crime releasing one. Since cultural and religious roots play a significant role in crime formation, migration can result in export of crime, which can be controlled with difficulties. '(Finszter, 2002, 149-162.)

It is unavoidable to consider the issue of man-trafficking related to organized human activities in irregular migration, which can (even) be related to those people who are involved in and show supportive approach to committing terrorist activities. Hegyaljai in his study presents the organized criminal perpetrator behaviour related to irregular migration, the revealed methods, the guarantee system in connection with financing and the variations of fee payment by instalment in advance (Hegyaljai, 2016, 11-17.).

In addition to socially recognised religious or charity organizations, which appeared when mass migration affected Hungary's external borders, more and more Hungarian and foreign civil help turned up (association, company, board, charity, etc.) who realise their activities in an organised way. However, the real and communicated goal of these helpers soon became controversial, as first only the objective information conveyed by irregular migrants verified the suspicion, but later the helpers provided aimed orientation for migrants openly with online access to inform them about ways of getting to their destination, how they can mislead the representatives of official procedures' authorities, how they can abuse laws on refugee institution system. (URL7) According to the examined and analysed data it can be concluded that the measurable and analysable data related to organised irregular migration can appear; these factors can reinforce each other or can work independently in space and time in such concentration and intensity that they can threaten authorities' legal activity, and also sense of objective and subjective security of both officials and migrants.

Law enforcement response to overloaded migration

Border defence, which is not more than efforts made in order to regulate access to territory, is centrally organised state activity since its declared appearance (Anderson, 1996, 5.) According to Anderson, the European borders formed primarily aligned to military purposes, as the societies had to defend their strategic supplies, or respectively they had to annihilate other nation's supplies. One of the meanings of the word border is related to a military term, which means a zone where enemy can be met. States from the time of their formation created rules and organisations, the main purpose of which as a government authority is to defend territorial integrity of borders, employ controlled entrance regulations, deter armed forces from aggression, defend national economy and trade, and keep aloof the borders of the country from those considered persona non grata and from events. As Krasnes claims that each and every country monopolizes the right of decision regarding who, what and on what condition is eligible for access to its territory, to enter the country and stay there (Krasner, 1973, 333-368.).

The results of my research data show that government level support of law enforcement bodies responsible for border control in the period of overload, as well as prior to it and in the period of restoration to normality can be ensured with five mechanisms, the so called PABP=LHTMM recommendations (Éberhardt, 2019, 42-45.). It can be provided with having the required financial support for accomplishing the complex tasks at the responsible authority's disposal; creating appropriate legal reaction for the different circumstances aligned with social and professional requirements; legal and cost-effective activities ensuring citizens' sense of security by providing human resources; application of new methods required for accomplishing new tasks. Teke draws responsible authorities' attention to the importance of process analysis and to taking preliminary steps in decision making for managing new types of challenges in migration. In searching solution significant support can be acquired with compiling a problem map employing the PABP methodology for dealing with forecasted elements, which can determine use of atypical solutions in managing not typical challenges (Teke, 2018, 110-128.).

Conclusion

As the basic principle of migration theories, accepting Maslow's pyramid train of thought (Maslow, 1943, 370-396.) and the fact that its history (Ritecz & Sallai, 2015, 11-20, 117.) is as old as humankind, I concluded that there are several definitions and interpretations related to the phenomenon; moreover, it is a recent ongoing process in both time and space characterized with differences generated by social and technical development due to the evolution of globalization. The phenomenon and approaches related to it are also characterized not only by scientific objectivity related to their creator, but also by professional subjectivity. Certain migration theories show that those involved in dynamic process of migration are not isolated from each other, they very frequently meet in space and time, that is why the different levels of migration should be examined thoroughly; moreover, structural macro factors can influence decisions at micro level. Majority of migration theories primarily focus on the elements, which are involved, the context of the process, spatial and time aspects of the phenomenon, excluding generating factors and goals to achieve; although theoreticians provide several recommendations regarding stopping, managing and forecasting the process, each of them depending on the researchers' point of view. The effect of overloaded migration at national border can serve as a basis for further research as it has well-identifiable beginning time. In Europe, during 2014 and 2015 at the Hungarian southern border, due to its organized feature, the illegal border crossing attempts reached a level, which increased by thousands every day compared to previous periods of several thousand a year characteristic for the whole length of national border; when the number of those who wanted to cross the border illegally and were involved in confirmed official action in a couple of hundred kilometre length of the border. As a result of globalization, free movement of goods and capital, freedom of movement, improvement of travelling infrastructure and the decrease of negative effects of recession at international level, besides the dynamic increase of controlled border crossing, some unusually high figures appeared temporarily. This order of magnitude professional challenges, which involve the whole processing and service law enforcement capacity, can overload any system and its each element, being hectic and intense. Appearance of terminology related to the effects of overloaded organized migration and based on theoretical classical, economic and security principles and deploying the results it is possible for the responsible authorities to manage the phenomenon with legal and proactive action so that executing controlling and proceeding tasks would occur no security deficit.

References

- Anderson M. (1996): Frontiers: Territory and State Formation in the Modern World Cambridge Polity, 5.
- Balogh R. (2008): Migráció, mint anomália a bevándorló-kérdéstől a bevándorló-veszélyig [Migration as an anomaly - from the immigrant issue to the immigrant threat]. De Iurisprudentia et Iure Publico: Jog- és Politikatudományi Folyóirat, 414-426.
- Berry, M. Garcia-Blanco, I. Moore, K. (2015): Press Coverage of the Refugee and Migrant Crisis in the EU: A Content Analysis of Five European Countries Report prepared for the United Nations High Commission for Refugees, 3-11.

Bruhács J. (1999): Nemzetközi jog II [International law II.]. Budapest: Dialog Campus, 81.

Chimienti, M. – Solomos, J. (2011): Social Movements of Irregular Migrants, Recognition, and Citizenship. Globalizations, 344-345. DOI: 10.1080/14747731.2011.576854

Éberhardt G. (2019): A túlterheléses migráció kifejezésének helye a migrációelméletben [Iden-

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tification of overloaded migration concept in migration theory]. Belügyi Szemle, 10, 42-45.

- Finszter G. (2002): Jogi válaszok a migráció kérdésében [Legal answers in migration issues]. Országos Kriminológiai Intézet, 149-162. http://www.kriminologia.hu/sites/kriminologia.hu/ files/finszter_geza.pdf
- Finszter G. (2016): A rendészet és a rendészeti igazgatás elmélete [Law enforcement and its theory]. Budapest: NUP, 61.
- Giddens, A. (1990): The consequences of Modernity. Polity Press, 64.
- Hautzinger Z. (2013): Az első idegenjogi törvény [First Hungarian law of aliens' rights]. In: Gaál, Gy. – Hautzinger, Z. (eds): A modernkori magyar határrendészet száztíz éve [Hundred and ten years of modern Hungarian border control]. Budapest: Magyar Rendészettudományi Társaság Határrendészeti Tagozata, 179-183.
- Hautzinger Z. (2014): A magyar idegenjog rendszere és az idegenjogi (szak)igazgatás [The system of Hungarian international law and administration]. Pro Publico Bono, 2, 69-78.
- Hautzinger Z. (2018): A migráció és a külföldiek büntetőjogi megjelenése [Migration and the appearance of foreigners in criminal law]. Pécs: AndAnn Kft.,11-21.
- Hárs Á. (1992): A nemzetközi migráció néhány problémájáról [Some issues of international migration]. Szociológiai Szemle, 2, 123-137.
- Hegyaljai M. (2016): *Migráció bűnügy nemzetközi kitekintés [Migration crime international overview]* In: Hautzinger Z. (ed): A migráció bűnügyi hatásai [Criminal effects of migration]. Budapest: Magyar Rendészettudományi Társaság Migrációs Tagozat, 11–17.
- Kerezsi K. (2018): A párbeszéd hatalma A helyreállító igazságszolgáltatás szerepe a közpolitikában [Power of dialogue – role of restoring jurisdiction in public politics]. Budapest: Dialóg Campus, 16.
- Krasner, S. D. (1995): Power Politics, Institutions, and Transnational Relations. In: Thomas Risse-Kappen, ed., Bringing Transnational Relations Back. New York: Cambridge University Press, 268. DOI: 10.1017/CBO9780511598760.009
- Huntington, S. P. (1973): *Transnational Organizations in World Politics*. World Politics, 333–368. DOI: 10.2307/2010115
- Maslow, H. A. (1943): *A theory of human motivation*. Psychological Review, 4, 370-396. DOI: 10.1037/h0054346
- Nagy B. (2016): *Hungarian Asylum Law and Policy in 2015–2016*. Securitization Instead of Loyal Cooperation. German Law Journal, 6, 1041. DOI: 10.1017/S2071832200021581
- Ördög I. (2013): *Menekültügyi mítoszok, féligazságok [Myths and half-truths related to refugee policy]*. Fundamentum, 1, 74-77.
- Radcliffe-Brown, A. R. (1940): On Social Structure. Journal of the Royal Anthropological Society of Great Britain and Ireland, 5, 1-12. DOI: 10.2307/2844197
- Ritecz Gy. Sallai J. (2015): A migráció trendjei, okai és kezelésének lehetősége [Trends, reasons and management of migration]. Budapest: Hanns Seidel Alapítvány, 11-20.
- Ritecz Gy. Sallai J. (2016): A migráció trendjei, okai és kezelésének lehetőségei 2.0 [Trends,

reasons and management of migration]. Budapest: Hanns Seidel Alapítvány, 169.

- Sallai J. (2013): A határrendészet első kézikönyve [The first manual of border control] In.: Gaál Gy. – Hautzinger Z. (eds.): A modernkori magyar határrendészet száztíz éve [Hundred and ten years of modern Hungarian border control]. Budapest: Magyar Rendészettudományi Társaság Határrendészeti Tagozata, 61-63.
- Sallai J. (2015): A rendészet kihívásai napjainkban [Challenges of law enforcement nowadays]. Magyar Hadtudomány, 1-2, 135.
- Sik E. (szerk.) (2012): *A migráció szociológiája 1. [Sociology of migration 1.].* Budapest: ELTE TáTK http://old.tarki.hu/hu/about/staff/sb/Migracio_Szociologiaja_1.pdf
- Sik E. (szerk.) (2012): *A migráció szociológiája 2. [Sociology of migration 2.]*. Budapest: ELTE TáTK. http://old.tarki.hu/hu/about/staff/sb/Migracio Szociologiaja 2.pdf
- Stumpf, J. (2006): *The crimmigration crisis. Immigrants, crime, and sovereign power.* American University Law Review, 2, 367-419.
- Szalai É. E. (2014): Nemzetközi migráció jelensége és tendenciái az egyes földrajzi térségekben; Indiai migrációs folyamatok és az indiai diaszpóra [The phenomenon and tendencies of international migration in crtain geographical regions; migration in India and Indian diaspora].
 In: Tarrósy I. – Glied V. – Vörös Z. (eds): Migrációs tendenciák napjainkban [Migration tendencies nowadays]. Budapest: Publikon Kiadó, 137.
- Talcott, P. (1951): The social system. London: Routledge, 17-20.
- Teke A. (2018): *A migrációkezelés és problématérkép dilemmája [Dilemma of migration management and problem map]*. In.: Teke A. (ed): Európa határokkal – Határok nélkül? - Mobilitás – legalitás – illegalitás [Europe without borders? – Mobility –legality – illegality]. Budapest: Magyar Rendészettudományi Társaság Migrációs Tagozata, 110-128.
- Tóth J. (2001): *A nemzetközi migráció jogi alapjai [Basics of international migrationg]* In: Lukács É. – Király M. (eds): Migráció és Európai Unió (Migration and the European Union). Budapest: Szociális és Családügyi Minisztérium, 20.
- Tóth J. (2015): *Migrációs fogalomtár [Terms related to migration]*. Budapest: Közelkép, 159-169. http://econ.core.hu/file/download/mt_2015_hun/kozelkep_4.pdf

Legislation used

The Fundamental Law of Hungary article n46 (1). Source: https://cutt.ly/XyXiG1u Act on Police (AP) of 1994 XXXIV 1 § (2) 10-11. Source: https://cutt.ly/3yXiCNm

- Act II of 2007 on Asylum and Government Decree on third country citizens' entry and stay and the T/1609 annotated modification of Act LXXX of 2007 on Asylum and Government Decree (TCL). Source: https://cutt.ly/syXow8i
- Law on asylum of 2007 on LXXX.; Chapter IX/A., Crisis Caused by Mass Immigration, 80/A. § (1) (LA). Source: https://cutt.ly/kyXi0to

Border Law (BL) of 2007 LXXXIX. Law 11-11/A §. Source: https://cutt.ly/ByXi8ab

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Law on Defence and the Hungarian Army, as well as measures taken in exceptional legal status. Act CXIII of 2011 36 § n 1. (LDA). Source: https://cutt.ly/2yXi5S9

Online Links in This Article

- URL1: UNHCR Global Trends Forced Displacement in 2017. Geneve (2018.) https://www.unhcr.org/statistics/unhcrstats/5b27be547/unhcr-global-trends-2017.html
- URL2: Address of Mr. Kofi Annan, Secretary-General, to the High-Level Dialogue of the United Nations General Assembly on International Migration and Development. New York, 14, September 2006. https://doi.org/10.1111/j.1747-7379.2006.051_1.x
- URL3: *Definition of a migrant according to Organization for Migration (IOM)*. https://www.iom.int/who-is-a-migrant
- URL4: Admonitions by Saint István to Prince Imre (1027.) (VI.) On reception and support of guests: 'Hence I order you, my son, to support and appreciate newcomers in a way they stayed at you with more pleasure than anywhere else.' http://mek.oszk.hu/00200/00249/00249.htm
- URL5: Chancellor's statement published on the German Federal Government website. https:// www.bundesregierung.de/bregen/chancellor/refugee-policy-finding-common-answers-443560
- $URL6: http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_wnvn002b.html$
- URL7: Information material and recommendations for irregular migrants accessible on mobile application. https://www.migrationaid.net/infoaid/

Viktor Németh

The Scope of Body Mass Index (BMI) and other body component measurements

Most significant features of the different body component measurement methods

Abstract

This paper presents and compare the scopes of the body component measurement methods and techniques currently in use. Next to the best known and widespread Adolphe Quetelet's Body Mass Index, 'New Body Mass Index' created by Prof. Trfethen. Moreover, it presents and compares the bioelectrical impedance analysis and the Electrical Impedance Myographs methods, too. This article aims to go through one by one the body component measurement methods, and to compare the most important feature of them, for a better understanding of their usability.

Keywords: body mass index, professional sports, body component measurements, skinfold, new body mass index, bioelectrical impedance analysis

Introduction

The perfect body is the subject of inquiry of the civilization from ages. In the last century beside the representatives of different arts the scientists also set up standards of the human body. Body mass index has been used for several 100 years; BMI divides a person's weight by the height squared. This formula has never been corrected or changed during its use. Would it be perfect for all earth-lings, all age groups, all physical activities - especially for all sports practitioners? Some scientists say that the BMI leads to confusion and misinformation – especially in the fields of professional sports (URL5).

In the early nineteenth century the insurance companies gained a significant increase in the fields of life-insurances in the United States of America. They had to set up some kind of universal system based on human body ratio, indicating the level of health; and offering an easy access. The emphasized feature of the measurement process was 'universal' - all people, all age groups and both sexes - should be measured with the same method (ALMIDA, 1913).

Before that time there was no measurement of this type, so it had to be invented, developed. 'Superficially, it might seem simplest and most informative to express the weight of the individual as a percentage of the average weight of persons of the same height, age and sex in the population to which he belongs. That was the reasoning that led to publication of 'standard height-weight' tables by the life insurance industry, beginning with the Medico-Actuarial Mortality Investigations of 1912' (Keys, 1972)

Background

To fulfil the most important viewpoint, i.e. the universal application, the measurement had to be based on some anthropometric features. This discipline is 'the study of the measurement of the human body in terms of the dimensions of bone, muscle, and adipose (fat) tissue. Measures of subcutaneous adipose tissue are important because individuals with large values are reported to be at increased risks for hypertension, adult-onset diabetes mellitus, cardiovascular disease, gallstones, arthritis, and other disease, and forms of cancer' (URL2)

However, in that time already existed some anthropometric measurement for example the skinfold-measurement, which is a method for determining body fat composition. (Ojo, 2017) According to the medical dictionary the definition of the skinfold measurement is: 'A skinfold caliper is used to assess the skinfold thickness, so that a prediction of the total amount of body fat can be made. This method is based on the hypothesis that the body fat is equally distributed over the body and that the thickness of the skinfold is a measure for subcutaneous fat' (URL3 'Skinfold-measurement')

Finally, the Body Mass Index (BMI) became a worldwide recognized and supported measurement method. It is not an exact physical method, but a theoretical indicator, which is derived from a mathematical formula. Body Mass Index defined as 'the weight in kilograms divided by the square of the height in meters.' (Rolland-Cachera, 2014, 117.) The insurance companies have selected the fastest solution, which can be used without any additional investment or

special knowledge. And thanks to this method - which later got the name Body Mass Index - the employees could use a simple formula, from behind a desk.

This calculation was the fastest and the cheapest, so the most economical. And these were the most important aspects for the insurance companies at that times. The inventor of this formula was Adolphe Quetelet, under the premise that 'the transverse growth of man is less than the vertical', derived the function most used today to characterize relative body weight, that is, the ratio of weight (kg) to height (m) squared (Blackburn, 2014). 'Adolphe Quetelet at age 23, the remarkable Belgian mathematician went to study in Paris under Poisson, Laplace and Fourier and returned to found the Royal Astronomical Observatory, then to develop and promote the sciences of statistics and of anthropometry. All was part of his grand scheme to measure and characterize 'l'homme moyen'—average man—by the mean values of measured variables having a normal distribution!' (Faerstein – Winkelstein, 2012, 762–763.) In other words, Quetelet has coined the average of the average mass.

The Imperfection of Quetelet's formula

From the past century, experts from different disciplines have criticized the Quetelet's formula with different reasons. The most outstanding reason was the high-level of inaccuracy at body fat ration. However, the Body Mass Index does not measure body fat directly, researches have shown, that Body Mass Index correlates with direct measures of body fat: '*Regression of F/H2 on W/H2* (Quetelet's index) gave a correlation coefficient of 0.955 for women and 0.943 for men. The deviation of the body fat estimated from Quetelet's formula from the 'true' value was not much greater than that when density, water or potassium were used as a basis for estimating body fat. It is concluded that Quetelet's formula is both a convenient and reliable indicator of obesity' (Garrow – Webster, 1985, 147-153.)

Alternative Solutions

The newest critics is Professor Trefethen, mathematician at Oxford University. According Trefethen the Quetelet's formula is inaccurate and misleads the user, as the formula leads to confusion and misinformation. 'The height term, he says, divides the weight by too much when people are short, and by too little when they are tall. The result is that short people being told they are thin-

ner than they really are, while tall people are made to think that they are fatter than they are, '(Trefethen, 2013) Therefore Prof. Trefethen has created a 'New Body Mass Index' (URL2). This formula is based on the original one, the ration of height derived the weight square, but Professor says there is missing an important third factor, which would represent the third dimension where the human body exists. 'The oddity is the appearance of that exponent 2, though our world is three-dimensional. You might think that the exponent should simply be 3, but that doesn't match the data at all. It has been known for a long time that people don't scale in a perfectly linear fashion as they grow. I propose that a better approximation to the actual sizes and shapes of healthy bodies might be given by an exponent of 2.5. '(Trefethen, 2013, 42.) The new body weight formula is as follows: the weight multiplied by 1.3 and divided by the square of the height. This correction will result in a more realistic index for millions of people. 'If the new numbers gave a more accurate indication of actual health issues, this could be a significant change for the better. '(Trefethen, 2013) This theory is so new that there are simply not enough collected data to compare on a bigger pattern to verification.

And this is the point where the power of Body Mass Index's long data record history shows itself, not to mention the wilderness of the pattern. The new theories have no real chance to compete with its proved way. As we could learnt from above examples, the mathematical formula of the Body Mass Index is serving as an average and approximate determination. This is a guidance for organizations just like insurance companies. However, there are some organizations with huge staff, still not accepted Quetelet formula. For example, the Army of the United States of America uses a variation of the skinfold methods: measuring the neck circumference the waist circumference and the hip circumference and different skinfold sizes. And the person's weight, age and gender are also taken into account (Army Regulation, 40-501.). Several armies use this method, because its needs more detailed data for determination of the body fat ratio.

The most criticized part of the Body Mass Index is its inappropriate correlation to the body fat ratio. As Garrow and Webster proved: the correlation coefficient is 0.955 for women and 0.943 for men (Garrow – Webster, 1985, 147-153.) These correlations are good enough, but there exist more punctual, and more effective body fat measure methods. These measurement techniques mostly fulfill all the requirements in the field of accuracy. So, it could be used by numerous types of scientists, researchers and professional sport experts, too (URL6).

The punctuality of the measurement depends on the elaboration and exactness of the data survey. In case of a mathematical formula - like the BMI formula -

is not provided a high level of preciseness. In addition, the body fat ratio has only secondary and derived connection with this formula. Nevertheless, worthy to note that Quetelet's purpose was to find the formula for an average man's measurement, and he doubtlessly did it (URL4).

To reach a more precise measurement method in the case of the body fat, a more exact measurement technique is required. The following techniques are all based on exactness and fullness, so the results are more precise. All of them are time-consuming, and to complete these measures needs special knowledge and measurement tools. But the results are useful for those professionals, in whose worlds the details have got a high level of importance, where the numbers behind the point play a role.

One of the best-known body fat measure methods is DEXA, which 'stands for 'Dual-Energy X-ray Absorptiometry,' because it uses the absorption properties of your body to figure out which bits are fat and which are muscles. This is also how x-rays work in general. Your bones are much dense than everything else in your body, so when someone shines x-rays at you, your bones deflect the rays more. Fat and muscle also reflect radiation differently from each other (and from bone), so we can also use x-rays to determine where you have fat versus muscle.' (Chlodosh, 2013)

The other available option is: 'computer tomography or magnetic resonance imaging (MRI) give accurate values of body fat, but are inappropriate for routine clinical practice because of the lack of available retrospective data, high cost and technical difficulties.' (Chlodosh, 2013). In the everyday life these methodologies cannot be used in an effective way (URL7). But the sport industry developers invented a functional tool for the precise measure of body fat and other body components.

The new era of the measurement

The first newly developed body component measure tools are based on the bioelectrical impedance analysis (BIA). It is a widely used method for estimating body composition. BIA measures the opposition of body tissues to the flow of a small (less than 1 mA) alternating current. Impedance is a function of two components (vectors): the resistance of the tissues themselves, and the additional opposition (reactance) due to the capacitance of membranes, tissue interfaces, and nonionic tissues. The measured resistance is approximately equivalent to that of muscle tissue. Impedance measures vary with the frequency of the current used (typically 50 kHz, when a single frequency is used). '*Applications of* BIA increasingly use multifrequency measurements, or a frequency spectrum, to evaluate differences in body composition caused by clinical and nutritional status. ' (URL1)

The second type of body component measure tools is Bioimpedance Spectroscopy (BIS). BIS is similar to BIA in that both methods measure the body's response to small electrical currents. BIS and BIA devices look similar but use different technology. 'BIS uses a much larger number of electrical currents than BIA, in addition to high and low frequencies, to mathematically predict your amount of body fluid BIS also analyzes the information differently, and some researchers believe that BIS is more accurate than BIA.' (URL1) So Bioimpedance Spectroscopy is a more exact generation of this totally new measurement method.

The third member of this type of measure method is Electrical Impedance Myographs. 'However, while BIA and BIS send currents through your whole body, EIM sends currents through smaller regions of your body. Recently, this technology has been used in inexpensive devices that are available to consumers. These devices are placed on different parts of the body to estimate the body fat of those specific areas. Because this device is placed directly on specific body regions, it has some similarities to skinfold calipers, although the technologies are very different.' (URL1)

The EIM is the newest technology so there is no information about precision of this method available. But no question that the body parts measure will be the next step on the path of development. In addition, these measurements use electronical data survey. It means that anytime can have access to these big databases, which lead to a better methodology development. Because these developments are based on a high-precise survey and are not just theoretical formulas.

Conclusion

To sum up: the body component measurement went through a huge development in the last century. In the beginning the Quetelet's mathematical formula (divides a person's weight by their height squared) the Body Mass Index (BMI) was the solution. This was not a real exact measure, it was an estimated derivation from the formula. Over the past decades, the needs arose, to get a more punctual result. The focus increasingly moved from all body components to body fat. So, the new measurement methods also changed to fulfil the requirements.

References

- Army Regulation 40-501 (2019): Medical Services. Standards of Medical Fitness. Washington, DC: Headquarters Department of the Army. https://www.calculator.net/pdf/r40_501.pdf
- ALIMDA (1913): Medico-Actuarial Mortality Investigations. Association of Life Insurance Medical Directors and Actuarial Society of America, 1.
- Blackburn, H. Danor. J. Jr. (2014): Commentary: Origins and evolution of body mass index (BMI): continuing saga. International Journal of Epidemiology, 3, 665–669. DOI: 10.1093/ ije/dyu061
- Chodosh, S. (2018): There are better ways to measure body fat than BMI We're using an outdated, inaccurate system. 10. Jan 2018. https://www.popsci.com/there-are-better-ways-to-measure-body-fat-than-bmi
- Faerstein, E. Winkelstein, W Jr. (2012): Adolphe Quetelet: Statistician and more. American Journal Epidemiology, 5, 762–763. DOI: 10.1097/EDE.0b013e318261c86f
- Garrow, J. Webster J. (1985): *Quetelet's index (W/H2) as a measure of fatness*. International Journal Obes, 2, 147-53.
- Keys, A. Fidanza, F. Karvonen, M. J. Kimura, N. Taylor, H. L. (1972): Indices of relative weight and obesity. Journal of Chronic Diseases, 25, 6-7.
- Ojo, G. Adetola, O. (2017): The Relationship between Skinfold Thickness and Body Mass Index in Estimating Body Fat Percentage on Bowen University Students. IBBJ, 3. http://ibbj. org/article-1-109-fa.pdf
- Rolland-Cachera, Marie Françoise and Akrout, Mouna: *History and Meaning of The Body Mass Index. Interest of Other Anthropometric Measurements.* 23. Nov. 2014:117 https://ebook. ecog-obesity.eu/chapter-growth-charts-body-composition/history-meaning-body-mass-index-interest-anthropometric-measurements/
- Trefethen, N. (2013): *New Body Mass Index.* 11. Jan. 2013. https://people.maths ox.ac.uk/tre-fethen/bmi.html

Online links in this article

- URL1: NIH National Institutes of Health Technology Assessment Conference Statement. Bioelectrical Impedance Analysis in Body Composition Measurement. https://consensus.nih.gov/1994/1994bioelectricimpedancebodyta01.pdf
- URL2: NHES National Health and Nutrition Examination Survey III; Body Measurements (Anthropometry). https://wwwn.cdc.gov/nchs/data/nhanes3/manuals/anthro.pdf.
- URL3: 'Skinfold-measurement.'Nutritional Assessment. https://nutritionalassessment.mumc.nl/ en/skinfold-measurements

- URL4: Devlin, K. (2009): *Top 10 Reasons Why the BMI Is Bogus*. https://www.npr.org/templa-tes/story/story.php?storyId=106268439&t=154378809599
- URL5 Matte, Michaele: *What Is a Realistic BMI for Someone Athletic?* Web. 30. Nov. 2017. https://www.livestrong.com/article/395464-what-is-a-realistic-bmi-for-someone-athletic/
- URL6: Moon, J.: Rethinking the Body Mass Index, The Sport Digest. United States Sports Academy America's Sports University. http://www.thesportdigest.com/archive/article/rethinking-body-mass-index
- URL7: Peterson, T. (2016): *Male body image and the average athlete American Addictions Center Resource.* 23. Feb. 2016. https://www.psychguides.com/interact/male-body image-and-the-average-athlete/

Agnieszka Rogozińska

The role of NATO in shaping the global security system. Reflections on the 70th anniversary of the founding of the organization

Abstract

NATO has survived until its 70th anniversary, essentially in the same condition as practically every year of its existence. According to commentators and external experts, the Alliance seems to be in a constant crisis, and every new version of the crisis is seen as final and deadly. By contrast, for those who are active internally, NATO seems stronger than ever before - it is engaging in more places than ever before, presenting new initiatives at an unprecedented pace and in ever-longer summit declarations. The problem situation presented in this way allows us to formulate the main research problem: What role does NATO play in shaping the global security system? The research problem formulated in this way consists of detailed problems formulated in the form of questions: 1) What are the current challenges for NATO? 2) What are the current threats to NATO? 3) What is Donald Trump's policy towards NATO? The aim of the presentation is to present an analysis of the role of NATO in ensuring collective security in the context of the 70th anniversary of the founding of the organization. The research process uses methodological methods of scientific cognition, mainly analysis and criticism of literature.

Keywords: NATO, security, Russian Federation, Donald Trump

Introduction

NATO has survived until its 70th anniversary, essentially in the same condition as practically every year of its existence. According to commentators and external experts, the Alliance seems to be in a constant crisis and every new ver-

sion of the crisis is seen as final and deadly. By contrast, for those who are active internally, NATO seems stronger than ever before - it is engaging in more places than ever before, presenting new initiatives at an unprecedented pace and in ever-longer summit declarations. Now that the Alliance has returned to its inherent collective defence mission its future has long since seemed so secure. This dichotomy will undoubtedly lead to a debate that will be reminiscent of what the Alliance experienced when it celebrated its 40th, 50th, and 60th anniversary. There will be those who highlight the factors that cause divisions while others will highlight what unites. Some will analyse global strategic trends and argue that the Atlantic is expanding and the days when Europe could rely on North America are gone. Others will see the worsening security conditions and the rise in the power of anti-liberal authoritarian leaders as factors pushing transatlantic partners to work together as they represent a shrinking part of the world's population and economic power (URL1). Some will be convinced that NATO is a victim of history and the pressure exerted on multilateralism and an on international order based on recognised principles. Others will see the Alliance as a valuable barrier against these destructive forces and as a guarantee that liberal democracies can still emerge from this clash with a defensive hand. The 21st century is a turbulent century characterised by competition of the great powers, rising military spending and a willingness to use the threat of force, rapid and far-reaching technological innovations that put greater, destructive potential in the hands of more potential villains; and a series of hybrid actions aimed at dividing and destabilising Western societies and influencing their political and economic systems. More than in the past, Alliance members face challenges from within and outside its borders, from multiple directions at the same time. Death from a thousand minor injuries may not seem as horrible as sudden death, but the effect remains the same. The problem presented in this way allows us to formulate the main research problem: What role does NATO play in shaping the global security system? The research problem formulated in this way consists of detailed problems formulated in the form of questions: 1) What are the current challenges for NATO? 2) What are the current threats to NATO? 3) What is Donald Trump's policy towards NATO? The presentation aims to show an analysis of the role of NATO in ensuring collective security in the context of the 70th anniversary of the founding of the organization. The research process uses methodological methods of scientific cognition, mainly analysis and criticism of literature.

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Challenges

For most of the past decades, NATO has been in a relatively luxurious position because it has had to face one challenge at a time and place. On its 40th anniversary, the Alliance focused solely on changes to the USSR. The 50th anniversary coincided with the air campaign in Kosovo, and the 60th anniversary was dominated by discussions about the leapfrogging increase in the number of forces in Afghanistan. However, this time it is different. NATO is in its seventies and has to deal not with one but three strategic fronts, not only geographically differentiated, but also with different types of threats and responses. In the East, a resurgent and aggressive Russia has raised the pressure in the Alliance's eastern Member States and the situation demands that the Alliance - after a break of almost 30 years - be capable of deterring, defending and defeating an equal opponent with a modernised armed force, rich military experience and technically advanced weapons (URL2). In the South, fragile states are vulnerable to extremism, militias and criminal gangs, which pose a whole range of security threats, from terrorist attacks to humanitarian crises and uncontrolled migrations. These problems require regional knowledge, development, and long-term capacity-building partnerships involving a wide range of actors. At home, we see the polarisation of many Western societies that are struggling to control the dependencies created by globalisation. Moreover, the all-encompassing technologies have given sinister actors a new set of hybrid tools to spread confusion or influence. These challenges hit Alliance members in different combinations and come from different sources. However, all members expect NATO to listen equally to their individual concerns and provide solutions. What is therefore unique about the current situation of the Alliance, what is that it threatens to get out of control? One of the problems is strategic overload. Another is that poorly solved domestic crises or the inability to create a barrier against provocations such as cyberattacks or chemical attacks below the threshold of Article 5 (NATO collective defence) could encourage opponents to make territorial demands as well. Equally, allowing these opponents to trample human rights and sow corruption and bad governance in the South - all in the name of restoring order - could encourage them to try the same tactics in the eastern neighbourhood of the Alliance. Therefore, for the first time in seven decades, NATO must deter and defend itself against both internal and external enemies. As we have seen since the terrorist attacks on the United States on 11 September 2001, from now on, Article 5 could be applied much more to threats to transport, power supply infrastructure, satellite communications, pipelines, IT networks and civilians sitting on park benches than to tanks crossing borders. Solidarity will no longer be a rare requirement waiting for

a potentially catastrophic but extremely unlikely armed blurred message. Rather, it will be an almost daily necessity in response to provocations that do not pose an existential threat, but which cannot be tolerated by civilised societies. This is a fundamentally new and extremely urgent issue that Alliance leaders must debate if they want NATO to have a future at least if as in the past. How, instead of preparing for one type of attack, can the Alliance make its Member States (and some key partner countries) fully resilient and capable of responding effectively to the 21st century model of excessive interference and ubiquitous competition?

This does not mean that the topics that dominate NATO's current political activities are not relevant. Burden-sharing is at the heart of the US President Donald Trump's concept of the Alliance's usefulness to the US, and any future US administration - whether republican or democratic - is likely to insist on this as well. Robert M. Gates, Secretary of Defence of the democrat administration, gave a speech in Brussels in 2011, its sharpness, and the emphasis on the urgency of European capability shortages was a harbinger of the rhetoric of the Republican Trump, half a decade before the latter entered the White House. The participation of the United States in burden-sharing of the of collective defence and, more recently, Article 5 operations outside NATO have always been disproportionate and unfair. Europe's prolonged dependence on the United States was one of the main reasons why some US senators wanted to limit the duration of the NATO Treaty to just ten years when it was presented for ratification in 1949. Europeans have constantly promised to eliminate this discrepancy in a series of burden-sharing and balancing initiatives, but they have not done so. As Europe became wealthier and wealthier, aspired to equal treatment on the global stage, its inability and unwillingness to put money into its defence became increasingly incomprehensible. So, instead of being the most reluctant to return to the debate on burden sharing, Europeans should perhaps congratulate themselves on being so lucky that Canada and the United States were willing to insure Europe's defence during peacetime longer than any of the founding fathers of NATO would have thought possible - and desirable. Europeans simply need to increase their defence budgets to two percent of GDP, not because the United States is demanding this as a precondition for maintaining NATO, but because Europeans are living in an increasingly difficult and threatening neighbourhood. Under these conditions, these two percent will provide Europeans with the necessary capabilities so that they do not have to make difficult choices between deterring Russia and fighting extremism in the Sahel, or put a high-ready division above the development of more powerful cybersecurity and research into the emerging areas of artificial intelligence, robotics and hypersonic missiles (URL3). Now that the Defence Investment Commitment of the Alliance Summit in Wales has stopped the decline in

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defence spending and brought about a real increase in it, Alliance members must unequivocally sustain these efforts. However, they also need to develop a narrative to explain the relationship between money, capabilities and security. The figures in the media may seem a little arbitrary. An additional USD 100 billion by 2020 is a large amount, but NATO must show the public what this means in terms of real improvements in equipment, readiness and training. It also needs to focus more on the achievements of individual countries. Ability to combat threats such as cyber-attacks, armed disruptions to space capabilities, terrorism, border security, data manipulation, protection of critical infrastructure and supply chains and humanitarian crises caused by extreme weather events may be more in line with public expectations than traditional military assets such as tanks and artillery. This should encourage NATO planners to take a broader view of capability requirements. Two percent of GDP should be a target for both the European Union and NATO. If the United States were to turn its back on NATO one day or limit its involvement to territorial collective defence against Russia, two percent should be the minimum that would guarantee European strategic autonomy (URL4). Consequently, the Defence Investment Commitment should progressively evolve from efforts largely enforced by the United States to actions that Europeans will demand of each other. On the other hand, NATO's function is not primarily to ensure justice - equal benefits for equal contributions. Achievements, i.e. the benefits of membership, will always be more important than investments. Individual investments must contribute as much as possible to our common success. The diversity of Alliance members (large and small, with different resources and influence networks) means that they will always contribute in different ways to the common goal. The role of NATO must be to promote activities and to find ways of combining different contributions in order to achieve maximum strategic impact. This is more effective than formulating guidelines for standard contributions, which could make NATO too strong in some domains and too weak in others. When NATO takes on the challenges of the 21st century, it can be argued that a broad and diverse spectrum of multiple resources, skills and knowledge and capabilities will give the Alliance an advantage over its opponents. I see four areas where the Alliance must become a better playmaker.

Threats

First, we need to intensify the inter-agency dialogue. China, for example, will have a much greater influence on international relations in the 21st century than Russia and will exert that influence in a very different way. China is al-

ready leading the way in setting technological trends in artificial intelligence and bioengineering, as well as in 5G connectivity, which will be the cornerstone of the Internet of Things. They are increasing their investments in Africa, Europe, and the Middle East and sending more soldiers to UN peacekeeping missions. Even now, those NATO members are discussing the advisability of allowing Huawei to join their IT networks, they can see that China can divide them up while Russia, in general, usually unites them. Since the 'Chinese model' will be the main competitor of liberal democracy, the key question will be: how will Alliance members deal with China? The point is not to see China as another military challenge, but to best understand the country and involve it in joint action. Perhaps the time has come to set up a NATO-China Council or, at the very least, to have a strategic dialogue. In the past, cooperation in the areas of the joint fight against piracy in the Gulf of Aden and assistance to the UN and the African Union in capacity building have shown the potential of NA-TO-China relations (Burles - Shulsky, 2000). To begin with, NATO should appoint some prominent diplomats or officials to focus on China and establish a network with the Chinese People's Liberation Army and civilian leadership. Apart from China, other key issues must be more systematically addressed by the Alliance. For example, although NATO is developing its space policy, the Alliance has still not declared that space is an operational area, nor has it looked at the seriously growing dependence of navigation, time calibration, tracking and target-setting on space assets. Yet 58 countries have put satellites in orbit and most of the space-based services on which NATO depends have a dual-use (civil/commercial and military). The development of missile defence, hypersonic missiles, drones and data processing, not to mention early warning and cyber-security capabilities, will all make competition in space more competitive. Satellites will be more vulnerable to manipulation, disruption, and destruction, and conflict resolution will increasingly depend on who makes better use of space. That is why the United States has recently established a Space Force and is planning to establish a space command.

Other issues that need attention are Russia's role in exerting influence outside Europe, particularly in Africa and the Middle East, and the emerging importance of entities such as India and Saudi Arabia. But not only traditional states with traditional potentials are changing the nature of security. Equally important are the issues that need to be addressed: How will the decisions of large technology companies shape and control the future of the internet and social interaction? How will ISIS/Daesh be regrouped and how will it define a new business model for the post-caliphate? Or how does organised crime weaken governments and fuel corruption?

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NATO cannot rely on rare ministerial meetings or occasional briefings presented by national diplomats passing through Brussels. Recent crises like the one between India and Pakistan in Kashmir show how quickly events can get out of control and have global consequences. NATO needs to think about how to better match its situational awareness and consultation mechanisms to rapidly changing and unpredictable security conditions. The alliance should not be considered solely as an organisation dealing with a limited set of issues in a narrow way, and only in its immediate neighbourhood. The second area in which the Alliance must improve its performance is the deterrence of threats below the threshold of Article 5. Hybrid warfare is complicated because the boundary between what is legal and what is illegal is thin. When do normal business transactions become a form of hostile state interference? How can we stop our opponents from using technology we have created against us? Some commentators have declared that deterrence cannot be effective against hybrid threats because they are multifaceted and simply reveal the polarities and divisions that are already so prevalent in our societies.

There is certainly no easy and immediate solution that would allow effective deterrence in a hybrid area such as the acquisition of nuclear weapons to neutralize an opponent's nuclear potential. Indeed, the first step is to deter by negating the benefits or depriving the opponent of the fruits of aggression through immunity and rapid regeneration of potential. However, the reaction to Russia's chemical attack in Salisbury last year showed a whole range of other steps that could be taken. The perpetrators have been identified and condemned through the disclosure of intelligence material, and a large number of Russian diplomats have been expelled in a coordinated manner. NATO and the European Union have united their actions and the two organisations have undertaken to analyse their preparedness and resources to respond to chemical and biological attacks.

Will NATO survive Donald Trump's policy?

Donald Trump has not spared critisism of NATO. It is also a common belief that the sudden abandonment of allies in Syria speaks volumes about the situation of US allies around the world. In NATO in particular. We know for sure that Donald Trump spoke publicly about NATO, that it is 'obsolete', and that he has quietly, at least several times, raised with his colleagues the issue of the possible departure of the US from the Alliance (URL5). This will probably not happen formally - the president's view that the Alliance is unnecessary for the USA, and few people, apart from him, share it in Washington. However, we are

undoubtedly witnessing the weakening and unsealing of NATO. The majority of Europe and America are parting more and more quickly. Today, this is the biggest problem of international politics in the West. For countries such as Poland, which are medium-sized but have an extremely difficult geography, this is a fundamental problem. There is a conviction in Europe that we are protected from catastrophe by the fact that the President of the United States does not decide on foreign policy alone (URL6). It is true that not many of the people who today co-decide on the policy of the superpower would, like President Trump, say that Europe is an 'enemy'. However, more of them do not like Europe, almost all of them do. Naturally, the Americans are right in their criticism of Europe. Most European governments spend too little on defence, others, like the PIS government, hide their expenditure on roads and VIP aircraft in their military budgets. Not all allies are in solidarity - Germany, for example, is openly flirting with Russia over the Nord Stream II gas pipeline or the Italians and Hungarians. However, America also often, or rather more often, does not show solidarity, and for Trump, moreover, it shows solidarity on a particularly regular basis. Suffice it to mention the unilateral withdrawal from the USA and Europe's agreement with Iran.

It is the USA, that is Trump, who disregards above all the foundations of NATO, that is to say, the common values. The preamble to the Washington Treaty states that members are to protect 'a common heritage and civilisation based on the principles of democracy, individual freedom, and the rule of law'. The current US Government does not pay attention to this. Turkey is sometimes less criticised than the European Union or Germany. The criticism of Law and Justice is not about rules, but only about matters that America cares about: disputes with Israel or attacks on TVN (owned by a company from the USA). This is the case with everything: Trump's America treats everyone, including its allies, exclusively in terms of narrow interests and even trade: you can give, you will get something. He does not see that the advantage of the USA and the whole West in the world, starting from the Second World War, consisted of something else: politics based on common principles (even if sometimes bent) and working out unity (even if difficult). After the initial shock, the majority of Europe developed a two-track 'Trump strategy'. First, to get along in those fields where possible - either with the president himself or, more often, with his environment and other members of the government. The same game is played by the Law and Justice government, for example in talks on increasing the presence of American troops in Poland. Secondly, the response of the EU or countries such as France, Germany, or Scandinavia is stronger intra-European coordination and seeking closer ties with third partners such as Canada, Australia, or Japan. Our

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government is doing the opposite - it is throwing itself into the arms of Trump's America with everything and unconditionally, as evidenced by the last anti-Iranian conference in Warsaw. A characteristic - and sad - style of the world's reaction to America's new, selfish as never before, policy is also characteristic. It is not only the Polish President ('Fort Trump'), but also larger partners - for example Emmanuel Macron - who tried this tactic without success. Recently the Prime Minister of Japan shocked the whole country and half of the world when a hidden message leaked that Trump had nominated him for the Nobel Peace Prize. It is even more interesting in Washington, D.C. itself. Professionals who have sometimes told him the unpleasant truth are disappearing from the environment of the US President, and those who have no problem with flattery are doing well. In his speech in Munich, Vice-President Pence mentioned Trump over 30 times. This is much more than the deputy of the Chinese First Secretary Xi Jinping mentioned in his speech in Munich. How will the West differ from the East - Putin's or Chinese - if it is governed by the same poor, sometimes embarrassing rules? Exaggerated? Perhaps. But what if the extravagant president has been ruling the White House for not two but six more years? Trump has, yes, a record-breaking unpopularity in the US. But its political opponents, the Democrats, have no one who would be more popular (URL7).

Conclusions

In conclusion, deterrence can be gradually built against hybrid campaigns by credibly identifying, naming, and condemning the perpetrators. Through proportionate responses that do not escalate but show that hybrid attacks will be consistently resisted in a collective and coordinated way. It is also important to identify and remove weak elements in NATO's critical infrastructure spectrum, both materially and virtually. These reactions will include trial and error phases when the Alliance checks what will best encourage the opponent to rethink their intentions. They will also require the creation of a common catalogue of measures - both existing and new - and a knowledge of how they can be applied in a targeted way against both the states and the pawns they are using. The daily image of NATO - which deploys new forces in its eastern Member States, organises powerful exercises, fights cyber threats and terrorism, conducts training and capacity-building missions in places such as Afghanistan or Iraq and welcomes new members - will be in startling contrast to the political and academic rhetoric that presents NATO as obsolete and its members as a burden on low return assets. In a word, optimists will not see the need to reform the Alliance,

and pessimists will see that reforming the Alliance is not possible. As has often been the case in history, this will boil down to a choice between deeds and words and a discussion about what is most decisive for NATO's credibility in the long term. If the glass is half-full and half-empty, both sides are right, and we are not moving forward. However, to repeat this somewhat fruitless discussion on NATO's 70th anniversary would be a waste of opportunity - perhaps even a historical mistake. Extreme opinions that everything is fine or nothing is fine with NATO to distort reality and do not reflect the essence of the matter. Indeed, the Alliance is not doing so badly if we take into account the criticism and doubts that hit so many other institutional pillars of the post-war international order. It is not difficult to find good news about NATO, and impressive concrete achievements overshadow the frustrations of the last two summits. Overall, they show how great the commitment of 29 members to NATO is still expressed in the financial expenses, capabilities, and sacrifice of the soldiers, as well as in the speeches. However, without falling into shallow patterns that prophesy the crisis, we must also face the fact that the Alliance is now operating under the most complex security conditions it has ever faced in its history. It is facing, more than ever, a diverse range of threats. Of course, they may not be as extreme as the nuclear holocaust during the Cold War, but they are nevertheless acute and uncontrollable, they can bring to an end liberal societies and individual freedoms that are now taken for granted by the citizens of the nations. Above all, NATO will have to develop a culture of permanent readiness, reliable intelligence, and the ability to make a whole lot of small decisions regularly and quickly, rather than great decisions being made rarely and too late. However, if NATO can operate more effectively below the threshold of Article 5, it will be less likely that it will have to face threats above that threshold in the future.

References

Burles, M. – Shulsky, A. N. (2000): Patterns in China's Use of Force: Evidence from History and Doctrinal Writings. California: RAND Corporation, 113.

Online links in this article

URL1: European Reassurance Initiative and Other U.S. Efforts in Support of NATO Allies and Partners. https://www.whitehouse.gov/the-press-office/2014/06/03/fact-sheet-european-reas-surance-initiative-and-other-us-efforts-support-

- URL2: Graham, T. (2019): U.S.-Russian Relations in a New Era. https://nationalinterest.org/ feature/us-russian-relations-new-era-40637
- URL3: The Trump-Putin Relationship, as Dictated by the Kremlin. https://www.theatlantic.com/ politics/archive/2019/04/kremlin-dictates-trump-putin-relationship/ 586975/
- URL4: S. Gutterman, Russia Denounces Kosovo Declaration. http://www.washingtonpost.com/ wp-dyn/content/article/2008/02/17/AR2008021700714.html
- URL5: Allen, N. Oliphant, R. Foster, P. (2016): Donald Trump praises 'very smart' Vladimir Putin for not expelling US diplomats in response to sanctions. www.telegraph.co.uk/ news/2016/12/29/obama-expels-35-russian-diplomats-election-hacking-row/
- URL6: Kramer, A. E. (2007): Putin likens U.S. foreign policy to that of Third Reich. https:// www.nytimes.com/2007/05/09/world/europe/09iht-russia.4.5642323.html
- URL7: The Trump-Putin Relationship, as Dictated by the Kremlin. https://www.theatlantic.com/ politics/archive/2019/04/kremlin-dictates-trump-putin-relationship/586975/



Erzsébet Tőzsér

Organizational psychological studies in a county of the Hungarian Police – comparison of two departments

Abstract

Organizational psychological studies deal with the assessment and interpretation of psychological processes taking place in an organization. In the organization of the Police, these studies are carried out by answering managerial questions which are composed using empirical experiences and theories of organizational psychology. The present study compares the results of organizational psychological surveys of two rural police departments, with an emphasis on social indicators. It attempts to present how McGregor's X and Y theory as the management's approach to their employees affect the working community of the Police. The results clearly indicate that in one department, the management's approach has a positive, while in the other department, it has a negative effect on the individuals and the whole organization unit. The comparison indicates that the management's approach can have a significant role in shaping the results of the organizational psychological study. Therefore, it is important to take the management's approach into consideration when dealing with organizational problems and establishing the organizational human strategy.

Keywords: police, organizational psychological survey, human strategy, human approach, management theory

Introduction

Organizational psychology studies the psychological processes that take place in organizations and affect their function, such as communication, co-operation and the mood of the co-workers. In the organization of the Hungarian Police, organizational psychological studies are conducted by the associates of the field of psychology and are based on answering managerial questions. Managers are interested in the organizational psychological processes, because understanding the organizational psychological background of conflict situations, communication problems and fluctuation tendencies help them make proper arrangements.

Several studies explain the current organizational problems of the Police, describe their organizational psychological background, and offer possible solutions (Tegyey, 2018; Tőzsér, Fridrich and Borbély, 2018; Borbély, 2019; Tőzsér, 2019; Tőzsér, 2020). Instead of focusing on the general attributes of the organization, the present study compares the results of the organizational psychological studies of two very similar local departments of the county police headquarters, in order to identify the social factors behind their differences. The two studies were conducted simultaneously in the autumn of 2019 (Tőzsér – Törkenczi, 2019a; Tőzsér – Törkenczi, 2019b). (Both studies were initiated by the Chief of the County Headquarters.) The later described differences and tendencies display what organizational psychological factors should be taken into consideration when investigating the operation and problems of an organization unit.

Theoretical background

There are some system-level problems (e.g. increased fluctuation tendencies) that almost every employee noticed and indicated in an interview situation, based on their own experiences and interests. As described in the former organizational psychological study, two major factors affect the mood of the Police employees. One is the feeling of organizational injustice which comes from the dissonance between organizational expectations and limitations, and from a relative deprivation feeling, mainly because of the differences in the access to resources among the groups of the organization. The other factor is the negative approach to employees which is enhanced by the error searching and statistical approach (Tőzsér, 2019).

Manager's negative approach to employees was described by Douglas McGregor, university professor in his study titled 'The human side of Enterprise', in 1960. According to the 'X and Y' theory, the manager can have two approaches to the employees. Those who have the X approach, assume that the employees are inherently lazy and work-shy, they can only be motivated by money, and they need to be forced to work by threatening and punishment. Their management methods are based on precisely describing of tasks, strict control and punishing mistakes. This attitude in a work community facilitates developing the condition of learned helplessness. According to Seligman's definition, this condition results from the individuals' experience that they have no influence on their environment, thus it does not matter whether they do their job well or bad, the result will be the same. As a result, they enter an unmotivated, apathetic state. This happens in a workplace with a manager who has the X approach, because he/ she assumes that his/her employees, who are lazy and always thinking about how to avoid work, would not do their jobs without his/her leading and control, and everything would turn into chaos. In this case, the employees feel that they are treated like robots, they have no influence on what is happening, and their opinions, experience, and knowledge do not matter. They feel infinite helplessness and burn out (Carney and Getz, 2010).

Managers with Y approach consider their employees ingenious, creative individuals who seek self-actualization in work and long for the experience of creation. According to them, people search for solutions to problems and the opportunity to take responsibility, and their main motivation is not money. Therefore, managers with Y approach encourage their employees to engage in different workflows and communicate openly. When assigning tasks, they focus on defining the aims, and they leave the method of accomplishing the task to the competent employees. In this way, employees feel that they can develop their abilities, their opinion and knowledge matter, and they experience a freer environment, where their motivation is maintained over time, and their commitment to the organization gets stronger (Carney and Getz, 2010).

The authors of the book, titled Freedom Inc, present McGregor's finding, that the subsistence of organizations with the X, negative approach is questionable, because, in fact, 97% of people function like the Y theory, and only 3% of them are real slackers. As a result, managers with X approach unnecessarily block and slow down the employees of their organizations with bureaucratic rules, and by this, they lay the foundations of a system of throwing the responsibility on others and create the atmosphere of learned helplessness (Carney – Getz, 2010).

Comparing the description of the theory with the given characteristics of the organizational culture of the Police (Kovács, 2009) (such as bureaucracy, strict sub- and superordinate relations, the triplet of assignment - execution – control... and so on) we get the impression that McGregor's X approach is an integral part of the organizational culture. This tendency is supported by the formerly mentioned error searching and statistical approach of the organization. Error searching operations are those organizational activities that aim to detect potential errors in the work processes and their perpetrators. These include the requirement of frequent inspections or the increase of administrative burdens, and constantly threatening with disciplinary action. These can have a negative

effect on direct relationships and can create distrust in the community (Tőzsér, 2019). These factors indeed correspond to the characteristics of the X approach, but the mood of the given working community is strongly influenced by where the management takes place between the two endpoints of the dimension of the X and Y approach, and how they can communicate the organizational standards to the employees.

The surveys

The survey methodology is based on a questionnaire and an interview. This survey method was developed during a study of the whole staff of a police department of nearly 100 people, in 2018, where the interview was complemented with a questionnaire for every subject (Tőzsér, 2019).

Questions of the interview:

- 1. How do you feel yourself at your division?
- 2. What is the strength of your division?
- 3. What is the weakness of your division?
- 4. How would you describe the communication at your division?
- 5. How would you describe the mood at the division?
- 6. How would you describe relationships and cooperation at the division? How much do you trust the majority of your colleagues?
- 7. How do you evaluate the achievements at the division?
- 8. How would you describe the most important values at your division? How much work is appreciated?
- 9. Is there anything that could improve this?
- 10. How would you describe your relationship with your manager (division and subdivision)? Can you cooperate with him/her? How much do you trust him/her?
- 11. How does he/she give you feedback? What kind of feedback did you get last time? (When was that?)
- 12. Would you like to tell us anything else? Do you have any comments about these questions and the topics?

Questions of the questionnaire

The first 25 questions of the questionnaire (figure 2.) were based on the topics of organizational psychology, in most cases distinguishing between the three

management levels (department, division, and subdivision). The subjects were asked to answer the questions regarding quality on a 10-point scale. 1 represented the most negative option ('Very bad' or 'Not at all') while 10 represented the most positive option ('Very good' or 'Absolutely'). Questions number 26. and 27. concerned whether the subject considered leaving the department or the Police organization in the past year. In the case of 'Yes' answer, there was an opportunity to explain its reason. This was continued by the choices of values, regarding the strengths (question 28.) and weaknesses (question 29.) of their division. The last question, number 30. provided room for adding notes (Tőzsér, 2019).

Results of the Surveys

Two police departments were surveyed. The total number of both departments are around 60 people. Those who were absent for some reasons (sick-leave, training) were excluded from the survey, thus 44 people from department I and 50 people from department II took part in the survey.

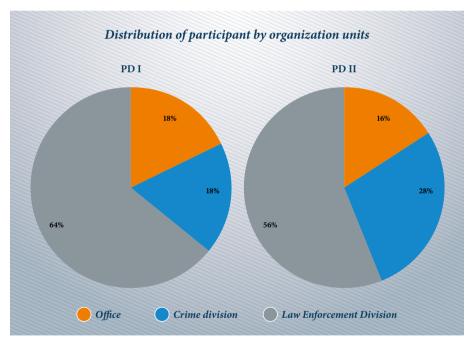


Figure 1: Distribution of participants by professional fields

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It is clear that Law Enforcement employees made up the majority of the respondents. Besides the head of the department, there are 4 chiefs: the heads of the Crime and Law Enforcement divisions and the heads of the subdivisions of Law Enforcement. With these 5- 5 persons per unit a management interview was also recorded, in order to better understand the operation of the departments. In this, they were asked for the SWOT analysis of their organizational unit, and we asked about their relationship system, management operations, and the problems mentioned at the beginning of the survey, and potential suggestions.

When analyzing the questionnaire, we had to exclude 5 questions regarding the subdivision level (1., 5., 9., 13. and 16.), because the low number of people in the subdivisions (in some cases only 2-3 people), and the crime divisions working as one unit made the subdivision level uninterpretable in the survey. Therefore, the averages of the answers of the asked 20 questions can be seen in the opposite figure.

It is clearly visible that the department II has higher average values than the department I. The biggest difference between the two departments (2,48) can be seen in question 10. 'How much do you trust the head of the division?', then in question 12. 'How much do you think your leader trusts you?' (2,27), and in question 3. 'How would you describe the mood at your department?' (2,00). However, the smallest difference (0,73) was found in question 21. 'How disciplined do you consider yourself at work?', then in question 24. 'How do you see the quality of your work?' (0,81), and in question 22. 'How disciplined is your division?' (0,82).

So, the biggest differences were in mood and trust, and the smallest differences were in their own discipline and the quality of work. In the first survey with this questionnaire, we also found that the subjects tend to give a higher score to the questions regarding themselves. This can be considered as a distortion tendency towards our own positive self-esteem. This is the most similar aspect of the two departments. However, the subjective experience plays a much more important role in the interpretation of the abstract concepts of mood, trust, and cooperation, like how the given subject feels him/herself in the given environment in everyday life.

Analyzing the answers to question 3. 'How would you describe the mood at your department?', nearly 60% of the employees of department I gave an answer below 5 (1, 2, 3, and 4), while 64% of the employees of department II gave 6 or higher points to the question. So, there is not only a difference in the average, but the majority of the respondents of department II gave a higher score to the mood of the department. Respondents of department I were more likely to rate the mood of the department with a lower number.

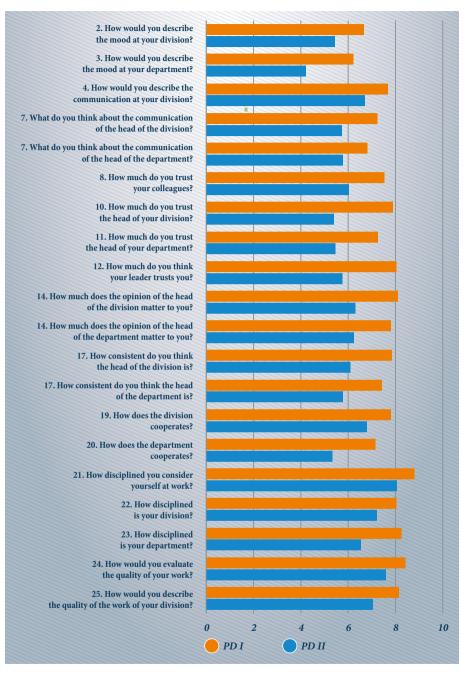


Figure 2: Averages of the 20 analyzed question from the first 25 questions

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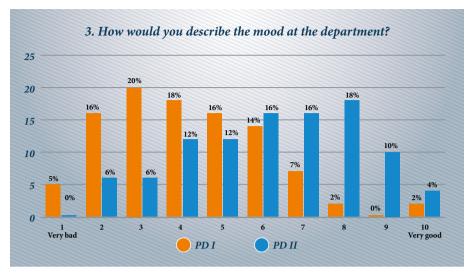


Figure 3: Frequency of the answers to question 3.

A similar tendency can be observed in the case of the answers for trust, since 62% of the respondents of department II gave 8 or higher score, while in the case of department I only 37% of them gave this score, so, at department II much more people experience workplace trust.

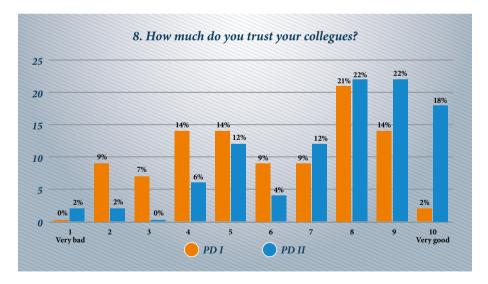


Figure 4: Frequency of the answers to question 8.

Erzsébet Tőzsér: Organizational psychological studies in a county of the Hungarian Police – comparison of two departments

Then, we analyzed cooperation (20. 'How would you describe cooperation at your department?') and after comparing answer frequencies we can see that while 70% of department I gave a score between 1 and 6, 70% of department II evaluated the cooperation with a score of 7 or higher. Thus, it seems like the majority of department II experiences good cooperation, in contrast, the evaluation of the cooperation is not uniform at department I, and it tends to a medium score.

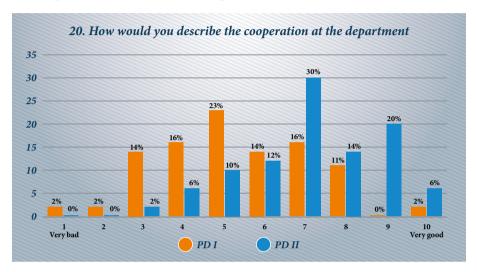


Figure 5: Frequency of the answers to question 20.

The answers to question 26. 'Have you considered leaving the department in the past year?' and 27. 'Have you considered leaving the Police in the past year?' by departments can be seen in the below figure.

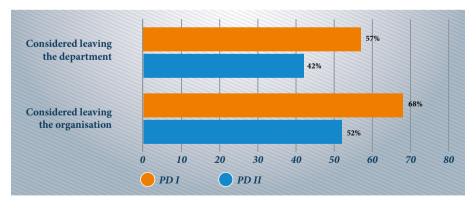


Figure 6: Frequency of considering leaving

The intent of leaving displays very high proportions. The tendencies behind this have been described in a study from 2018 (Tőzsér, 2019) where this method of survey was first used, therefore, the present study does not explain it. It can be clearly seen that in the case of department I these values are 15% and 16% higher, than in the responses of department II. As an explanation, the lack of appreciation, being overwrought, disappointment in the system, and the uncertainty of the future of the organization were mentioned in a similar proportion in the two departments. However, the communication and attitude of the leader only appeared in the case of department I. One or two people from both departments indicated unpredictability, burnout and mood as well.

In questions 28. and 29. the subjects were asked to choose from 10 values, which ones they consider as the strengths and the weaknesses of the departments. The responses from the two departments can be seen in the below figure.

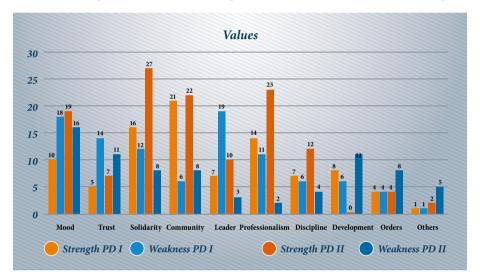


Figure 7: Frequency of identifying values as strengths or weaknesses

In the case of department I, community (21 people), then solidarity (16 people), and professionalism (14 people) were considered as strengths. As weaknesses, most of the respondents chose the leader (19 people), then mood (18 people), and trust (14 people). As can be seen, mood was indicated by 10 people as strength, and nearly twice as many people (18) indicated it as weakness. The tendency is the same in the case of trust, where 5 people considered it as strength, and 14 people as it is missing from the department. The case of the leader is also similar, since 7 people indicated it as strength and 19 as weakness. The commu-

nity had an opposite tendency, 21 people considered it as strength, and only 6 people as weakness. In the case of department II, solidarity was considered as strength by most of the people (27 people), then it was followed by professionalism (23 people), and community (22 people). As weaknesses, most respondents choose mood (16 people), then trust and development (11-11 people), and solidarity, community and order (8-8 people). It can be observed that 27 people chose solidarity as strength, and only 8 people as weakness. This is the tendency in the case of community (strength: 22 people, weakness: 8 people), the leader (strength: 10 people, weakness: 3 people), professionalism (strength:23 people, weakness: 2 people) and discipline (strength: 12 people, weakness: 4 people) as well. So, more people consider these as strengths of the department, than as weaknesses. Development was only indicated as weakness, by 11 people. Thus, the lack of opportunities to develop can be strongly felt in such a small department. In the present figure the number of indicated strengths and weaknesses can be seen by departments.

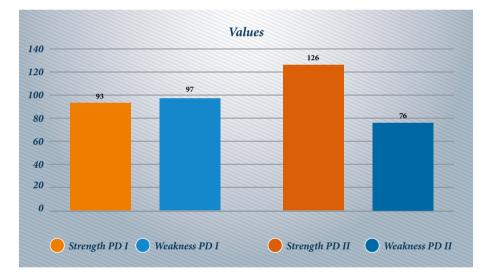


Figure 8: The values classified as strengths and weaknesses by depart-ments

It can be clearly seen, that in the case of department I there were 93 answers as strength, and 97 as weakness, so people indicated roughly the same amount of values as the strengths and weaknesses of their department. At the same time, in the case of department II, 76 answers were given as weakness, and 126 as strength, showing a much more positive attitude. Although there was a difference of 6 people in the number of respondents (department I: 44 people, de-

partment II: 50 people), the higher number of elements cannot explain the upper described tendency.

Observations of the interviews

In the case of department I, the majority of the interviews focused on the tense atmosphere, which is related to the arrival of a new division leader, one year ago. The attitude of the management was perceived very negatively. The reports gave the impression of a split department, where communication between the leaders and the employees became almost hostile. The interviews of department II were focused on the systematic problems (low salary, high fluctuation, lack of recruitment) and the uncertainty of the future of the organization. Besides these, the majority had a positive opinion about the community of the particular department, and they described the leaders as humane and democratic. The organizational problems – such as low salaries in the executive area, increasing and changing of work tasks, increased fluctuation tendencies, and the difficulties of the new generation to fit in the organization – are mentioned by almost every subject, however, the emphasis can be different, based on their position, age, and personal experiences.

Comparison

The opposite table compares the results of the organizational psychological study of the two departments.

It can be clearly seen that in the case of the first 20 questions, the employees of department II gave a better evaluation of their organization unit, while 15% and 16% fewer people answered that they considered leaving in the past year. So, an inverse tendency can be seen between the two parts of the questionnaire. 15% fewer people considered leaving the department and the organization where the employees valued the mood, trust, communication, relationships, and cooperation better. It can also be noticed that for the explanation of the idea of leaving (question 26. and 27.), department I mentioned the 'attitude and communication of the management', which did not show up at the questionnaires of department II. There were differences in determining the strengths and weaknesses of the departments as well, that indicates that the employees of department II have a more positive opinion on their department, since they marked

	Police Department I	Police Department II
3. How would you describe the mood at your department?	4,20	6,20
8. How much do you trust your colleagues?	6,02	7,52
20. How does the department cooperate?	5,32	7,14
Average of the first 20 questions	6,16	7,64
Considered leaving the department (26.)	57%	42%
Considered leaving the organization (27.)	68%	52%
Explanations for question 26. and 27.	low salary	
	being overwrought	
	disappointment in the system and uncertain organization future	
	management attitude and communication	
	unpredictability	
	burn-out	
	mood	
Strengths	community (21)	solidarity (27)
	solidarity (16)	professionalism (23)
	professionalism (14)	community (22)
Weaknesses	management (19)	mood (16)
	mood (18)	trust, development (11)
		solidarity, community and order (8)
Number of strengths	93	126
Number of weaknesses	97	76
Observations of the interviews	autocratic management	democratic management
	hostile mood	humane management
	tense atmosphere	good community
	autocratic management	democratic management
	hostile mood	humane management
	tense atmosphere	good community
	systematic problems: low salary, fluctuation, lack of recruitment	
	few constructive suggestions	many constructive suggestions

Table 1. Summary of the results of the organizational psychological survey of the two departments

much more values as strengths (126), than weaknesses (76). The observations of the interviews also display a significant difference between the employees of the two departments, regarding how they see the attitude and communication

of the management. While the employees of department I experienced hostile communication and autocratic management style, department II described a democratic leader, humane atmosphere and most of the time good communication. In department I the majority of the interviews consisted of venting and complaining about the tense atmosphere and bad mood. However, in the case of department II this focused on the organizational (systematic) problems, and they gave much more suggestions at organizational level, and in connection with their daily work as well.

Conclusions

The incorporation of the X approach, described in the introduction, to the organizational culture of the Police cannot be doubted, however, the hypothesis that local management has a great impact on the question, whether the employees experience an X or Y workplace environment in their daily life, is proven by the results of the survey. The destructive effect the X approach can be identified analyzing the results and interviews of department I, because in the first 20 questions they evaluated their organizational unit with lower values and 15% more people answered that they have considered leaving. In addition, they marked approximately the same amount of values as strengths and as weaknesses, and their interviews were characterized by passive complaining and fewer suggestions and ideas. In contrast, the negative effect of the X approach that is fundamentally present in the organization, cannot be seen in the results of department II. The employees gave higher average scores to the first 20 questions and fewer people have considered the idea of leaving the police or the department. At the same time, they identified much more values as strengths than organizational weaknesses, and during the interviews they complained about organizational, systematic problems, but with a more active attitude, besides they gave more ideas and suggestions. Based on the interviews, regarding the local management, in department I the X approach, in department II the Y approach is more prevalent. The conflict situation with the management, and mentioning it as a reason for leaving, only emerged in the case of department I. The interviews also reflect a passive attitude in the case of department I, which supports the presence of the learned helplessness, as a negative outcome of the X approach. According to these, it is eligible to assume that this management attitude is the factor that correlates with the differences in the values, possibly at a causal level. The two organizational units have very similar parameters, there is a minimal difference in numbers, and there is no significant difference

in the social environment, moreover the data were collected in parallel. There are some differences in the physical working environment between the two departments, but this was not emphasized in any of the departments during the investigations. However, we have to take this into account, because department I has worse environmental parameters, and this could strengthen the passive, negative attitude and the state of learned helplessness. Organizational commitment and identification with the goals of the organization is related to the quality of the relationship with the direct leader, so if it is conflicting, then it will also be reflected in the indicators of satisfaction, and lower commitment to the organization will be seen (Kovács és Tőzsér, 2017). The most worrying problems of the Police are recently the increase of fluctuation tendencies and the difficulties of retaining and recruiting human resources. These problems may be explained by the altered functioning of the new generations (Y, Z and later the Alpha), which can cause communication difficulties between the representatives of the generations in the organization as well. Two tendencies that are present in the way of thinking of the new generations play a role in this. One is that, for them, the importance of seniority and authoritarianism has decreased, while level of awareness and representation of their interests has significantly increased. These are the two tendencies why their communication could be unacceptable for the older generations (Tőzsér, 2020). Because of these factors it is more important to take the managerial attitude into account when thinking about solutions for organizational problems. The younger generations are even more interested to have opportunities for development and self-actualization at work, so they can only integrate easily into a workplace environment where they mostly experience the Y approach on a daily level, regardless of the basic characteristics of the organization. Therefore, good workplace relationships can have a retaining ability in the organization of the Police as well (Lövei és Nadkarni, 2003). Although there is a need for numerous organizational actions that aim to treat the above-described problems, we should not forget about the local problem management. In the case of an organizational unit, a department, the well-functioning social relationships, the proper management of conflicts and the positive management attitude towards the employees are never the results of central actions, they can only be achieved locally by individual management decisions. The strengthening of social relationships and maintaining (forming, developing) the Y, positive, approach is always a local management task that has immediate effect on the workplace-related well-being of the affected people and on the indicators measured by organizational psychology.

References

- Borbély Zs. (2019): Egészségmagatartás mentális egészség különbségek a munkahelyi stressz megélésében [Health behaviour, mental health – differences in experiencing workplace stress]. Belügyi Szemle, 7-8, 37-50. DOI: 10.38146/BSZ.2019.7-8.3
- Carney B. M. Getz I. (2010): Szabadság Zrt. [Freedom Ltd.]. Budapest: Akadémiai Kiadó
- Kovács G. (2009): A rendészeti szervek szervezeti kultúrájának összetevői és sajátosságai, a téma feldolgozása a Rendőrtiszti Főiskola vezetéselméleti oktatásában [Components and properties of the organisational culture of law enforcement forces, developing the topic in the training of leadership theory at the College for Police Officers]. Pécsi Határőr Tudományos Közlemények, 10, 223-234.
- Kovács G. Tőzsér E. (2017): A vezetői attitűdök, vezetői stílusok és a dolgozói elégedettség összefüggéseinek vizsgálata egy megyei rendőr-főkapitányságon [Examination of coherences between leaders' attitudes and leaders' styles and employee satisfaction at a county police direction]. Pro Publico Bono – Magyar Közigazgatás, 2, 138-157.
- Lövey I. Nadkarni M. S. (2003): Az örömteli szervezet: szervezeti egészség, betegség, öröm – és a vezetés [The joyful organisation: organisation's health, illness, pleasure – and the leadership]. Budapest: HVG Kiadói Rt.
- Tegyey A. (2018): *A* 'Z generáció' címke [The 'generation Z'label]. Rendőrségi Tanulmányok, 3, 81-97.
- Tőzsér E. (2019): Két városi rendőrkapitányság szervezetpszichológiai vizsgálata 2018-ban [Organisational psychological test of two city police departments in 2018]. Belügyi Szemle, 12, 69-93. DOI: 10.38146/BSZ.2019.12.4
- Tőzsér E. (2020): Generációk és vezetői attitűd a rendőrség szervezetében [Generations and leader's attitude in the police organization]. In: Baráth N. E. Pató V. L. (ed.) (2020): A haza szolgálatában Konferenciakötet 2019. Budapest: Doktoranduszok Országos Szövetsége, 165-173.
- Tőzsér E. Fridrich A. C. Borbély Zs. (2018): A XXI. század biztonsági kihívásai a rendőrségi szervezeti kultúrában – generációk a szervezetben [Safety challenges of the 21st century in the organisational culture of police – generations in the organisation]. Pécsi Határőr Tudományos Közlemények, 20, 97-102.
- Tőzsér E. Törkenczi B. (2019a): Jelentés a 'I.' Rendőrkapitányság szervezetpszichológiai vizsgálatáról [Report on the organisational psychological test of Police Department 'I.']. KEM-RFK belső anyag, Tatabánya. (Private report of local organizational psychological survey)
- Tőzsér E. Törkenczi B. (2019b): Jelentés a 'II.' Rendőrkapitányság szervezetpszichológiai vizsgálatáról [Report on the organisational psychological test of Police Department 'II.']. KEMRFK belső anyag, Tatabánya. (Private report of local organizational psychological survey)

Ferenc Molnár

Protection of Critical Infrastructures for Energy Supply

Abstract

Continuous economic and social development is a defining feature of human history. Technological revolutions have been following each other at an ever-accelerating pace since the Industrial Revolution. As a result of this development, our ever-expanding supply of equipment results in a strong increase in energy demand. The comfort of mankind is provided by the ever-widespread electrification, that is, we are encountering electricity-based technologies in more and more areas of our daily lives. In addition to providing convenience, automation and the advancement of digital technologies improve the efficiency of economic activities and promote sustainable energy production. The life of an urbanized man is moving towards full automation. Smart homes, internet-based work and commerce are gaining ground. Self-learning software, thinking computers are spreading. Self-propelled vehicles run a test run. Without the continuous, reliable availability of electricity today's advanced technologies are worthless. Without electricity life stops. Based on this recognition, energy systems' infrastructures are increasingly exposed to external attack. In addition to the reliability of technologies that play a decisive role in the supply of energy, it is necessary to take effective action against potential threats from the environment. This article, along with a description of power supply systems, identifies potential external threats and remedies available.

Keywords: energy, sustainable development, energy supply, security, infrastructure

Preamble

Our everyday life today is unthinkable without electricity. We cannot mention a segment of households, industrial and agricultural production, medicine, R&D,

education and countless areas where electricity demand would not be present in any form. The continuous availability of electricity is also one of the cornerstones of our daily security. Public administration, property protection, law and order and national defense cannot be deprived of the power supply of systems under continuous electrification development. Our comfort and security are increasingly energy-dependent, making us vulnerable to energy supply systems.

Structure and operation of the Hungarian electricity system

Electricity is generated in power plants through various specific conversion technologies from a variety of primary energy sources. Primary energy sources can be nuclear, conventional fossil (coal, lignite, natural gas, oil), renewable (waste, biomass, biogas, solar, wind, water, geothermal).

The power plants are intended to be basic, scheduling and peak power plants.

- System power plants ensure systematic production over time at continuous system operation. This is also called cord production or base load. These are nuclear power plants and coal-fired power plants.
- Scheduling power plants meet predictable power demands with well-controlled load capacities. These include 3 + generation nuclear power plants (Paks 2 technology), combined cycle gas turbines, natural gas fired power plants, controllable renewable base power plants (biomass, biogas, geothermal, hydro reservoir).
- Peak power plants can be loaded with open-cycle quick-start gas turbines, rotary shaft, no-load turbine generator units, and energy storage units in the event of unpredictable rapid, significant load changes or sudden energy demand.

The electricity produced is passed on to the consumers, i.e. the users, through an electricity distribution network (*Figure 1*).

The task of the electric network is divided into four hierarchical levels. The core network collects electricity from 400kV and 220kV power from hundreds of megawatts of high-performance power plants and transmits it to node transformer stations to the 132kV main distribution network. Hungary connects to ENTSO-E through the core European electricity network. The main distribution network, transformed from the 132 kV voltage level, also transmits power through transformer stations to the 35, 20, 10 kV medium voltage distribution network. Large industrial consumers buy from a 132kV or medium voltage network. Tens of MW power plants are connected to the main distribution and distribution network. After further transformation, electricity will arrive on the 0.4kV

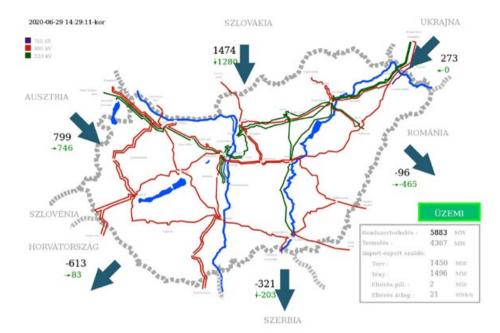


Figure 1: Map of Hungary's basic network Source: (URL1)

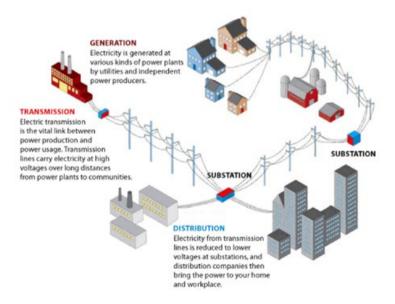


Figure 2: Structure of electricity distribution. Source: (URL2)

low-voltage grid, which will supply nearly 3.8 million households in Hungary. This is more than 99% of the population. (Bonnyai, 2014) By way of illustration, the Paks Nuclear Power Plant with 2000MW power supplies 400kV, the 20MW Felsőzsolca photovoltaic power plant with 20kV, and the 5-50kW household solar power plants with 0.4kV power to the electricity grid. Operational management of the network is carried out by system operators. Downstream, the core network is controlled by MAVIR (Hungarian Electricity Transmission System Operator), owned by MVM Zrt., the distribution network is controlled by the KDSZ (District Dispatcher Service) and the UICs (Operational Control Centers) belonging to the electricity suppliers (*Figure 2*).

The natural gas supply system

More than 60% of Hungary's energy consumption comes from imports of fossil primary energy sources. Almost 90% of natural gas imports come from Russia via the Brotherhood gas pipeline. The remainder reaches the country via the Győr-Baumgarten line. Domestic distribution is provided by 400 gas transmission stations and a total gas pipeline network of 5780 km with a pressure of 63 bar.



Figure 3: High-pressure pipeline network of Natural Gas Supply Ltd. Source: (URL3)

Ferenc Molnár: Protection of Critical Infrastructures for Energy Supply

The country has more than 4 billion m³ of storage capacity for strategic natural gas storage with 55 million m³ of daily storage capacity.

The oil supply system

Domestic oil production is able to cover only a fraction of domestic consumer demand. Most of the imports come from Russia under Friendship II. crude oil pipeline. It has a capacity of 10 million tons per year. It serves as a safety reserve for the Friendship I line from Slovakia with a capacity of 5 million tonnes per year. The third supply option is the Adria transport pipeline, with an annual transport capacity of 10 million tonnes (Bonnyai, 2014).

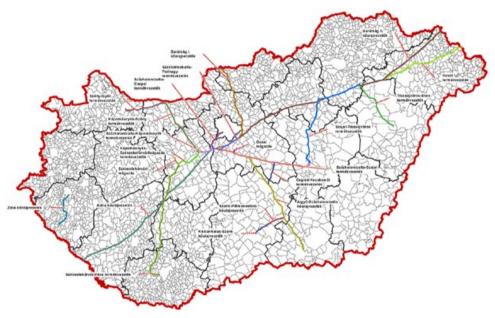


Figure 4: The pipeline network of the Hungarian Oil Company (MOL Plc.). Source: (URL4)

Possible external hazards of power supply systems Critical infrastructures

Economic and social development is accompanied by modernization and widespread adoption of technologies. As a result, a network of technologies and activities for various purposes, linked to each other at many points, has been and is still evolved. Infrastructures have been created. There are several sources of alternatives to the definition of infrastructure, even if interpreted uniformly. In summary, we can speak of economic and technical condition systems that are not direct components of the production process, but are networks, facilities, utilities, bases, processes, activities without which the desired goal could not be achieved. Organizations and facility systems that serve life and well-being of citizens are vital to the functioning of society. Critical infrastructures are facilities whose destruction or limited availability has a negative impact on the existence and quality of life of the affected users.

Act CXXVIII of 2011 on Disaster Management and Amendments to Related Laws on the implementation of Act No. 234/2011. (XI. 10.), Section 1, paragraph 25 reads as follows. Critical Infrastructure: Devices, systems or parts thereof located in Hungary that are essential for the fulfillment of vital social functions, health, safety, human economic and social wellbeing, and the disruption or destruction of which would result in a lack of continuous performance.

This concept is completed by the following 5 basic features:

- interdependence correlation;
- IT Security Highlights, Digitized Workflows;
- operation peculiarities, unique character;
- domino principle chain reaction type injury / damage;
- weakest link and part-whole principle the stability of interconnected networks depends on the strength of the weakest element.

Based on present experiences and results of foresighted planning activities, it can be concluded that, in addition to the risks posed by deliberate harmful activities of human origin, situations should also be prepared for (URL5).

Critical systems and facilities

In the context of the protection of European critical systems and facilities, the Minister for the Interior shall perform national contact and coordination tasks. Governmental co-ordination of disaster management, civilian crisis management and critical infrastructure protection tasks, as well as the preparation of legislation on tasks related to these elements, also fall within the competence of the Minister of the Interior. The Energy Government Decree deals with the energy sector in three sub-sectors. These are the installations of the electricity system, the oil industry and the natural gas industry (Sibalin, 2017).

European and National Criteria for the Electricity Subsector (360/2013. (X. 11.) Government Decree):

Criteria for designation of constituents at European level:

• The loss of a system component alone leads to a limitation of the service for at least 6 hours, resulting in a permanent power or import capacity shortfall of up to 7% of gross domestic use plus imports;

National Element Designation Criteria:

Production of electricity:

• Failing which security of supply cannot be maintained and cannot be replaced within 30 minutes. The loss of a system component that cannot be replaced by imports or otherwise shall result, for at least 24 hours, in a loss of power of at least 10% of the average gross peak consumption of the three years preceding the test for all domestic electricity production.

Transmission network:

• A system component whose failure causes any other component to deviate from the voltage level specified in Annex 2 of the Regulation for more than 24 hours and cannot be replaced in any other way for the performance of the activity.

The distribution network:

A system component larger than 1 kV but not more than 132 kV for which: a) downtime of at least 10,000 users in excess of 24 hours but less than 48 hours, b) at least 5000 users with an outage of at least 48 hours but less than 72 hours; or c) an outage of at least 72 hours will exclude at least 2000 users from receiving.

European and sectoral designation criteria for the oil system: (360/2013. (X. 11.) Government Decree):

European constituent designation criterion

In the case of the petroleum industry, no component loss of more than 90 days for crude oil supply, petroleum refining and strategic stockpiles may be made up.

National Element Designation Criteria:

A component whose irreparable shortage causes the domestic demand for finished products (motor gas oil, gasoline, kerosene jet fuel) to be at least 70% beyond 55 days.

European and sectoral designation criteria for the natural gas system (360/2013. (X. 11.) Government Decree)

European constituent designation criterion:

• In the case of the natural gas industry, the interruption of the component within the time limit specified below for the provision of the relevant activity shall not be made otherwise. 1 day of system operation, natural gas transmission, natural gas distribution. 10 days of commercial storage. 40 days of strategic storage. 50 days of natural gas import. 90 days of natural gas processing and other natural gas plants.

National Element Designation Criteria:

Natural gas transmission and system management

• A system component which, in the event of disruption, is up to 85% of its capacity required to secure the supply of domestic natural gas in line with average consumption conditions, and cannot be replaced in any other way for the provision of the activity concerned.

Production of natural gas:

• A component with up to 40% of the availability of committed production capacity in the event of a break of at least 72 hours and which cannot be replaced in any other way for the performance of the activity.

Natural gas Storage:

• A component with up to 40% of the availability of committed withdrawal capacity in the event of a break of at least 72 hours and which cannot be replaced in any other way for the performance of the activity.

Natural gas distribution (gas receiving station, high pressure or medium pressure natural gas distribution pipeline):

- The component whose
 - a) downtime of at least 10,000 users in excess of 24 hours but less than 48 hours,
 - b) at least 5000 users with an outage of at least 48 hours but less than 72 hours; or
 - c) a downtime of at least 72 hours excludes at least 2000 users from the possibility of receiving natural gas.

Expected sources of danger from the natural environment

Environmental hazards are primarily weather or geological disasters that have a significant negative impact on the living conditions and the well-being of the people concerned. A common feature of natural hazards is that the time, place, extent and process of their occurrence are unpredictable or very difficult to predict. Therefore, defending them should also be a major focus of disaster prevention. In the following, I would like to list these whimsical environmental effects together with possible means of controlling them.

Inland water, flood, lightning

Hungary is located in the deep part of the Carpathian Basin surrounded by the Carpathians, the Alps and the Dinaric Mountains. Almost three-quarters of the country's territory is below 200m above sea level. The waters collected from the surrounding mountains flow through the country, leaving the country south. There is a high risk of dangerous levels of floods and inland waters. 95% of the volume of flood water comes from abroad. A total of 22 rivers are responsible for the drainage of water, with a total length of 2,800 km (Gyenes, 2017). In the unfavorable case, the power supply technology system elements may be submerged. This will result in power failure and equipment damage. The most effective means of protection is to prevent disasters, i.e. to prepare for the potential damage caused by floods and inland water. The tools of defense are as follows:

- Continuous improvement of forecasting systems and methods.
- Design and construction of dams and drainage facilities as physical protection. As part of this, the construction of channels, sumps, pump shafts, dredgers.
- Careful design of superstructure of power supply systems, including proper leveling and sufficient stability of building foundations.
- Construction of critical roads with sufficient strength and stability.
- Establishment of reservoirs and catchment areas taking into account further utilization of the captured water, e.g. energy, irrigation, fish farming, sports, leisure.
- Promoting innovation in the use of flood wave energy.

Strong, stormy winds, gusts of wind

Strong winds and gusts can be expected anywhere in the country. There can be 90-120 km / h gusts of wind or tornadoes. Wind gusts above 120 km / h can cause

the power line column to fall or be damaged, or cause a wire break. Damp soil increases the likelihood of columns falling out. The risk of pipeline ruptures is also increased by the loading of ice-crushed snow on their surface. Trees falling overhead can also cause power outages.



Figure 5: Falling post on a 220 kV dual-system transmission line. Source: (URL6)

Proper static dimensioning of power line poles, careful design of roof structures in power supply systems, and regular maintenance of power line guardrails can be an effective means of preventing adverse effects.

Temperature effects

Extreme cold can occur anywhere in Hungary, which can often be below -25 °C or even below -30 °C. This can cause line breaks, breakage of supporting and tension insulators, overload of gas supply systems, malfunctions of coal-fired power plants due to frozen coal supply systems, and failure of SF6 gas-insulated electrical equipment. Wind turbine blades can cause increased icing, thus reducing operational efficiency. Extreme heat can occur anywhere in Hungary, which can include temperatures above 40 °C. Increased use of air conditioning systems can cause overloading of power supply systems. In extreme cases, due to the reduction in cooling capacity, the output of some base stations needs to be

reduced. Solar power plant production is also negatively affected by high ambient temperatures. Supply restrictions may occur due to overheating of main equipment such as transformers or compressors. Forest fires also threaten the operational safety of power supply system components. Defensive planning of the equipment from a technical and operational point of view can be a defense option. Application of best available technologies. Design of shades and backup cooling systems. Forest fire detection and fire extinguishing facilities should be prepared especially for the protection of vital facilities and equipment. Flood and inland trapped water resources could be used for sport and agricultural use as well as for additional cooling and firewater systems.

Thunderbolt

There are hundreds of thousands of lightning strikes per hour on Earth. Lightning strikes can occur anywhere in the country. Their annual frequency is characterized by an average of 2 lightning strokes per square kilometer. Lightning strikes a current between 30 and 300 kA. Their damaging effects can be damage to track facilities or failure of outdoor transformers. It may be a direct destructive effect, but it may also be a transient increase in voltage from the secondary effect. Lightning surge can cause electrical equipment to malfunction. Protective measures may include the installation of suitably sized lightning protection systems, the application of surge protection measures, and the design of carefully designed grounding systems.

Extreme amount of snow

Over a period of 24 hours, more than 30 cm of snowfall can occur in any area of the country. Heavy snow obstructs traffic, making it difficult to carry out operations and troubleshooting. Extremely increased snow loads cause mechanical overloads and damage. Possible defenses include preparation. Provision and availability of snow removal equipment. Strength dimensioning of system components exposed to mechanical overload with appropriate engineering margin.

Earthquake, landslide

The 2000 earthquake catalog recorded more than 20,000 cases. Hundreds of earthquakes can be detected by instrument every year. The most important task

of earth sciences is to predict vibrations as accurately as possible. The occurrence and negative impact of earthquakes should be considered. Soaked soil structures and stretches of hillsides carry the risk of landslides. There are more and more examples of these cases in Hungary.



Figure 6: Paks Nuclear Power Plant Earthquake Reinforcement Brace Steel Bridge Structure Between Localization Towers. Source: (URL7)

As a defense, careful selection of site locations and thoughtful static sizing can be one solution. Earthquake strengthening of existing facilities should be carried out. Continuous inspection and review of facilities should be performed. Continuous improvement of forecasting methods and improvement of their accuracy are prerequisites for effective prevention. International cooperation on learning from experience and development also plays an important role here. An important part of the defense is the preparation and, if necessary, disciplined and trained implementation of disaster management measures.

Human vulnerability of energy supply infrastructures

The first infrastructures of human societies were road networks and irrigation systems. After the emergence of infrastructures, threats to them have also been

emerged. In addition to being endangered by the natural environment, damage to human origin is also a threat to welfare and comfort systems. Most of the damages serve to intimidate the population and to undermine the trust in current political power and to insecure people. Along with industrial development, the risks of industrial origin due to technological errors are constantly increasing. The probability of their occurrence and its negative effects are determined by the application of the best available technologies, by constantly updated regulations, by regular inspections of the relevant bodies, etc. They can be reduced by working closely with disaster management. The most important threats from civilization are epidemics, depletion of the Earth's resources, dangerous industrial facilities and cyber attacks. Cyber threats can also be classified as deliberate, harmful activities. Attacks against IT-based technologies have now increased to the level of threat, posed by terrorist attacks, armed conflicts, revolutions and riots. The major components of power supply systems are large in scope, such as power line trace installations, pressure booster stations, distribution boards, transformer stations, power plants, control centers, which are vital to the operation of the system. The possible attacks on these large numbers of objects also depict a very diverse picture. Without limitation, unauthorized or mentally injured individuals may include intrusions, theft of property, armed attacks, remote shots, damages caused by protests, sabotage by members of organizations, drone attacks, or drone bombs.



Figure 7: MAVIR ZRt. Kerepes 400/120 kV substation. Source: (URL8)

Previously, physical protection was sufficient against attacks. This includes the use of concertina wires, security walls, locks, security cameras, field lighting, motion detectors, door detectors, access control systems, detection gates, alarms,

infrared barriers and security guards, even nowadays. Physical defense, in its constantly evolving form, is an indispensable defense tool even today. Successive technological revolutions place increasing emphasis on protecting against new IT-based attacks. The place where digital data and information is stored, called cyberspace, where attack and defense take place. The IT tools needed to create cyberspace are also provided with increasingly sophisticated physical protection. In addition to more and more tight regulation, firewall software developers have an increasing task. As a result of increasingly sophisticated attacks damages caused by cyber attacks are almost three times more than damages caused by natural disasters. The threats posed by IT-driven drones also mean a greater threat to the operational security of power supply systems day by day. Today, drone defense systems are still in the early stages of development. The efficiency of currently known, used or experimental systems can be greatly improved and their relatively high cost of ownership is considered depending on the level of security of the object to be protected. In practice, the means of protection against drone attacks include: electromagnetic dome shield, radar stations, electromagnetic weapon, sleeping weapon, drone deterrent software, drone tracking software, interfering frequency of electromagnetic field, trained predator birds.



Figure 8: Complex defense against drones in Russia. Source: (URL9)

Ferenc Molnár: Protection of Critical Infrastructures for Energy Supply

Summary

Economic and social development brings with it the rapid development of production tools, technologies and systems that improve the comfort and quality of life of mankind. Constant technological advances and the ever-increasing standard of living also involve a drastically increase of energy demand from the Earth's population. The share of electricity consumed in total primary energy consumption is constantly increasing thanks to powerful electrification and automation. Without the continued availability of electricity, modern economies and societies would be paralyzed. Nor would primary care systems guarantee the living conditions of the population. The reliability of the technology of energy supply systems must be constantly improved, but in addition to this, the security of energy supply must be protected against possible external threats. These can be weather and geological hazards, but they can also be human threats. Energy dependence and vulnerability to power supply systems have also been recognized by hostile and malicious people and groups of people. Physical and cyber-attackers are also leveraging technological innovation to launch more and more damaging attacks on power system infrastructures. As technology continues to evolve, defenses against external threats to power supply systems need to be raised to an ever-increasing level in order to maintain the conditions of society and national security.

References

- Bonnyai T. (2014): Analysis of Critical Infrastructure Protection in the Light of Population Preparation. PhD Thesis
- Gyenes Zs. (2017): National Disaster Risk Assessment. Ministry of Interior National Disaster Management Directorate. UNISDR, 5.
- Sibalin, I. (2017): Energy Significant Systems and Regulation Relating to the Protection of Facilities Presentation. In: National Energy and Climate Plan of Hungary, 15-25.

Legislation used

234/2011. (XI. 10.) Korm. rendelet a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról szóló 2011. évi CXXVIII. törvény végrehajtásáról [Government decree implementing law no CXXVIII / 2011 On disaster management and on changes of certain connecting laws]. https://net.jogtar.hu/jogszabaly?docid=a1100234.kor

Online links in this article

- URL1: Magyar Villamosenergia-ipari Átviteli Rendszerirányító ZRt [MAVIR Hungarian Transmission System Operator Company Ltd.]. https://www.mavir.hu/web/mavir
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- URL4: Magyar Olaj- és Gázipari Nyrt [Member of MOL Group]. https://mol.hu/
- URL5: BM Országos Katasztrófavédelmi Főigazgatóság 2019. [National Directorate General for Disaster Management, Ministry of the Interior (NDGDM) 2019.]. http://www.katasztro-favedelem.hu/index2.php?pageid=lrl index
- URL6: Energetikai Szakkollégium [Student Association of Energy]. http://www.eszk.org/
- URL7: Iparterv Épülettervező Zrt. [The Industrial Buildings Consulting Co.]. http://iparterv.hu/
- URL8: Erőmű Beruházási Vállalat [MVM Erbe Power Engineering & Consulting Ltd.]. http:// www.erbe.hu/
- URL9: Atombiztos [Nuclear bomb-proof]. https://atombiztos.blogstar.hu

Nándor Makkos

Instruction in a holistic approach to discrimination

Abstract

Administrative activity is present in all walks of life and it has a universal character nowadays. This article has been tabled to draw attention to the discriminatory erosions that sometimes appear as a hiding place in public administration, which may appear as minor deviations in childhood, but may lead to disintegration of organizational unit in adulthood. On the other hand, however, the quality of life of workers is impaired because workers exposed to psychosocial risks show significantly higher levels of health risk than those who are not. The most common symptoms are stress, sleep problems, fatigue and depression (URL1). I have tried to approach the relationship between instruction and discrimination holistically, from the slightest socialization error of man to the most serious crime. I believe that a person's discriminatory behavior is characterized by the inclusion of the milder deviations of a person to the more serious ones. Genocide certainly involves its four milder stages, the physical assault transmission, discrimination, verbal expression, and discriminatory thought. We have drawn attention to the harmful effects of 'invisible' in its form, but abnormal in its content. Perhaps avoidance is one of the most insidious behaviors of our time, which, by distorting personality in childhood, can put its mark on the daily life and public service of an adult. In the case of discrimination, sanctions of a non-legal nature which undermine the offender's social authority may also be significant, e.g. mocking, exasperation, appearance, speaking, which are more common than legal sanctions and can cause a great deal of torment to the perpetrator and his environment, we need anti-instructional discrimination in the public sector to ensure good public services and well-being of public service employees. In the bureaucratic system, it is precise regulation that can be used to combat discrimination by instruction, because it not only serves to coordinate and fix the best method, but also ensures standardized, equal treatment of individual cases (Gajduschek, 2000, 44.). It

is also worth noting that enforcing the prohibition of discrimination, its principles, its loyalty, impartiality, responsibility or professionalism, and the confidence of users of public services in the public service is in the interests of professional administration.

Keywords: instruction, discrimination, law, public sector

Instruction in a holistic approach to discrimination

Issuing and following the instruction is a mandatory instruction for action, procedure, conduct and task performance, which is characteristic of the organizational system of public administration, the non-observance of them may have serious consequences. An instruction to apply discrimination is a provision that must not be appealed to unless explicitly permitted by law. The phantom of instruction to discriminate, today no longer demands human lives, but deteriorates people's quality of life, causing material and moral damage, making people unhappy and excluded from society. The instruction may affect the organization of the public sector and the relationship between the public sector and other service providers and users, e.g. the application of 'unwritten professional rules'.¹ The prohibition of instruction to discriminate in the public sphere is a multiple relevant principle, since 'it must maintain the requirement of equal treatment in the establishment of legal relationships of the Hungarian state, and 'the requirement of equal treatment (all public and non-budgetary bodies) (...) the employer is the employment relationship, the person authorized to give instructions in relation to other employment relationships and the legal relationships directly related thereto '2 (Ebktv) There are only a few exceptions to the scope of the Act in the case of discrimination, family, parties, or churches, which, however, are justified by a higher interest.³ The existence of discriminatory instruction, if not in written form, is often not, or only difficult to justify, although there are legal and non-legal methods and tools for identifying and verifying its existence, since combating this form of discrimination is fundamental to society. The thousand-face appearance of the discriminatory instruction is characterized by its appearance in many areas of law, inducing criminal, civil, and public administration through legal proceedings. In this

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¹ Hungarian Equal Treatment Authority (EBH) EBH/641/2007.

² Hungarian Equal Treatment Act. (Ebktv) S. 4.

³ There are exceptions to the exception to the general rule and are thus subject to the general rule. Ebktv. S.7. (2). a) b).

work, we look at the different areas of discriminatory instruction, attempt to understand the driving forces behind these measures, and outline possible ways of imposing sanctions.

The nature of the instruction

The issuing of an instruction shall be conditional on its being formulated and brought to the notice of the person concerned. However, the formulation of all discriminatory ideas and disclosure to the person concerned does not justify a violation of personality, as under the law the lawyer does so at the client's direction; however, this wording 'does not attack the victim's person.'⁴ Instruction to commit a discriminatory act appears to require a negative intention. However, discrimination can be justified not only by hostile thought, but also by its absence, since another group of major motives for discrimination is the enforcement of unintentional self-interest. The third major group of motivation is the lack of interest, which is not derived from hostile behavior or interest, ignorance, omission, or indifference. However, the act at issue must be examined both in its content and in the circumstances in which it was adopted and in the way in which it is formulated and communicated to the person concerned.⁵ To determine the actual exercise of the instruction (influence, guidance, rules of conduct), it is not only necessary that the natural or legal person issues the instruction, but also that it will be followed by the trustee since the Court bases it does not violate the principles of personal responsibility, the presumption of innocence and liability based on fault.6

The giving of instructions can be considered as a probable circumstance which may be taken into account in the analysis of the actual exercise of decisive influence. It is important that the exercise of a decisive influence must be actual and on the other hand, executes instructions. As a general rule, therefore, *'the execution of instructions is what determines the actual exercise of decisive influence over the act.'*⁷ Advocate General Mengozzi's Opinion does not contain but focuses on the behavior of the executor of the order, but only on its objective consequences. Whether the person who committed the act fully understood

⁴ Metropolitan General Court. P./2012/203.

⁵ S. Case T 713/14.

⁶ Opinion of Advocate General Paolo MENGOZZI. Date of presentation: 3 September 2015 (1) C 155/14. P. Evonik Degussa GmbH AlzChem AG, formerly AlzChem Trostberg GmbH, formerly AlzChem Hart GmbH v European Commission, 19.

⁷ Opinion of Mengozzi, 52.

the instruction - eg. the language of the communication used or any other skill, aptitude, skill or skill of the executor who has an influence on the action will not be assessed. In Argyle's view, 'the treatment should be a series of interactions between individuals, whether equal or unequal, and therefore it is not only the legal rights of those involved that are significant (...) by the outcome of the case.' (Argile, 1992, 170-171.)

The nature of instruction to apply discrimination

Instruction to discriminate can be made today only by a natural person, which, in view of the gravity of the act, may include in particular the influence of a natural person on another natural person or persons

- I. a hostile thought
- II. verbal expression
- III. evasive behavior
- VI. instruction for discrimination
- V. physical assault, and
- VI. destructive behavior (Allport, 1954, 324.)

Hostile thought

It is hard to imagine that the humanity of the world is united. Its members belong to different groups, from the closest bond to the least close bond: family, neighborhood, settlement, state, nation, race and humanity (URL2). The child feels part of the community in which he or she is raised, is able to perceive his or her ethnic identity at the age of five, but even at the age of nine to ten, he or she does not understand that eg. the Jew is different from the Gentile or the Methodist, or the Methodist from the Quaker, and does not expect to be understood, he is fiercely loyal to the parent's identity.⁸ For a group member, intra-group membership is vital to the survival of the individual, where the familiar is better than the unknown. However, a partial attitude within a group or a reference group does not necessarily require that one's attitude towards the other groups be antagonistic, whereas hostility often contributes to enhancing intra-group cohesion.

⁸ Opinion of Mengozzi, 29.

Verbal expression

Verbal expression can violate the human dignity of a natural person and the right to good repute of a natural or legal person. However, a negative verbal expression also has a more significant content, which undermines the morale of the community, and, where appropriate, the public administration, and demonstrates the traceability of the misconduct.

Verbal expression can also affect the intellectual and emotional spheres of the audience, which also serves to delimit acts of hate speech and arousal. 'The Constitutionally Denounced Outer Limit of Freedom of Expression Incitement to Hate.' (URL2) Both and incitement work against the safety of society. 'Community security means preventing, reducing or suppressing social, environmental and intimidating factors that influence people's right to survive in crime and affect their quality of life. It includes preventive measures that contribute to reducing crime and tackling antisocial behavior. '(Vincent, et.al., 2009, 69-70.) If community members fail to apply social sanctions against the perpetrator of a verbally discriminatory act, they may easily become involved in an offense, or a crime. The Ebkty. Also prohibits the creation of a degrading, intimidating atmosphere, as 'it constitutes a violation of the principle of equal treatment - in particular (...) - direct discrimination, indirect discrimination, harassment, un*lawful segregation, retaliation and instruction.* Thus, verbal expressions can carry a number of and offenses and serve as a starting point for other punishable acts, eg. slander, libel, hate speech, incitement.

Instruction to avoid circumvention, omission

Avoiding behaviors include active and passive behaviors that one engages in to get rid of thoughts and feelings that he or she does not control. This anxious behavior can have a negative impact on a person's social relationships, job opportunities, social events, friendships (Hopwood et al. 2009, 264.). The parent may also instruct the child to avoid this behavior in order to protect it physically, psychically, for example defining those children with whom you can make friends, however, this early innocent socialization may be a hallmark of later passive aggressive behavior, segregation, and discrimination. People who are used to avoiding behavior are more difficult to deal with problems e.g. in the world of work or, in more serious cases, it can become a disintegration factor in work organizations or miss e.g. assistance in critical cases. From a legal point of view, avoidance is also closely linked to omission because discrimination can be committed by avoiding obligations, both individually and as a public body.⁹ For example, under section 4 (a) of the Swedish Discrimination Act, a person with a disability may be disadvantaged if the state does not establish accessibility measures to enable a person with a disability to enjoy the same status as a person without a disability. Be placed in a position where such measures are required by law and regulations based on accessibility requirements and by-laws, they shall reasonably consider:

- financial and operational conditions;
- the relationship between the operator and the individual or the duration and nature of the relationship and other relevant circumstances (URL3).

Instruction for discrimination

Instruction in the case of multiple discrimination and its implementation suggests that the offense is organized. The instruction to apply discrimination can be seen as a sign of discrimination, whereas becoming a victim means the occurrence of discrimination. In both situations, there is a legal remedy. The instruction to commit discrimination is prohibited by several international laws ratified by Hungary, e.g. ICCPR, CERD, CPRD and CDE.¹⁰ Pursuant to Article 20 (2) of the ICCPR: The promotion of any form of national, racial or religious hatred which promotes discrimination, hostility or violence is prohibited by law. The prohibition is fully compatible with UDHR 2 and 19. Freedom of expression, because if it is violent it goes against the interests of the community. According to Article 4 of the CERD: 'States Parties shall condemn all propaganda and any organization based on ideas or theories that promote the superiority of a particular race or group of persons of a particular color or ethnic origin, or in any way justify racial hatred and discrimination, or Member States undertake to take immediate positive action to eradicate any incitement or practice of such discrimination, and to that end, with due regard for the principles set out in the Universal Declaration of Human Rights (UDHR) and the rights explicitly enshrined in Article 5 of this Convention. (...) Which promotes or incites to racial discrimination, and participation in such organizations or activities is considered as offense punishable by law. Pursuant to Article 5 (c), No nation-

⁹ Failing to desegregate s. Kaposvár General Court 11.P.21.553/2013/70.

¹⁰ Convention on the Rights of Persons with Disabilities. Covenants on Economic, Social and Cultural Rights. Convention Against Discrimination in Education. International Covenant on Civil and Political Rights.

al or local authorities or public bodies shall be allowed to promote or arouse racial discrimination.'

Article 6 of the CPRD specifically addresses women with multiple disabilities:

1. States Parties recognize that women and girls with disabilities are subject to multiple discrimination,' and (...) guarantee them the enjoyment and of the human rights and freedoms set out in this Convention.' Pursuant to Article 3 (a) of the Convention on Combating Discrimination in Education (CDE), 'the States Parties to the Convention have agreed to abolish their statutory provisions and any administrative instructions, and to abolish administrative practices involving discrimination in education. '11 An instruction to commit discrimination. based on the outcome of the act, was established in the ECtHR procedure, where the existence of the instruction was confirmed by the implementation of the act. In the case Timishev v. Russia,¹² the applicant drove a car from Nazran, Ingushetia, to the Kabardino-fortified Republic of Nalchik (Russia) and complained that the Urukh checkpoint had been refused entry. Officials from the Kabardino-Balkar Road Safety Inspectorate (Гибдд Мвд Кбр) refused to enter, citing verbal orders from the Ministry of Interior of the Kabardino-Balkaria that prohibit the admission of Chechen ethnic origin. He therefore had to turn back and make a 300-kilometer detour to reach another checkpoint at Nalchik. The ECtHR referred to Article 2 of Protocol 4 to the UDHR, the relevant parts of which read as follows: '1. Everyone has the right to freedom of movement and freedom to choose his or her place of residence.'According to paragraph 3,' the exercise of these rights shall not be restricted unless they are compatible with the law and necessary in a democratic society for national security or public security. For the maintenance of law and order, prevention, crime, health or morals, or the rights and freedoms of others. According to paragraph 4, 'the rights set out in paragraph 1 may be subject, in certain areas, to statutory restrictions and may be justified in a democratic society, in the public interest. 'The applicant may seek compensation for non-material damage caused by violation of his right. She claimed EUR 300 000 and EUR 500 000 for violation of her children's right to education. The Government alleged that the applicant's claim for non-pecuniary damage was excessive and unreasonable and that a fair amount would be justified in the circumstances of the case. The Court held that the applicant had suffered non-pecuniary dam-

¹¹ The Convention on the Fight against Discrimination in Education (CDE).

¹² Case of Timishev v. Russia (Applications nos. 55762/00 and 55974/00) JUDGMENT STRASBOURG 13. December 2005 FINAL 13/03/2006.

age, such as distress and frustration, as a result of the actions and decisions they were found to be incompatible with the Convention and its protocols. However, it considered that the specific amounts claimed by the applicant were excessive. On a fair basis, the Court finally awarded damages of EUR 5,000.¹³ An instruction to discriminate against persons on the basis of religion or belief, disability, age or sexual orientation within the meaning of Article 2 (4) of Directive 2000/78 / EC shall be deemed to be direct or indirect discrimination. An instruction to discriminate against a person on grounds of racial or ethnic origin under Article 2 (4) of Directive 2000/43 / EC shall be deemed to be discrimination. Pursuant to Article 2 (2) (b) of Directive 2006/54 / EC, discrimination includes a provision which *calls for the discrimination of certain persons on grounds of sex'*. According to the Directives, the instruction appears to be a direct and indirect discrimination. form. According to the Mt.¹⁴, the instruction to commit discrimination is also deemed to be discrimination. However, we know from legal practice that, in addition to direct (Numhauser-Henning 2001, 146-148.)¹⁵ and indirect discrimination, (Tobler 2006, 61.) an instruction to commit discrimination can also provide grounds for harassment,¹⁶ unlawful separation,¹⁷ retaliation, (Opinion of Kokott C476/11 63.)¹⁸ abuse of rights, and permutations of these behaviors. The Ebktv.: Some of the discriminatory behaviors listed on the basis of this article are rare in themselves, when they are plural, we speak of multiple discrimination. The exemplary nature of the list of offenses suggests that discrimination can also take the form of unlisted offenses, which, however, are also punishable by the legislature, e.g. arbitrary discrimination, abuse of rights, 'in particular, conduct that results in or results in the disruption, harassment, repression of the legitimate interests of others, the harassment of others.' (URL4)

Tobler notes that multiple discrimination can be traced back to three basic forms,

- 1. the nationality associated with free movement,
- 2. discrimination on a variety of grounds related to competition law,
- 3. sex-based discrimination. (Tobler, 2006, 67-68).

¹³ Case of Timishev v. Russia, 69-71.

¹⁴ Hungarian Act I of 2012 on the Labor Code (Mt.) S. 54. (2).

¹⁵ Direct (direct or formal) discrimination. Read more Ebktv. Section 8. Paragraph 2 (a) of Council Directive 2004/113 / EC. Case C-69/80 Susan Jane Worringham and Margaret Humphreys v Lloyds Bank Limited 11. March 1981.

¹⁶ Equal Treatment Act. 10. (1) §. Paragraph 1 of Council Directive 2000/78/EC; Article 2 (c) of Council Directive 2004/113/EC.

¹⁷ Ebktv. 10. (2) §.

¹⁸ Equal Treatment Act. 10. (3) §. ILO Convention 158 of 22 June 1982. Article 11 of Council Directive 2000/78 / EC; Recital 32 of Directive 2006/54 / EC of the Council and of the Parliament.

In the opinion of Baer, Bittner and Göttsche, 'the categories of multiple discrimination are not simply juxtaposed, but interdependent. The concept of intersection and its studies show that discrimination does not occur in one-dimensional way, that is, not only the cause exists, but that discrimination takes a complex form. Therefore, 'the understanding of discrimination, which refers only to categorization, is absent: even more problematic: stereotyping. distorting one-dimensional views, and shortening the issues that are actually at risk.' (URL5) Nieminen mentions that 'the theory of intersectionality recognizes that subjectivity is made up of mutually reinforcing vectors of race, gender, class, and sexuality, which shape the experiences of individuals and cannot be understood on the basis of a single prohibited discrimination. (Nieminen, 2019, 80.) This means increased stigma from different sources. for example when certain members of society express their beliefs that members of the young colored population are violent or drug traffickers, etc. For example, increased exclusion of marginalized young people in society means poorer work and life chances and contributes to the growth of people with deviant behavior. Multiple discrimination is also referred to as cumulative or cross-discrimination, such as the case of Roma women, because Article 3 (2) of the Treaty prohibits discrimination between men and women, which is also referred to in the Racism Directive. The European Parliament 'Emphasizes that while EU law and policy-makers have adopted extensive legislation to combat multiple discrimination suffered by women from minority backgrounds. particularly Roma women, no significant progress can be reported; therefore calls on the Member States to review the implementation of all policies related to the phenomenon of multiple discrimination.¹⁹ There are exceptions to sanctions in the case of injunctive injunctions, where there is a reasonable justification, based on an objective consideration, that is directly related to the legal relationship. The court accepted the injunction when its injunction excluded those who were more absent from work due to illness. The employer's injunction, which adversely affects parents with young children, was considered reasonable by the court, because the employer may be subject to a large amount of penalty for its delay.²⁰

¹⁹ Council Directive 2000/43/EC of 29 June 2000 implementing the principle of equal treatment between persons irrespective of racial or ethnic origin Preamble (14).

²⁰ Judgments (BH) BH 2008/253.

Instructions for a Physical Attack

The instruction to commit an ethical attack is included in the holistic interpretation of discrimination because, on the one hand, it denotes an intermediate state between genocide and its less-offensive conduct and, on the other hand, the act occurs in view of the protected nature of the victim. The instruction to carry out a physical attack of two forms of complicity (incitement, aiding and abetting), according to the rules in force, constitutes incitement, which is punishable by our criminal law. The Btk. According to his justification: 'It is the instigator who deliberately induces another person to commit a (deliberate) crime.' Inducement is defined as an activity whereby the instigator decides to commit a crime and, as a result, at least attempts to commit the crime. Instigation therefore has the effect of causing intent, so instigation can only be linked to intentional crimes. According to Belovics et al., 'The characteristic of the instruction is that it is ancillary, that is, in the absence of the basic act of the offender, there can be no complicity. However, it is not necessary for a party to be held criminally liable for the identity of the offender to be known or actually prosecuted. Thus, if the perpetrator dies or receives procedural pardon, the offender will not be punished because of the existence of a ground for extinguishing the criminal offense, but the accomplice will.' (Belovics et al. 2014, 3.)

On the one hand, it is noted that the motivation for a physical assault may be motivated by racial or ethnic origin, and therefore behavior that incites it clearly fits into the concept of direct discrimination.²¹ Physical assault instructions may not be based solely on the racial or ethnic origin of a person, but may be based on, vulnerable groups of people with disabilities (Roulstone – Mason-Bish, 2013, 68-69.). On the other hand, however, the instruction to physical assault can be distinguished from other forms of discrimination on the basis of the above, because cases of physical assault in the Criminal Code are not only a violation of personality, but also a crime. We note that the facts of discrimination are more extensive than those of criminal law, because in criminal law the condition of a criminal offense is the intent or negligence of the perpetrator, but discrimination can also be found in the absence of intent and negligence. Physical assault in the public sector is no longer typical of instruction, but memory is preventive.

²¹ S. Armed attacks on Roma in Galgagyörk, Piricse, Nyíradony, Tarnabod, Nagycsécse, Alsózsolca, Tatárszentgyörgy, Tiszalök and Kisléta.

Genocide, the most serious discriminatory act

The Genocide Convention established by ECOSOC entered into force on 12 January 1951.²² In the 2001 Krstic case,²³ the former Yugoslav International Tribunal²⁴ ruled that the mass murder of Muslims in Srebrenica extends the concept of genocide. Pursuant to Article 2 of the Genocide Convention, it is a genocide which

- (a) *is intended to eliminate, in whole or in part, a national, ethnic, racial or religious group*
- (b) kill members of the team,
- (c) causes serious physical or psychological harm to the members of the group as a result of belonging to the group,
- *(d) forces the group into living conditions which threaten its or individual members' death;*
- (e) take measures to prevent births within the group,
- (f) take children of the group into another group.'

Article 3 of the Convention states that conspiracy to commit genocide, direct and public incitement, attempted or complicit acts of genocide, even in the absence of a genocide, warrant prosecution. Genocide is the most serious form of discrimination. Raphael Lemkin coined the term genocide in 1944, (Lemkin, 1944, 79-95.) derived from the Greek words genos (tribe, family) and Latin cide (to kill). Lemkin extensively uses the term genocide to denote political disintegration, social institutions, culture, language, national sentiment, religion, and the economic existence of national groups, and the personal safety, freedom, health, dignity, and even life of individuals belonging to such groups. destruction as well. Genocide is directed against the national group as a unit, and the acts concerned are directed against individuals, not in their individual capacity but as members of the national group. Lemkin lists the political, social, cultural, economic, biological, physical, religious, and moral means of applying genocide, which are prohibited by the Hague Law, but notes that there are forms of genocide in the above categories that are not prohibited by law. Lemkin further notes that 'The Hague Regulations as amended define the genocide as having

²² The Convention on the Prevention and Punishment of the Crime of Genocide first codified the crime of genocide adopted by the United Nations General Assembly on 9. December 1948.

²³ Case No. IT-98-33. The Prosecutor v. Radislav Krstic. International Criminal Tribunal for the former Yugoslavia.

²⁴ The International Court of Justice was dissolved in December 2017.

two fundamental elements, the first of which must include any activity which is detrimental to the life, liberty, health, physical integrity, economic existence and respect for human rights when committed because they belong to a national, religious or racial group; the second includes the prohibition of any prejudice or policy aimed at exacerbating or damaging the situation of a group.²⁵

Lemkin also points out that Genocide is not only a problem of war but also of peace. It is particularly important in Europe, where the distinction between nationalities is so marked that, despite the principle of political and territorial self-determination, some national groups may be required to live as minorities within the borders of other states. If these groups are not properly protected, such a lack of protection will lead to international disturbances, the persecuted migrants will seek refuge elsewhere, especially in a disorganized form. The protection of minorities should not prevent the gradual process of assimilation and integration.

Enforceability of sanctions for instruction to discriminate

According to these categories, the instruction to discriminate can be classified into the categories of non-sanctioned, ²⁶ lex imperfecta, lex minus quam perfecta, lex perfecta, lex plus quam perfecta, in the order of the gravity of the consequences of the act. Based on the perpetrator's state of mind, we can distinguish between subjective sanctions, whether in civil or criminal proceedings, objective sanctions in the administrative procedure. In civil proceedings, for example: the person instructing the discrimination can be fined for a violation of his/ her personality, imprisonment in the case of a criminal offense; out of the trial. Offenses and crimes can be committed intentionally or negligently and can be punishable by law, but instruction to use discrimination can only be deliberately enforced, and therefore excludes groups that do not require intentionality or negligence.²⁷ However, there is a difference between the liability of natural and legal persons, and of the perpetrator of the discrimination. According to Szajbély, Legal persons can be held criminally liable if their representative or body commits a discriminatory act in the interest of the legal person.²⁸ It is important that not only the legal person is held liable, but also the natural person

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²⁵ Ibid. Lemkin, 93.

²⁶ Note that negative actions (thoughts) of a negative nature can also be sanctioned by unlawful means.

²⁷ Case C-69/80 Susan Jane Worringham and Margaret Humphreys v Lloyds Bank Limited 11. March 1981.

²⁸ Code pénal Version consolidée au 20 September 2019. 225.

who is involved in the commission of the offense is held liable. In practice, it is problematic in law that state or local governments cannot be held criminally liable, only the individual employed by them (Szajbély, 2009, 87.). Employees of state organs may also be subject to disciplinary, damages and criminal liability. The former can be exercised by an administrative body, the latter by a court. Political accountability to the head of an administrative body can also be established when the liability is out-of-court, e.g. replacement may be applied. The civil servant's liability for damages and the extent of his involvement are determined today in Hungary (intentionality, negligence).

The Ebktv. states that 'The Authority may conduct tests to verify compliance with the requirement of equal treatment, whereby the person subject to the proceedings is placed in the same position with regard to the conduct, measure, condition, omission, instruction or practice of the person subject to and the practices of the person subjected to the proceedings for compliance with the requirement of equal treatment.'²⁹ The result of the test may be used as evidence in proceedings for breach of the principle of equal treatment.³⁰

Conclusion

The discriminatory attitudes mentioned by Allport focus primarily on interactions between natural persons but can also be interpreted in terms of social agglomerations with and without legal personality. According to Polt, if the violation is a criminal offense, it should be tried by a criminal court. If there is an infringement, it is referred to the jurisdiction of the infringement authority or court by law. If the act is a violation of privacy, it falls within the jurisdiction of the civil courts. If the violation is found to fall within the scope of, for example, a criminal offense under international law (genocide, apartheid, and war crimes), and an international tribunal or, in the case of others, therefore fall within the jurisdiction of the courts of the Member States. (Polt, 1987). According to the authors of the Anti-Discrimination Handbook, Just as criminal law (more broadly: law enforcement law) is not capable of significantly reducing crime, nor can an increase in legal prohibitions and sanctions alone be expected to reduce exclusionary, discriminatory attitudes and practices. However, the system of sanctions is essential in order to make it clear that the state does not tolerate the mere fact of belonging to a particular social group making it difficult or funda-

²⁹ Ebktv. 15/A §. (3).

³⁰ Ebktv. 15/A §. (4).

mentally questioning the participation of individuals and their communities in social life (Kaltenbach, et.al., 2007). We must also bear in mind that the conduct mentioned by Allport is intentional, but the Court has ruled in the Worringham case that intentionality is not a necessary element of direct discrimination, it is sufficient that the effect of the measures discriminates.

References

Allport. G. W. (1954): The Nature of Prejudice. Addison-Wesley

- Argyle, M. (1992): The Social Psychology of Everyday Life. New York: Routledge
- Belovics E. Gellér B. Nagy F. Tóth M. (2014): Büntetőjog I.; Általános rész. [Criminal Law I.; General part]. Budapest: HVG-ORAC Lap- és Könyvkiadó Kft
- Hopwood, C. J. Morey, L. C. Markowitz, J. C. (et.al.) (2009): The Construct Validity of Passive-Aggressive Personality Disorder. Psychiatry: Interpersonal and Biological Processes, 3, 256–267.
- Kaltenbach J. Muhi E. Márton U. Geskó S. Iványi K. (2007): Anti-Discrimination Handbook Prepared within the framework of the program of the Ministry of Social Affairs and Labor entitled Civil Organizations and the Implementation of the Anti-Discrimination Act. Budapest: Clone Design Kft., 26.
- Kis, B. Gellért, B. (2005): *The Hungarian codification of international crimes de lege ferenda*. In: Imre A. (2005): Wiener Festive Volume. Budapest: KJK-Kerszöv Kft., 365.
- Kussbach E. (2005): *International and European Criminal Law*. Budapest: Stephen's Company, 40–41.
- Lemkin's, R. (1944): Axis Rule in Occupied Europe: Laws of Occupation Analysis of Government - Proposals for Redress. Washington, D.C.: Carnegie Endowment for International Peace
- Nieminen, K. (2019): Eroding the protection against discrimination: The procedural and de-contextualized approach to S.A.S. v France. International Journal of Discrimination and the Law, 2, 69–88. DOI: 10.1177/1358229119838457
- Numhauser-Henning, A. (2001): Legal Perspectives on Equal Treatment and Non-Discrimination Kluwer. Law International
- Polt, P. (1987): *Some issues of the development of international criminal law*. Journal of Law, 4, 172-178.
- Roulstone, A. Mason-Bish. H. (eds.) (2013): *Disability*. Hate Crime and Violence Routledge. DOI: 10.4324/9780203104460
- Szajbély, K. (2009): Action against Racial Discrimination in the European Union, Transposition of Standards in France, Great Britain and Hungary. Doctoral Dissertation

- Tobler, C. (2006): Indirect Discrimination a Case Study Development of the Legal Concept of Indirect Discrimination under EC. Antwerpen: Law Intersentia
- Vincent, F. Radford, K. Jarman, N. Martinowitz, A. Mary-Rallings, M-K. (2009): *Hate Crime against People with Disabilities A baseline study of experiences in Northern Ireland*. Institute for Conflict Research, 6. 69-70.

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Bianka Speidl – Hanga Horváth-Sántha

Jihadist attacks on Critical Infrastructure

Abstract

Besides its function to maintain the social and economic well-being of a nation, operating critical infrastructure serves as a proof of the ability of the state to provide protection to its citizens. Hence, a successful terrorist attack targeting critical infrastructure - in addition to generating fear and panic in the ranks of society undermines the operational character of the state. In recent years, several terrorist incidents in Europe have highlighted the vulnerability of critical infrastructure and, consequently, the importance of protecting it. Bearing this in mind, the protection of critical infrastructure has become a high priority for Western states, in parallel with the growing trend of risks, challenges and threats posed by international terrorism. Recently Europe has seen an increase in terrorist attacks against members of law enforcement as well as the armed forces. This paper argues that such attacks should also be considered as attacks on critical infrastructure, as it is ultimately the human resources being responsible for the well-functioning of those agencies. Further, the paper aims to examine the religious justification of Jihadist terrorist attacks against critical infrastructure.

Keywords: Critical infrastructure, terrorist attack, Salafi-Jihadism, al-Qā'ida, Islamic State

Introduction

Greatly simplified, critical infrastructure can be defined as all those infrastructures our society depends on in daily life, including transport, energy, information technology and many other sectors. Critical infrastructure has made life of the citizens in a modern state much more simple compared to previous decades, but it has also made them dependent of and vulnerable to these complex infrastructures (Muha, 2007, 9.). Considering its increasing importance in the information society, where the different critical infrastructures are closely interlinked with one another, (Haig, 2009, 329-337.) critical infrastructure has always been an attractive target for malicious intent, springing both from state as well as from non-state actors, such as the Madrid (2004) and London (2005) attacks, further the assassinations on train and public transport, as well as the terrorist attack at the airport and central metro station in Brussels (2016). The precise definition of critical infrastructure is complicated by the dense connections, networks, nodes and interactions involved as well as by the fact that the parameters by which a particular infrastructure is classified as critical may change over time.¹

The European Commission defines critical infrastructure as a tool or system that is vital to maintaining basic social functions. (URL1) Critical infrastructure encompasses communications, emergency services, energy, dams, finance, food, public services, industry, health, transportation, gas, public communications, radio and television, information technology, commercial equipment, chemical and nuclear industries, water and forest management. (Besenyő, 2019) A broader definition of critical infrastructure includes banking and finance, telecommunications, emergency services, air, sea and rail transport, health care, the food industry and energy and water supply. Recent studies argue that the question of protecting critical infrastructure should not be seen as an isolated phenomenon and the question of solely independent-functioning systems, but rather as something integrating several aspects of security and vital functions of society. Attacks against such systems can inevitably lead to disruption of public services, which - in more serious cases - is accompanied by chaos on a social scale. Some components of critical infrastructure are predominantly interdependent and closely interrelated, e.g. food supply depends on transport, telecommunications on electricity, and healthcare can simultaneously depend on electricity, water, and emergency services. As more states become increasingly dependent on critical infrastructure that is partially or totally outside the narrower public sphere (in the competitive sphere), it is of pivotal importance that public-private partnerships and constructive cooperation form an integral part of comprehensive defence and preventive strategies (Clemente, 2013). An important contribution to the debate on critical infrastructure protection and the research thereof was made by several Hungarian researchers as part of a larger

¹ United Nations Security Council Counter-Terrorism Committee Executive Directorate (CTED). Physical protection of Critical Infrastructure Against Terrorist Attacks, CTED Trends Report, 2017.03.08.

project thoroughly and comprehensively investigating the methods for such protection (Nádai, 2016).

In order to investigate the broader meaning of the term critical infrastructure, the paper makes an attempt to argue why certain categories of human resources may be considered within this definition. This paper argues that in the context of jihadist-inspired terrorist attacks against members of law enforcement agencies as well as military personnel, these targets should be considered within the broader definition of critical infrastructure, as it is the members of these organisations that are ultimately responsible for the well-functioning of the agencies tasked with providing order and security for the citizens. Including the human resources in the definition of critical infrastructure may contribute to these agencies receiving protection to a larger extent through more comprehensive preventative strategies in the context of counterterrorism and counter-extremism.

The ideology behind the attacks on critical infrastructure

Analysis of a large sample of CI attack data (through the Critical Infrastructure Terrorist Incident Catalog – CrITC – created by researchers at the Lawrence Livermore National Laboratory) shows that groups generally classified as religiously motivated have accounted for roughly 73% of all casualties and 35% of all fatalities claimed by attacks against critical infrastructure worldwide that took place in the second half of the 20th century and in the years following the millennium until 2003. The vast majority of the organisations involved fall into the Islamic subcategory. As Ackerman et. al. has underlined, *'these statistics support a frightening hypothesis – that religious terrorist groups are more likely than other groups to mix CI attacks with mass casualty attacks.'* (Ackerman, 2007).

a. The trope of total war

With regards to Jihadi Salafism, following the invasion of Afghanistan and that of Iraq, jihadist ideologists declared Europe to be a territory of war and called for attacks on the continent. Collective retaliation, i.e. aggression against civilians got justified once members of a community carry out acts against Muslims with the approval and consent of the others. The dogma got applied in the attacks against Western democracies, claiming that citizens elect their leaders and therefore bear responsibility for their acts. One of the most detailed elaborations of this approach is laid down in the text justifying the 2005 London attacks: '*Any Briton who voted for war is a combatant, or at least sides with the enemy*'. (March, 2009)

The apocalyptic revanchist (Sandal, 2018) dogma that justified the attacks against civilians was elaborated in a series of manuals and propaganda materials. In the ideology of the Islamic State (in the following: ISIS) apocalypse is of crucial importance: it has either already started or just about to take place. Every single combat or attack is a prat of or a prelude to the final battle between the righteous and the false. A tradition that envisions *Dabiq* in the north of Syria as the location of this final battle was very emphatic in the discourse of ISIS, (URL2) and this is why their primary propaganda magazine was entitled Dabiq (Wood, 2015).

The al-Qā'ida propaganda asserting that Europe is carrying out a crusade against Islam, is reiterated by the ideologues of ISIS as well. Among their arguments not only the participation in the wars in Iraq and Afghanistan was listed, but also grievances of Muslims living in Europe such as the ban on the *hijab* or the cartoons ridiculing Muhammad. In February 2004, Ayman al-Zawahiri classified banning the *hijab* from French schools as equivalent to burning down villages in Afghanistan, destroying Palestinian homes, murdering children or the looting Iraq. (Nesser, 2000).

Given that the notion of critical infrastructure includes public communications, radio and television, the attacks on the headquarters of the French satirical magazine Charlie Hebdo on 7 January 2015 may be considered as such, as well as being a strong indicator of the global aspirations of ISIS and a turning point in its media campaign. Hitting a symbolic outlet of secular press freedom in the heart of Europe was a high profile, effective and economical manoeuvre, the first in a chain of terrorist attacks that shook Europe between 2015 and 2019. Bernat Aragó proved to be right in assuming that the goal instead of urging radical Muslims to enrol in the army in their caliphate was rather *'to encourage the receiver living in the West to move to action without the need to travel to the Middle East.* (Aragó, 2015) In the 4th issue, quoting Abu Muhammad al-'Adnānī al-Shāmī, the spokesman of the organisation back then, the logic or revanchism appears at its clearest:

'O Americans, and O Europeans ... It is you who started the transgression against us, and thus you deserve blame and you will pay a great price. You will pay the price when your economies collapse. You will pay the price when your sons are sent to wage war against us, and they return to you as disabled amputees, or inside coffins, or mentally ill. You will pay the price as you are afraid of travelling to any land. Rather you will pay the price as you walk on your streets, turning right and left, fearing the Muslims. You will not feel secure even in your bedrooms. You will pay the price when this crusade of yours collapses, and thereafter we will strike you in your homeland, and you will never be able to harm anyone afterwards.' (URL3) Al-'Adnānī's call to murder crusaders, whether they are dressed in uniform or as civilians, by all possible means, made any target legitimate, blurring all kinds of boundaries between law enforcement and military infrastructure, politicians and common citizens. From this moment on, the declared goal was the destruction of western lifestyle in its entirety. Attacks on critical infrastructure, on their manpower in specific are highlighted, however the definition of critical infrastructure is broad and inclusive:

'Strike their police, security, and intelligence members, as well as their treacherous agents. Destroy their beds. Embitter their lives for them and busy them with themselves...Do not ask for anyone's advice and do not seek anyone's verdict. Kill the disbeliever whether he is civilian or military, for they have the same ruling.' (URL3)

As the examples show, jihadist propaganda employs figurative language. Every civilian is referred to as a representative of the hostile system through the use of synecdoche - any part of the described object refers to its whole and vice versa – and metonymy – designating the object by only one of its qualities – such as describing the West as crusader and imperialist, and transferring this quality to the individual citizen defined as a inimical soldier, agent etc. This linguistic tool helps defacing the victims and dispelling any moral doubt regarding the carnage of innocent civilians. The idea magazine is further elaborated in the Rumiyah by explicitly calling for attacks on citizens, claiming that 'the blood of the disbelievers is halal, ... This includes the businessman riding to work in a taxicab, the young adults (post-pubescent children) engaged in sports activities in the park, and the old man waiting in line to buy a sandwich. Indeed, even the blood of the kafir street vendor selling flowers to those passing by is halal to shed – and striking terror into the hearts of all disbelievers is a Muslim's duty. There is no shar'i requirement to target soldiers and policemen nor judges and politicians, but all kuffar who are not under the covenant of dhimmah are fair game.' (URL4)

In this line of argument, each human or material constituent represents the whole inimical system. Through a semantic shift, civilians are defined as crusaders, and the ordinary infrastructure of daily life as symbols, embodiments, and requisites of the western secular order. There is no small or insignificant target, the all-inclusive understanding and the frequency of the attacks pose constant threat, thus exhaust the enemy and empower the attacker. In the reframing of ISIS, no target is forbidden to hit, and there is no attack of small significance. The Rumiyah – magazine took over where al-Qā'ida's Inspire had left off that is encouraging 'Open Source Jihad' renamed as just terror operations by the use of common, available means such as vehicles and knives (URL5).

b. Theoretical foundations

The strategy was elaborated in various manuals and books, the most well-known of them are Ouestions from the Jurisprudence of Jihad also known as Figh al-Dama' (Jurisprudence of Blood) a volume compiled from lectures given by Abu Abdallah al-Muhajir in the 1990s in Afghanistan, (URL6) and The Management of Savagery written under the pseudonym Abu Bakr Nājī, that has been circulating on the Internet since 2004. Al-Muhajir is considered as the principal architect of Islamic legal justification supporting terrorist attacks and all-out war. He was an Egyptian national who graduated from the Islamic University in Islamabad fought in Afghanistan where he also worked as an instructor in jihadi camps. From 2012 he stayed in Syria where he allegedly died in 2016. In defining forms of killing al-Muhājir drew parallels between the traditional and the modern means and approved the use of weapons of mass destruction, nuclear and chemical weapons. Concerning critical infrastructure, he agreed to burning or flooding crops, cutting trees and plants, and destroying all kinds of land, property, facilities, all that can strengthen the enemy. Similarly he encouraged targeting children, women, the elderly and monks asserting that Islam does not differentiate between military and civilians. As such, killing an infidel is always justified as punishment of infidelity. He argued for kidnapping, beheading and suicide operations. Following the structure of standard figh literature he supports his views by referring to Quranic passages (for example 59: 2, 59: 5,² 22: 39,³ 9: 14-15⁴) and various traditions which affirm that Muhammad also destroyed his enemies' fruit trees that were an essential source of food sustenance and of protection from the desert sun. (Peters, 1977). In the referred texts, God is an active participant in the battles, therefore fighting is no longer just a doubtful political tool, but becomes a religious obligation. Based on the quotes, al-Muhajir reiterates that one cannot be a good Muslim unless he fights for the cause of God. Reaching out to the enemy in their safe zones, depriving them of their livelihood and the basic infrastructure that guarantees their survival was meant to be a proportionate punishment for their disbelief.

The Management of Savagery is a Salafi jihadist manual on how to wage jihad in a non-declared war. It outlines a strategic road map of how to create chaos

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² Qur'an 59: 5 'Whatever you have cut down of [their] palm trees or left standing on their trunks - it was by permission of Allah and so He would disgrace the defiantly disobedient.' (URL7)

³ Qur'an 22: 39 Permission [to fight] has been given to those who are being fought, because they were wronged. And indeed, Allah is competent to give them victory.' (URL8)

⁴ Qur'an 9: 14-15 'Fight them, and Allah will punish them by your hands, cover them with shame, help you (to victory) over them, heal the breasts of Believers, And still the indignation of their hearts. For Allah will turn (in mercy) to whom He will; and Allah is All-Knowing, All-Wise' (URL9)

and fear among the enemies of Islam and grasp power from inside in any given society. The book describes the process in three stages the first of which is called *marhalat al-nikāya wa-l-inhāk* (the power of vexation and exhaustion) carried out by groups and separate cells until the anticipated chaos and savagery breaks out. The objectives of this phase are the following:

'1 - Exhausting the forces of the enemy and the regimes collaborating with them, dispersing their efforts, and working to make them unable to catch their breath by means of operations in the regions of the choice states, primary or otherwise, even if the operations are small in size or effect. Although the blow of the rod may only strike a (single) Crusader head, its spread and escalation will have an effect for a long period of time.

2 – Attracting new youth to the jihadi work by undertaking qualitative operations ['amaliyyat naw'iyya] – when it is appropriate with respect to timing and ability – that will grab peoples' attention...Also note: The normal, small operation and its results must be considered very valuable...

3 – Dislodging the chosen regions – regions in which it was decided to have focused movement, whether in all of the priority regions or in some of them – from the control of the regimes and then working toward the administration of savagery which will transpire in it.

4- The advancement of groups of vexation through drilling and operational practice so that they will be prepared psychologically and practically for the stage of the management of savagery.' (Nājī, 2004)

The strategy described above is that of an asymmetric, guerrilla warfare. During this period, the primary goal is to dismantle the central power of the enemy and create favourable conditions for an all-out jihad. At the beginning of the process, when central power is still strong, the fight has to be carried out in smaller groups or cells. In this phase, vital economic and strategic targets are attacked, comprising oil facilities, economic infrastructure, tourism and foreigners as well as entertainment spots. This drains out the security forces and plunges the society into savagery and chaos which provides the jihadists an opportunity for launching a comprehensive offensive. As the author explains:

'If an oil interest is hit near the port of Aden, there will have to be intensive security measures put in place for all of the oil companies, and their tankers, and the oil pipelines in order to protect them and draining will increase. If two of the apostate authors are killed in a simultaneous operation in two different countries, they will have to secure thousands of writers in other Islamic countries. In this way, there is a diversification and widening of the circle of targets and vexation strikes which are accomplished by small, separate groups.' (N $\bar{a}j\bar{i}$, 2004)

This tactic is meant to spread hopelessness in the hearts of the enemy, and makes them pay the price Moreover, it is not necessary that the retaliation is directed against the perpetrators, rather acts of deterrence in any part of the world is fit for purpose making the enemy feel that he is surrounded. Violence is therefore not only a means of physical warfare, but a strategic tool aimed at the psychic impact on both the victim and the perpetrators. The first issue of *Dabiq* deals in detail with the benefits of violence, defining its primary purpose, in the spirit of $N\bar{a}j\bar{\imath}$'s book, is to provoke chaos. The manuals and texts call for the greatest possible destruction by legitimising any target, encouraging killing at any time in any place referring to cases of early Islamic history when aggression guaranteed expansion.

c. Aims and tactics

The strategic thinking is well reflected in the propaganda, and in certain instances the text is emphatic about the economic gains of the operation. This is well exemplified in the following:

'Attack the interests of the Crusader coalition near you, including their embassies, businesses, and 'civilians. Burn down their government institutions just as they try to bomb our buildings where Allah's law is upheld' (URL10)

The justification is backed by the monopoly of truth, based on the alliance with God. The corrupt West and all its inhabitants deserve material loss, while the spoils of war wait for the faithful. Besides the Qur'ānic references that call to retaliation,⁵ claiming that violence must be met with counter-violence as the only means for restraining the powerful, Muhammad's practice -itself a source of Islamic jurisprudence – reveals a conscious tactic of destroying the economic structure of the Meccan society led by the Quraysh, through attacking their caravans before the actual conquest of the city took place. As Patricia Crone highlighted in her study of Meccan trade in the early sources of Islam, among them works by early Muslim historians and hagiographers, Ibn Ishāq and al-Wāqidī:

'it could be argued that the traditional account of how Muhammad forced Mecca to surrender should be rejected. For one thing, the number of caravans

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⁵ Qur'an 6:126: 'And if you punish, you are to punish with the like of what you were punished.' 2:19 'Whoever commits aggression against you, retaliate against him in the same measure as he committed against you' 4:78 'Wherever you are, death will find you out. Even if you are in towers built up strong and high.' (URL11)

threatened or intercepted by Muhammad is considerably larger in $W\bar{a}qid\bar{i}$ than in Ibn Ish $\bar{a}q$: the three caravans that are plundered by the Muslims over a period of five or six years in the latter's work scarcely suffice to explain why a trading city of major importance let alone one backed by a 'Meccan Commonwealth' should have surrendered to a nest of robbers.' (Crone, 2004)

We can assume therefore that smiting the trade roots surrounding Mecca, raiding the caravans and posing a constant threat on the Meccan society prepared the way for its relatively easy invasion. In the contemporary Jihadi-Salafi manuals, hitting economic targets is recommended as it brings about exhaustion and social disruption. *The Management of Savagery* summarises the expected benefits as follows:

Prophetic tradition defines jihad as follows: 'I asked the Prophet: What is jihad? And he said it is fighting against the unbelievers whenever you meet them ' (Ism. b. Ish, 1998) From this tradition, jurists have inferred the following normative definition for jihad: 'Fight with a sword against the unbelievers until they convert to Islam or pay tribute to the expression of humility in the form of taxes. '(M. b. A. Ibn Rushd, 1998) In the 7th century, jihad targeted pagan Arab tribes, and was later extended to Jews and Christians living on the Arabian Peninsula and its neighbouring territories. This was not just a religious war, it was equally about goods and territories. In its contemporary version, the envisioned effect is the exposed vulnerability of the states that shakes the trust of the citizens and their support of the government. This initiates a vicious circle, urging those in power to dedicate more efforts to maintaining law and order, an endeavour doomed to failure. This pressure burdens their economy, reduces their sources of income and creates an atmosphere of constant vigilance and general distrust. The planning process depends on many factors, among them the ideology in the name of which they act, the message and the specific operational objective of the attack, and last but not least the available means to carry it out as well as the accessibility and vulnerability of the target. The strategy outlined in *The Management of Savagery* suggests first attacking the periphery and with time, moving towards the centre, defining them as easier and more accessible *the peripheries and the crowded, popular regions are devoid of military forces* or there are a number of troops in them with brittle leadership and weak power, without a sufficient number of officers.'

Similarly, there is no small target if it makes part of a strategy:

The text raises attention to the possibility of paralysing a system by eliminating its weakest constituents. With due understanding of the fact that the top of the hierarchy cannot function without its rank and file, it reiterates the slogan that every hit gains its significance with respect to the damage it causes to the entire structure. The from the periphery to the centre strategy leads us to another highly contested issue, that of Jihadist infiltration into the armed forces. The *Management of Savagery* explicitly recommends this tactic in the following passage:

'(We) should infiltrate the police forces, the armies, the different political parties, the newspapers, the Islamic groups, the petroleum companies (as an employee or as an engineer), private security companies, sensitive civil institutions, etc. That actually began several decades ago, but we need to increase it in light of recent developments. Likewise, we may need to infiltrate a single place with more than one member—one member will not know another (member) and vice versa—for different roles or the same role if it requires more than one member.' (Nājī, 2004)

This line of thought summaries a conscious, gradual, three-pronged bottom – up approach: selecting and gaining access to crucial organisations and institutions, joining them and increasing the presence of agents, building up a reserve of them while maintaining their isolation and the security of the network.

Modus operandi - jihadist-inspired attacks on critical infrastructure in the west

a. Psychological operations in asymmetric warfare

In examining the relationship between critical infrastructure and jihadist attacks, it is a foregone conclusion that, in its genre, terrorism uses elements of military, economic as well as psychological warfare against the target country and its economy. In the field of psychological warfare, the aim is to spread fear, anxiety and panic throughout society (regardless of geographical location), making citizens feel unsafe everywhere. Therefore, the failure of a government to prevent and counter terrorist attacks that potentially target multiple segments of society - be it a critical infrastructure, a business, a restaurant, a mall, a hotel, a transport arena or a venue for public and social uprisings conveys the message that the state is unable to guarantee the security of its citizens and protect its critical infrastructures against the damage caused by terrorists. With regards to the types and the methods of attack, against critical infrastructure between 1993 and 2003, oil/gas, power, and public service/Government Office infrastructure facilities top the list. These targets also accounted for the largest number of casualties. Minor attacks against embassies and consulates accounted for almost 50% of the total. Bombing has been the most favoured method. As Ackerman et. al. indicated, 'terrorists generally attack

 $infrastructure\ because:\ 1)\ they\ want\ to\ destroy\ certain\ important\ facilities;\ 2)$ they feel that they can obtain more publicity or external support than if they had attacked non-infrastructural targets: 3) they can cause even larger number of casualties – or avoid causing casualties altogether – by attacking such facilities; 4) the symbolic value of infrastructural targets is greater than that of other targets; or 5) for a complex combination of general and very specific reasons.' (Ackerman, 2007) Between 2004 and 2018 there were 107 Islamist terrorist attacks in Europe killing 622 individuals. In eight cases terrorists targeted public transport vehicles (train, metro) or stations. By November 2019, twelve attacks took place against police stations or personnel. On 3 October 2019, a police employee at the Paris police headquarters stabbed four of his colleagues to death and injured two others. It should be noted, however, that more than 80 percent of Western states' critical infrastructure is owned and operated by the private sector, and it has become evident that security in this area is not solely the state's responsibility but also depends to a large extent on the quality of public-private partnerships.

b. Attacks on transport systems, vehicles, stations and operators

Jihadist-inspired attackers have in recent years repeatedly demonstrated their ability and readiness to plan and execute attacks on any critical infrastructure in Europe. Examples include the bombing of the aforementioned Madrid train station in 2004 (10 bombs on four commuter trains at three stations in Madrid killed 193 people and wounded more than 1,800) and the coordinated suicide bombings on London public transport in 2005, both of which were carried out by al-Qā'ida followers. Already in 2015, several previous incidents pointed at the similar intent of the Islamic State, a terrorist organization carrying al-Qā'ida's ideology calling for global jihad, according to Europol. (URL12) In June 2015, a man drove to the site of an American gas industrial company near Lyon called Air Products & Chemicals, where he wanted to blow up gas tanks (URL13). The courier and delivery man - in whose possession the black flag of the Islamic State was found - tried to set fire to one of the gas and acetone storage buildings but could only cause a smaller explosion. Before the blasting attempt, the man beheaded his property boss. One month after the incident, a large-scale explosion at an oil plant in southern France highlighted the vulnerability of similar sites and critical infrastructures. In both cases, the perpetrators had relatively easy access to the facilities and were able to trigger explosions using flammable chemicals, causing significant damage to the facilities. The selection of facilities, according to Europol, demonstrates that chemical plants

(and critical infrastructure as such) can play a key role in the future of targeting terrorist groups.

On March 22, 2016, two men who had pledged allegiance to the Islamic State carried out a simultaneous attack at Zaventem International Airport in the Belgian capital and at Maelbeek Metro Station near the city centre (Sinai, 2016). Nearly 30 people were killed and some 300 injured in the attacks. Such attacks on the capital's transport infrastructure also give rise to a sense of fear, uncertainty and vulnerability of the population, and a diminished confidence in the government's defence capabilities, as they will be targeted at the same time by future attacks on transport. It is no coincidence that the airport was blown up on a departure site with a lower level of security control, which has reaffirmed the terrorists' conscious strategy to identify and exploit vulnerable areas of the target.

In the United Kingdom, 'on September 15, 2017, an 18-year old Iraqi asylum seeker named Ahmed Hassan detonated a bomb using triacetone triperoxide on a District line train at Parsons Green Underground station in London. Thirty people were treated for burn and other injuries.' (URL14) As for attacks against entertainment facilities, in 13 November 2015 the Bataclan Theatre in Paris Saint Denis was targeted simultaneously with Stade de France where a football match was taking place and various other entertainment facilities, with a death toll of 130. On May 22, 2017, Salman Abedi detonated an improvised explosive device in the Manchester Arena demanding the life of 22.

Some recent trends seem to imply that terrorist organisations such as al-Qā'ida in the Arabian Peninsula (AQAP) and the Islamic State (ISIS) rather propagate for the jihadi carrying out the attack to stay alive in order to be able to continue with further ones. An example of such an attack would be the derailment of trains, such as suggested in a 2017 issue of *Inspire*, the propaganda magazine of al-Qā'ida in the Arabian Peninsula, dedicating an entire edition to step-bystep describe how to derail trains in Europe and US for future terrorist attacks. The 18 pages article described in detail how to make a derailment tool with cardboard, an empty plastic container, part of a rubber tyre, pipes, iron wires, screws, sheet metal, and cement. The operation does not require any electronic or construction tools, so potential jihadis can easily *'remove any traces for suspicion*.' In the view of AQAP, railways make a perfect target, as they cannot be fully protected.

'America's railroads are estimated to be a 1/3 of the world's railway. So how can they protect 240,000 km of railroad ... it is practically impossible. The same goes to Britain, with 18,500 km and France, with 29,473 km. It is a daunting and almost impossible task to protect the long railroad length, and yet one of

the easiest to target. That may result to great damage and destruction on different levels,'

To this, al-Qā'ida's 'Lone Jihad Guidance Team' adds:

'it is time that we instil fear and make them impose strict security measures to trains as they did with their air transportation.' We have to expose more of their vulnerabilities in their security. And when they spend millions of dollars to tackle a vulnerability, we should be ready to open a new [front]... we expect that there will be no effective solution to the security gaps that may be caused by these types of operations that target the train system. 'The mentioned three countries were singled out as they 'have shown open hostilities towards Muslims'.

As illustrated below, AQAP showed particular interest in the high-speed train Acela in the U.S.

'This is the most suited condition for a successful train derail operation. When a train reaches high speed then it has to be reduced to around 100 km/h. This is because a train at a very high speed is hard to control or manage using brakes. For example, America's high-speed train 'Acela' requires a whole mile so that it can come to a halt, this is because of the train's very high speed. Another reason is that the train losses weight and stability when it is at high speeds, 'the article stated. 'Therefore, a Mujahid must be aware of areas where the train increases its speed and places where the train moves at a high speed.'

Another scenario favoured by the authors was the one 'that makes the different security agencies sleepless' — if a jihadist could wage a complex 'dual operation' attacking a train hauling hazardous materials through a well-populated area. 'Observing and surveilling the movements of these Hazmat trains' would be pivotal, as well as tapping into open-source intelligence available from government agencies in the U.S.

Research on the security capacity of Subway, U-Bahn, Underground, MRT, Rapid Transit, Metrorail showed that technical systems employed presently in metros cannot prevent bringing certain type of explosive devices into the metro stations and carriages. (Shvetsov, 2017)An analysis reflecting on the Brussels attacks highlighted, that according to the Congressional Research Service five times as many people per day in the U.S. travel by subway than by plane which makes public transport an ideal target for terrorists. Moreover, the much-needed high security – besides being extremely costly – would paralyse and destroy public surface transportation, while crowds of people waiting to get through a security back up at a crammed train station would create another target for terrorists. (URL15)

c. Attacks on members of law enforcement and armed forces

Jihadist-inspired attacks against members of law enforcement agencies and armed forces have increased in Europe. In October 2019 four police officers where knifed to death by their colleague at Paris police headquarters. What makes the incident especially alarming is that Mickaël Harpon, the perpetrator had access to classified police intelligence files. As The Economist summarised: 'He enjoyed high-level security clearance, which was renewed in 2008 and 2013. His job gave him access to a mass of intelligence data, including personal contact details of police officers and of individuals under surveillance, some of which have subsequently been found on a USB key in his possession.' (URL16)

This attack was not the only of its kind in France. Previous incidents include: ramming attack against soldiers stationed in Levallois-Perret in the north western suburbs of Paris (August 2017); crash into a police van outside Champs-Elysées with a car containing a gas canister (June 2017); a man attacking a policeman on patrol outside the Notre Dame cathedral in Paris with a hammer and two knives shouting 'This is for Syria' (June 2016); killing of a policeman and severely wounding of other two at Champs-Elysées (April 2017), murder of two policemen in the city of Magnanville west of Paris (June 2016) by a man who had sworn allegiance to ISIS; and the attack against police officers at the Tours police station by a Burundi-born convert to Islam (2014). These are merely examples; the list of attacks against members of law enforcement and military personnel in France contains many more incidents similar to the ones listed above. Similar examples of Islamist extremist attacking police and military personnel are found in a wide range of countries including e.g. Afghanistan, Indonesia, Iraq, Bosnia- Herzegovina, Saudi Arabia and Kenya.

The scale of the danger is well illustrated by the fact that Mickaël Harpon enjoyed high-level security clearance and his colleagues declined to submit written complaints against him, although noticed significant changes in his behaviour and sympathies. France has put in place a system designed to detect radicalised people, which was expanded in 2018. It comprises a list of warning signs, such as a change in dress or behaviour, which are supposed to trigger an alert. The findings are already alarming. 'According to a parliamentary report in June, 12,809 people are on a watch list as a result. Such lists are used to help screen recruits to sensitive public services. In 2018, of the 10,840 queries concerning applicants to the police force forwarded to the national security inquiry service, five were judged problematic. It also keeps watch on employees. There are currently around 30 cases concerning suspected radicalisation within the police force and gendarmerie.' – reports *The Economist*.

Several other countries are experiencing deadly violence against soldiers and police officers by Islamist extremists. Between December 2013 and May 2018, British intelligence and law enforcement agencies thwarted 25 plots from extreme Islamic groups, most of which were inspired rather than directed by the Islamic State and its ideology. In May 2013, British soldier Lee Rigby was murdered in Woolwich by two Islamist extremists of Nigerian origin. Combined attacks of driving into pedestrians and stabbing in central, governmental areas took place on March 22, 2017, when the British-born Khalid Masood drove a sports utility vehicle into pedestrians crossing Westminster Bridge in London, killing three people, then stabbed a police officer outside of Parliament. In September 2014, an Afghan Islamist extremist stabbed two counter terrorism officers in Melbourne. In October the same year a lone perpetrator shot a soldier at a war memorial and attacked Parliament in Ottawa, Canada. The offender has converted to Islam many years prior to the assault. The same month another attack took place against four police officers in New York. The hatchet-wielding assailant was identified as a former member of the U.S. Navy, who had been involuntarily discharged and who was also an advocate for black power as well as a recent convert to Islam at the time of the attack.

Conclusion

Critical infrastructure represents a global sector of a market economy, also implying that due to this nature it cannot be fully protected at all times and everywhere. Unfortunately, as the examples so far show, successful terrorist attacks targeting critical infrastructure are likely to continue. As discussed earlier, a broader definition of critical infrastructure includes banking and finance, telecommunications, emergency services, air, sea and rail transport, health care, the food industry and energy and water supply, but also the maintenance of order and security in the society. Since the latter – like almost all of the previously mentioned – are operated by humans, the question of human resources as critical infrastructure arises. In the context of this study, examining jihadist-inspired attacks on critical infrastructure, the authors have argued that members of law enforcement as well as armed forces to be considered within the scope of critical infrastructure. Jihadist sources are explicitly inclusive in their definition of critical infrastructure, which, besides their propaganda value prove a semantic shift, unilateral as it seems, still bears the potential to launch an overall attack against all dimensions of civil life in the West. The frequency of open source jihadist attacks - committed by bladed weapons like knives and vehicles - has turned the menacing message into a strategy of decentralised, non-coordinated, largely spontaneous and therefore

largely unpredictable attacks. Operations targeting human resources tasked with the maintenance of public order and security (as well as national security) can inevitably lead to severe disruption of these services and might result in chaos on a social scale. Moreover, creating vigilant societies or resilient structures places an unreasonably heavy burden on the affected states and its psychological impacts still have a long way to be estimated.

References

- Ackerman, G. et. al. (2007): Assessing Terrorist Motivations for Attacking Critical Infrastructure. Lawrence Livermore National Laboratory, 172. DOI: 10.2172/902328
- Aragó, B. (2015): Media Jihad: New Strategy: From Recruitment to Attack. Quaderns de la Mediterrània, 24, 108-122.
- Besenyő J. (2019): Inferno Terror: Forest Fires as the New Form of Terrorism. Terrorism and Political Violence, 6, 1229-1241. DOI: 10.1080/09546553.2017.1341876
- Clemente, D. (2013): *Cyber Security and Global Interdependence: What is Critical?* Chatham House, 2.
- Crone, P. (2004): Meccan Trade and the Rise of Islam. New York: Piscataway, 165.
- Ism. b. Ish. al-Jahdamī (1998): Juz' fīhi min ahādīth al-imām Ayyūb al-Sakhtiyyānī. Sulaymān ibn 'Abd al-'Azīz al-'Arīnī (ed.), al-Riyād: Maktabat al-Rushd, 37. In: Quoted in Belhaj, A. et. al. (2017): Radical Islamism and 21st Century Terrorism. Budapest Report on Christian Persecution, 91-100.
- M. b. A. Ibn Rushd (1988): Beyrut: Dār al-Gharb al-Islāmī. 1, 369.
- March, A. F. (2009): Sources of Moral Obligation to non-Muslims in the 'Jurisprudence of Muslim Minorities. (Figh al-agalliyyāt) Discourse. Islamic Law and Society 16, 34-94.
- Nājī, A. B. (2004): *The Management of Savagery: The Most Critical Stage Through Which the Umma Will Pass.* Translated by William McCants, 16-17.
- Nádai L. Padányi J. (Eds.) (2016): Critical Infrastructure Protection Research. Results of the First Critical Infrastructure Protection Research Project in Hungary. Switzerland: Springer International Publishing. DOI: 10.1007/978-3-319-28091-2
- Nesser, P. (2000): *Ideologies of Jihad in Europe*. Terrorism and Political Violence, 2, 173-200. DOI: 10.1080/09546553.2010.537587
- Panevski, V. S. (2018): Integrated Critical Infrastructure Security Management. SECURITY & FUTURE, 1, 3-6.
- Peters, R. (1977): Jihad in medieval and modern Islam: the chapter on jihad from Averroes' 'Bidayat al-Mudjtahid' and the treatise 'Koran and fighting' by Mahmud Shaltut. Leiden, 18-19.
- Sandal, N. (2018): Apocalypse Soon Revolutionary Revanchism of ISIS in Feisal al-Istrabadi. In: Sumit Ganguly (eds) (2018): The Future of ISIS: Regional and International Implications. Brookings Institution Press, 17-37.

Shvetsov, A. V. (2017): Research of a Problem of Terrorist Attacks in the Metro (Subway, U-Bahn, Underground, MRT, Rapid Transit, Metrorail). European Journal for Security Research, 2, 131–145. DOI: 10.1007/s41125-017-0019-3

Sinai, J. (2016): *New Trends in Terrorism's Targeting of the Business Sector*. Mackenzie Institute Wood, G. (2015): *What ISIS Really Wants?* The Atlantic, 3.

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- URL4: Rumiya Issue (2015): 1, 36. https://clarionproject.org/factsheets-files/Rumiyah-ISIS-Magazine-1st-issue.pdf
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- URL8: https://quran.com/22
- URL9: https://quran.com/9
- URL10: Dabiq Issue 15. (2016): 7, 69. https://clarionproject.org/factsheets-files/islamic-statemagazine-dabiq-fifteen-breaking-the-cross.pdf
- URL11: https://quran.com/4
- URL12: EUROPOL. Terrorism Situation and Trend Report (TE-SAT) 2016. https://www.europol. europa.eu/activities-services/main-reports/european-union-terrorism-situation-and-trend-report-te-sat-2016
- URL13: Le Dauphine Libéré: Attentat à St-Quentin-Fallavier: le chef d'entreprise décapité avant le début de l'attaque, 2015.06.26. https://www.ledauphine.com/isere-nord/2015/06/26/saint-quentin-fallavier-une-explosion-chez-air-products
- URL14: Jones, Seth G. (2018): *Keep Calm and Carry On: The Terrorist Threat in the United Kingdom*. Center For Strategic & International Studies. 12 November 2020. https://www.csis. org/analysis/keep-calm-and-carry-terrorist-threat-united-kingdom
- URL15: Bart J. (2016): Brussels subway bombing highlights challenge of rail security in U.S. USA TODAY. 22 March 2016. https://eu.usatoday.com/story/news/2016/03/22/brussels-subway-bombing-reflects-difficulty-rail-security/82120060/
- URL16: *France is shaken by the murder of four police officers*. The Economist. 12 October 2019. https://www.economist.com/europe/2019/10/12/france-is-shaken-by-the-murder-offour-police-officers

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András László Szabó

The impact of the 2015 refugee crisis on Hungarian criminal policy

Abstract

My study examines Hungary's migration management, in the framework of criminal policy and the theory of deterrence. Hungarian public service bodies have a two-fold task, since they must act in accordance with a given situation and be prepared for the expected future impact of migration. In addition, they must carry out all this by satisfying citizens' expectations and maintaining public safety. I present the change that took place in the Hungarian public service bodies, public administration, law enforcement services and the Hungarian Defence Forces as a result of the mass immigration of 2015. I placed the police and public administration at the centre of attention, while also focusing on complementary police forces.

Keywords: mass immigration, criminal policy, legislative environment, deterrence, Crimmigration

The impacts of the mass immigration in 2015 can primarily be observed in the change of criminal policy and, as a result, in the activities of public administration organisations and law enforcement agencies dedicated to migration. These organisations had not been established for a migratory pressure of such volume and intensity, either in terms of headcount or infrastructure. The Dublin III (URL1). Regulation, also signed by Hungary (effective as of January 2015), envisaged the acceptance of two or three hundred thousand refugees in the entire European Union. My study examines Hungary's migration management, in the framework of criminal policy and the theory of deterrence. Hungarian public service bodies have a two-fold task, since they must act in accordance with a given situation and be prepared for the expected future impact of migration. In addition, they must carry out all this by satisfying citizens' expectations and maintaining

public safety. I present the change that took place in the Hungarian public service bodies, public administration, law enforcement services and the Hungarian Defence Forces as a result of the mass immigration of 2015. I have placed the police and public administration in focus of my study. How did the establishment of a technical border barrier on the Hungarian-Serbian border, officially known as the temporary fence for border surveillance purposes, affect the headcount of law enforcement organisations? It is a fact that there are no migrants in the territory of Hungary, unlike in 2015; yet state bodies face continuous problems in terms of headcount resulting from border surveillance activities. I aim to present the impacts of migration on legislation and the legal environment, created by the establishment of the fence. Then, I will place it into context by presenting the theory of deterrence as well as the criminalisation of illegal immigration and immigration law, i.e. the phenomenon of crimmigration. International forecasts, including the forecast of the United Nations, project the continued growth of migration on a global scale. This cannot be regarded as traditional or regular migration, as the change of environment and demographic increase (meaning that resources decrease while the needs increase) direct people quite obviously where they can find a better life, healthy environment and safe living circumstances. Currently, our world is in a transitional period. First, I will review the concept of migration and the relationship between migration and the state.

The concept of migration

Migration has multiple definitions or notions in the academic world. For me, the following definition covers the phenomenon the most. Migration is a process in which the persons change residence and society in a manner that such change either becomes temporary or permanent (Póczik, 2011). A typical case of population movement is the labour force migration that has been taking place for centuries. In addition to the intention to work, several other factors increase willingness to migrate. Religious, ethnic and political migration also dates back to hundreds or thousands of years. Recently, the combination of political and economic factors can be more and more observed in migratory motivation.

The state's role in the management of migration

In terms of managing migration, a state can either be acceptance-oriented, i.e. open – a good example for this is Germany. It may be deterrence-oriented, i.e.

closed, such as North-Korea. Ultimately, it can also be a combination of the two, such as Hungary. States may either be countries of origin, like Syria; host countries or countries of destination, such as Germany; or countries of transit, such as Hungary. Migration has two sides, emigration and immigration. Today a third side has also appeared: transit migration, or cross-migration. In our case, this means that Hungary is a quasi-transit country between the countries of origin and host countries. This way, migrants (including both legal and non-legal categories) only want to cross our country and regard it as an obstacle to overcome. Therefore, the antecedents that must be learnt in order to clarify the purpose of deterrence are linked to the growth of migration, which went through the following changes in terms of illegal migration. Migration has been continuously growing on a global scale since the end of the first decade of the 21st century its impact could also be felt in Europe, and there was a drastic and sudden increase of migration in 2015. The dynamics of such a sudden increase is described in the report of Frontex in the following manner. The number of illegal border crossings on the West-Balkan route between 2009-2015 (URL2). In 2009: 3090 persons, in 2010: 2370 persons, in 2011: 4650 persons, in 2012: 6390 persons, in 2013: 19,950 persons, in 2014: 43,360 persons, in 2015: 764,038 persons. In terms of Hungary, the number of illegal entries changed in the following manner in 2015, as also shown by the figures displayed on the official website of the Hungarian Police (URL3). The increase of the numbers of illegal border crossings in 2015 broken down to months: 2735 persons on May 31; 7,226 persons on June 30; 10,677 persons on July 31; 19,069 persons on August 30; and 30,949 persons on September 30. After that the temporary border fence was constructed, this number decreased rapidly, to somewhere between 1-2 persons and 30 persons. Then it stagnated, with one or two higher volume entries, meaning two hundred and fifty persons on a daily basis. The question arises whether the established physical facilities, the temporary technical border barrier and the legal border barrier are suitable jointly for stopping migration. The truth is that they are not suitable, and this function should not even be expected from them – they are only suitable for slowing down the rate of migration. As it was put by György Ritecz and János Sallai: 'It would be unscientific from us if we didn't realise that the fence is, indeed, a solution – but not a solution for managing illegal migration, but for temporarily diverting it from a given section of the border and from a given region.' (Ritecz-Sallai, 2016, 199.)

This statement is consistent with the phenomenon of transmission or transfer in the case of situational crime prevention, which means that as committing the crime is not worthwhile for the offender, they will try to commit it elsewhere. In my opinion, the task of the fence is to direct migrants to the transit zone by diverting migration in the proper direction, where the officers of law enforcement agencies can initiate the necessary proceedings upon their request.

The concerned public service bodies

'Public service bodies are organisations with actual operational functions, organised along the principle of fitness-for-purpose that operate actively and implement processes that typically do not produce value. Public service organisations include public administration, state defence and law enforcement bodies." (Czuprák-Kovács, 2017, 79.) Hardly any organisations exist that are not affected by the impacts of migration to a greater or lesser extent. The areas impacted may include costs, expenses, headcount management and legislation. The Hungarian Defence Forces participate in the protection of the border substantially, and they also take part in joint international missions (such as the one in Macedonia). What is different between the Hungarian Defence Forces and the organisations under examination here? It is that they not form part of the creation of public safety at settlements; they do not carry out patrolling activities of that kind. This is the reason why armed security guard forces are also omitted from my analysis. The law enforcement organisations, whose statutory duties include protection, and whom citizens expect to maintain safety, are those that are most exposed to the migratory pressure towards Hungary. Security guards (84,094 (persons) Police officers (48,000 (persons) Municipal policemen (1563 (persons) Civilian patrols (50,000 (persons). In total 183,657 (persons). (Szabó, 2016, 42.) The most important participant is the Office of Immigration and Nationality, which operated under the name 'Office of Immigration and Refugee Affairs' as of 01.01.2017. As of 01.07.2019, the organisation was transformed from a public administration body into a law enforcement organisation; the public officials became professional police officers, and the name of the organisation became the Directorate-General for Aliens Policing. The transformation corresponds with the change of criminal policy, the approach to the management of migration, as well as the appearance of the theory of deterrence in immigration management.

The concept of criminal policy

The concept of criminal policy provides the framework in which we can interpret the phenomenon. The concept of criminal policy: '*The discipline examining the causes and impacts of criminal activities that sets out the boundaries of* *the state's action against crime'*. (Gönczöl-Kerezsi-Lévay, 2007, 601.) Criminal policy is related both to criminal legal sciences, including criminal law, the law of criminal procedures and the law of criminal law enforcement, and the not legal sciences, such as criminology, criminal psychology and criminalistics – it connects them and provides a framework for them (Gönczöl-Kerezsi-Lévay, 2007, 35.) The subsystems of criminal policy are law enforcement policy, crime prevention policy, victim protection policy, penal policy, criminal law policy, criminal justice policy, and penal enforcement policy. (Borbíró-Gönczöl-Lévay, 2017, 36.) The phenomenon of deterrence appears in the framework of criminal policy.

The theory of deterrence

In order to understand the theory of deterrence, we have to go back to the theorem in which it was born. This is how Andrea Borbíró puts it: 'The classic paradigm is based on the theorem of free will. It regards man a rational and freely acting individual whose behaviour and decisions are only influenced by its own best interest. According to the classic paradigm, criminality does not have a peculiar reason for that matter, in excess of the individuals' decision to commit crimes by following their interest, because this is good for them for some reason, and it is worth it (this is why the theories in criminology belonging to this category are called decision theories or intention theories)'.

(Borbíró-Gönczöl-Lévay, 2017, 36.) The inevitability of punishment gives its deterring effect. These principles are laid out in Cesare Beccaria's work 'On crimes and punishments.' (Beccaria, 2012) This was the formation of the socalled classic paradigm... This criminal policy had been neglected for a long time, and then from the 1970s on, it gradually came into view once again after the crisis and crash of welfare states. This is what we call the turning point of neoclassical criminal policy, and it dates back to 1984. The order-making or order-maintaining state appeared, and deterrence also came into focus once again at such time from a dogmatical point of view. It is typically referred to in pair with neutralisation, i.e. the neutralisation of the person or the act. The question arises as to what deterrence itself is based on. The sudden change of the extent of a phenomenon, such as criminality, with which the number of investigations cannot keep pace. In Hungary, the number of registered criminal acts quadrupled between 1985 and 1992, and the socio-economic changes also transformed the causal processes substantially. Criminologist András Szabó wrote his book 'Igazságosan vagy okosan?' in 1992, the fifth chapter of which

is dedicated to a thorough analysis of deterrence. Szabó deducted the theory of deterrence as follows. It consists of the following parts: Threat - Carrying out the threat - Option and responsibility - Balance of advantages and disadvantages - Certainty and rigor. (inevitability). (Szabó, 1993, 99-100.) Every punishment has a general and special deterrent impact. Here, the recipients of the general punishment are the potential criminal offenders. The special punishment affects the person already punished. Szabó's interpretation shows clearly that the number of police officers and the number of investigations cannot keep pace with the increase of the number of registered offenses, however society's expectations put great pressure on law enforcement bodies. This means that the state's urge to act appears, which paves the way for a paradigm shift. This is the most important amongst the features of deterrence: offense-based punishment, which is also pro-rated to the offense at the same time. Crime and punishment. It does not take into consideration the psychological, sociological or cultural aspects of the criminal offense. It can certainly be applied quite well to the management of suddenly increasing phenomena, such as criminality or migration. It provides general prevention: it is applicable to everyone in the same way, it is fast, and it results in visible output. It is relatively inexpensive, as it does not require in-depth organisational development, only a one-time technical investment is needed. It has some dissuasive force from the perspective of criminal law, and it has a crime preventing impact, but not in the sense of the classic three-way split of crime prevention. The most popular form of deterrence is detention. 'Detentions reduce criminality, as they represent the direct and instant efficiency of investigations or social reaction.' (Szabó, 1993, 98-125.) The question arises whether migration should be construed as a criminal act or migrants should be regarded as criminals.

The theory of deterrence and migration

In the theory of deterrence, crime is punished; however, the (neo)classical paradigm not only punishes the crime, but also prevents or makes committing the crime more difficult with the development of technical and environmental means. This is called environmental criminology or situational crime prevention. The theory was elaborated by American criminologist Ronald W. Clarke (Clarke, 1983, 225-256.). It is not regarded as criminology or as a science by many in the academic world of criminology, including Clarke himself, as it does not examine and does not explain the causal links of criminality; it only considers it as a totality of technical solutions. The principle manifests itself

clearly in the operation of the temporary technical border barrier as a means of safety technology and the reinforced legal border barrier. In my opinion, citizens sense of safety has been greatly increased by the construction of the fence itself. It is important to state once again that a migrant is not a criminal, and so they should not be stigmatised as such. Being a migrant is closer to the status of a victim, as anyone leaving their home for the sake of finding a better place to live or in order to escape persecution is a victim, whichever way one looks at it. As I have already mentioned before, my notion of migrants includes both legal and non-legal categories. It is important to establish that the phenomenon of migration and the intention of migrants, i.e. immigration, is different from the behaviour of criminals (escaping the crime scene). The intention of migrants is to achieve refugee status. This, however, is not applicable to transit countries, such as Hungary. No nation-state can allow its sovereignty to become impaired by letting aliens reside on its territory or cross the same without the state's knowing. The state must react. This is the expansion of criminal law, the integration of new norms. Most typically, it manifests in the expansion or lengthening of the above-mentioned detention (arrest). I also classify the deportation of illegal migrants or escorting them to transit zones into this category, as I consider it equal to isolation from a dogmatical point of view. The individual will either be detained at a specific place or will be isolated from the territory of the country elsewhere. As Zoltán Hautzinger puts it: 'The application of law is not homogenous in the Hungarian judicial system either. The legal consequences of illegal immigration (entry, residence) may result from norms outside of criminal law, but they can also be found amongst the provisions of the same. The law of immigration policing can come into play primarily owing to its efficiency, and especially the primacy of the social interest in the earliest possible elimination of the circumstances resulting from illegal entry or residence.' (Hautzinger, 2016, 16.) He also adds the following: 'The immigration policing proceeding with the ordering of expulsion, and, if necessary the application of deportation (not including the asylum proceeding), eliminates illegal residence regardless of the possibility of applying any further sanctions otherwise resulting from the penalty originating from the immigration policing sanction.' (Hautzinger, 2016, 17.)

The concept of the crisis caused by mass immigration

In Hungary, the basis of the change of criminal policy and deterrence was created by the announcement of the crisis caused by mass immigration. As Balázs Orbán puts it: 'The uncontrolled flow of large masses of people into a specific geographical territory with high intensity, taking place with a so-called irregular migrating movement. As a result of the crisis caused by mass immigration. the political, economic, social and cultural tensions grow in the given territorv and typically significant risks arise in terms of safety policy.' (Orbán, 2019, 71.) About declaring the crisis caused by mass immigration in the entire territory of Hungary: Paragraph (2) of Section 80/A of Act LXXX of 2007 on Asylum (hereinafter: the Asylum Act) states that the Government may declare crisis caused by mass immigration in a decree upon the initiative of the national police commissioner and the leader of the authority responsible for refugee affairs, based on the proposal of the minister in charge of alien policing and refugee affairs. The crisis caused by mass immigration can be declared either in specific parts of the country or the entirety of Hungary. With Government Decree No. 41/2016. (III. 9.) on the rules related to the declaration of crisis caused by mass immigration on the entire territory of Hungary as well as the declaration, existence and termination of crisis (effective as of March 9, 2016), the Government declared a crisis caused by mass immigration in the entire territory of Hungary. An unavoidable effect of this is the increase of tasks and workload of the organisations ensuring the maintenance of public order and public safety, and, in particular, the police forces on the concerned area, i.e. the territory of Hungary.

Criminal offenses related to migration in Hungary

What a state and the criminal policy thereof considers punishable always depends on the traditions, culture and economic level of the given society. Furthermore, the intensity of the actions of law enforcement bodies in criminal cases and the number of registered cases should also be examined, by also taking into account the population's willingness to report crimes and their trust in the judicial system. We can see a plethora of cases in the media, in which criminal proceedings are initiated against persons with migrant backgrounds in the West. These should not be fully trusted, as the number of actual acts could always be higher or lower than published. Moreover, they regularly forget about an important doctrine of criminology when analysing the percentages: one offender may commit several crimes. I consider it important to state that there is no direct link between migration and terrorism, only the increased number of immigrants and refugees may result in the potential increase of criminal offenses. Let us review Hungary after the mass immigration of 2015 and examine how the management of migration has changed since. Establishment of a technical

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border barrier on the Hungarian-Serbian border (official name: temporary fence for the purpose of border surveillance) August 2015. The laws applicable to the illegal actions related to the border barrier are set out in Chapter XXXIV of the Criminal Code: Criminal Offenses Related to Administrative Procedures. Such offenses include: the Illegal Crossing of Border Barrier (Section 352/A of the Criminal Code), Damaging the Border Barrier (Section 352/B of the Criminal Code), Obstruction of Construction Work Related to the Border Barrier (Section 352/C of the Criminal Code), Human Smuggling (Section 353 of the Criminal Code), Facilitation and promotion of unlawful immigration (Section 353/A of the Criminal Code). These pieces of law were substantiated by the establishment of the border barrier. The border barrier itself is none other than a physical obstacle, the primary function of which is to make entering the territory of Hungary more difficult. It cannot prevent entry; it only gives time for the border police forces and law enforcement bodies to react. According to the criminality control mentioned in the section on criminal policy, this is none other than the isolation of individuals, which takes place from the territory of the country in this case: illegal crossers are redirected to Serbia typically, or escorted to the Transit Zone established on the Serbian part of the border.

The concept of crimmigration

The criminalisation of illegal immigration and immigration law, also known as crimmigration. This topic focuses on the criminalisation of immigration and the rights of refugees. As Miklós Lévay sees it: 'So criminal law strives to prevent damage caused to the individual and the society through violence, in a fraudulent manner or with other malicious intent, and immigration law defines who can enter the country's borders, who can reside within the given country and who must leave it. The only similarity between two branches is that they both differ from other legal areas. While the majority of the branches of law put the regulation of the relationships and conflicts of individuals and business entities in focus, criminal law and immigration law primarily regulate the relationship between the state and individuals. The essence of both criminal law and immigration law includes the inclusive and exclusive systems. Both legal areas point out whether it is necessary to accept and keep individuals as members of the society, and if yes, how this should be done; or if they should be excluded from the society. Both legal areas create insiders and outsiders.' (Lévay, 2017, 174.) This is further supported by the process of securitization, and, in our case, the transformation of public administration into law enforcement.

Conclusion

As presented above, deterrence can work very well in managing suddenly changing circumstances. However, it does not resolve the problem in the long term. It does not explore the reasons and it is excessively general: the courts acting in specific matters are responsible for exploring the circumstances properly. Naturally, this is not true in the case of deportation and being escorted to a transit zone. Deterrence is useful in the short term but is not effective in the long term. It is important to note that the treaty between the European Union and Turkey has much improved the situation. Yet, we must not be optimistic about the issue. If Turkey opens its borders even on a temporary basis, Hungary will have to face severe and drastically increasing migration. This may also take place if the routes in the Mediterranean Sea are closed, or if passing through them is made more difficult for migrants. I would like to add that migration is considered to be a lengthy phenomenon by all studies. In my study, I have presented the development of criminal policy, and how criminality control and the protection of society went into the service of prevention. The figures of crime statistics show that there is no actual increase in criminal offenses that could be linked to migration. The future is unpredictable, yet there are some tendencies that are worth taking a look at. On the one hand, the majority of criminal offenses committed by foreign nationals in terms of migration are currently related to the construction of the temporary fence for border surveillance purposes. A consequence of this is the so-called deflection (Ritecz-Sallai, 2016, 199. DOI: 10.1086/449090), which means that illegal migration has not been eliminated; migrants are now looking for possibilities to enter the European Union from another direction (Ritecz-Sallai, 2016). On the other hand, we must also reckon with the increased numbers of violent criminal offenses committed by law enforcement bodies against foreign nationals. Tourists, students or foreign workers are mistaken for illegal migrants or terrorists. This phenomenon is the Fear of the alien (Hautzinger, 2016, 303.). It can be stated that migration will form part of our lives for a long time. Criminal law is not a means to resolving social or environmental causes. Only a comprehensive solution based on international consensus can bring a solution. Currently, the Visegrad Countries as a regional alliance can do the most to that effect within the framework of the European Union.

References

- Beccaria C. (2012): *A bűnökről és büntetésekről [On Crimes and Punishments]*. Budapest: Attractor Könyvkiadó, 112.
- Borbíró A. Gönczöl K. Kerezsi K. Lévay M. (2017): Kriminológia [Criminology]. Budapest: Wolters Kluwer, 36, 454.
- Clarke, W. R. (1983): *Situational Crime Prevention: Its Theoretical Basis and Practical Scope*. The University of Chicago Press Journal, 4, 225-256. DOI: 10.1086/449090
- Czuprák O. Kovács G. (2017): A szervezetvezetés elmélete. A közszolgálati szervezetek vezetésének elméleti alapjai [The Theoretical Basis of the Organisational Leadership of Public Service Organisations]. Budapest: Dialóg Campus Kiadó, 79.
- Gönczöl K. Kerezsi K. Korinek L. Lévay M. (2007): Kriminológia-Szakkriminológia [Criminology-Specialisation Criminology]. Budapest: Complex Kiadó Jogi és Üzleti Tartalomszolgáltató, 601.
- Hautzinger Z. (2016): Félelem az idegentől [Fear from the Alien]. In: Finszter Kőhalmi Végh (Ed.) Egy jobb világot hátrahagyni - Tanulmányok Korinek László Professzor tiszteletére [Leaving a Better World Behind - Studies in the Honour of Professor László Korinek]. Pécs: PTE AJK, 303.
- Hautzinger Z. (2016): Szemelvények a migráció szabályozásáról [Excerpts on the Regulation of Migration]. Pécs: AndAnn Kft, 16.
- Lévay M. (2017): 'Crimmigration' avagy kriminológiai kutatások a bevándorlás kriminalizálásáról ['Crimmigration' or Criminological Research on the Criminalisation of Immigration]. In: Finszter G. – Korinek L. - Végh Zs. (2017): A tudós ügyész. Tanulmányok Bócz Endre 80. születésnapjára [The Academic Attorney. Studies for the 80th Birthday of Endre Bócz]. Budapest: HVG-ORAC, 154.
- Orbán B. (2019): Bevándorlási válság [Immigration Crisis]. In: Pásztor P. Egedy G. Filep T. G. – Karácsony A. – Király M. – Mezei B. – Pesti S. (Ed.) (2019): Magyar politikai enciklopédia [Hungarian Political Encyclopedia]. Budapest: Mathias Corvinus Collegium/Tihanyi Alapítvány, 71.
- Póczik Sz. (2011): Nemzetközi migráció biztonságpolitikai, rendészeti aspektusok [International Migration - Security, Law Enforcement Aspects]. In: Tarrósy I. – Glied V. – Keserű D. (szerk.) (2011): Új népvándorlás: Migráció a 21. században Afrika és Európa között [New migration: Migration between Africa and Europe in the 21st century]. Pécs, Publikon Kiadó, 35-51.
- Ritecz Gy. Sallai J. (2016): A migráció trendjei, okai és kezelésének lehetőségei [The Trends and Causes of Migration and the Possibilities of its Management]. Budaörs: Hanns Seidel Foundation Hungary, 199.
- Szabó A. (1993): Igazságosan vagy okosan? [Fairly or smartly?] Budapest: Akadémiai Kiadó, 99-125.
- Szabó A. F. (2008): Fenntartható fejlődés és demográfiai problémák [Sustainable Development

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and Demographic Problems. Nation and safety]. Nemzet és biztonság, 4, 41. Szabó L. A. (2016): A magánbiztonság és a rendészeti szervezetek tevékenysége napjainkban [The activities of private security and law enforcement organizations today]. Budapest, EL-TE-ÁJK, 42.

Used Legislation

Act C of 2012 on the Criminal Code. https://net.jogtar.hu/jogszabaly?docid=A1200100.TV Government Decree No. 41/2016. (III. 9.) on the rules related to the declaration of crisis caused by mass immigration on the entire territory of Hungary, as well as the declaration, existence and termination of crisis https://net.jogtar.hu/jogszabaly?docid=a1600041.kor

Online Links in This Article

- URL1: Tájékoztató a dublini eljárásról [Information on the Dublin procedure]. http://www.bmbah.hu/index.php?option=com k2&view=item&id=424&lang=en
- URL2: *Migratory Routes*. https://frontex.europa.eu/along-eu-borders/migratory-routes/western-balkan-route/
- URL3: *Határrendészeti helyzetkép 2015*. május-szeptember [Border Police Situation 2015. May-September]. http://www.police.hu/a-rendorsegrol/statisztikak/hatarrendeszet?page=6

Adrián Csajka-Vándor

The relationship between the Islamic legal system Sharia and European continental law

Abstract

The study examines the essential differences between European legal systems and the Islamic legal system, the Sharia. It points out the differences between secular and religious legal systems, the differences of evaluating and judging crimes and punishments, the judicial system of Islamic law and the sanctions it offers.

Keywords: Islamic legal system, sharia, European legal systems, continental law, Quran. religious, secular

Introduction

The Arabic word sharia means a path, a path to a source - a collection of divine laws, religious regulations that completely determine and govern the lives of Muslims (Salamon – Munif, 2003). There are basically two major differences between Islamic legal system, that is sharia law, and the European continental legal system. On the one hand, Sharia is based on religion, on the annunciation of the Qur'an, Sunni (prophetic traditions), and Ajman (consensus), while, on the other hand, the continental European legal system is entirely secular, in which the branches of law are completely separate from canon law. The other essential difference is that, unlike the continental legal system, sharia is not a written law. Although the Qur'an mentions many specific laws and regulations that Muslims are required to observe, and also countless prophetic traditions have been recorded, the sharia alone does not have a single collected printed form, like the constitution of a European country or a Code. Muslim countries use sharia to varying degrees in their legislation. There are countries, such as Saudi Arabia, where the whole legal system is based on sharia, where written law is not applied. In other Muslim countries, like for example Turkey, the Islamic legal

order has been completely replaced by secular law. The most common, however, are countries such as Egypt or Libya, where sharia is only partially used, so Islamic law and secular law, mainly taken from the French Code Civil and the Swiss Civil Code, are mixed. However, besides the written law, especially in the underdeveloped regions, customary law based on Sharia and also local tribal customs play a major role in legislation in countries of Muslim majority.

Religious Law - Secular Law

Sharia is based entirely on the Islamic religion. Believers consider it to be a source of law from God, and therefore its legitimacy is unquestionable. Precisely for this reason, if a written law of a non-Muslim country conflicts with Islamic law, there is no question for the faithful Muslim, which path to follow. In many of the cases Sharia is not contrary to continental law, and imposes penalty to crimes such as murder, robbery and theft. At the same time certain acts or crimes are not judged identically by the different legal systems. A good example of this is the issue of homosexuality (Kovács, 2019a) (further typical examples of this are socially marginalized groups), (Kovács, 2019b) which is regarded as a criminal act and punished by the Sharia in a qualified case (when four credible witnesses have seen the act), or adultery, which is morally condemned by European societies but not punished by the Criminal Code.

Legal status of persons in Sharia

One of the biggest differences between the European and Islamic legal systems is the question of equality and being equal under the law, legal equality. Islamic law distinguishes subjects according to religion, gender, and in a certain sense, materially.

Non-Muslims

Sharia distinguishes ummahs from dhimmis. Ummahs are the members of the Islamic community of believers, where common ground is the religion, it is one single group that shares common religious beliefs and not a nation with common ancestry or geography, while dhimmis are those non-Muslim monotheist believers who live in the neighbourhood of the Muslim community, or in an Islamic state, with legal protection. The countries with Christian majority in Europe are populated by dhimmis. The laws and rights of the dhimmi communities are in many cases the same as those of the Muslims, but there are some pivotal points where the sharia differentiates between the two communities. One such difference that I would emphasize is that under Islamic law, a dhimmi cannot take care of Muslim children. This creates a particularly worrying situation regarding the integration of the children of Muslim immigrants into European societies. Although in most cases school-bound Muslim children are enrolled, the legitimacy and acceptance of non-Muslim teachers in Islamic communities is highly questioned. The other major difference is that according to Islam, a dhimmi cannot judge or give a verdict over a Muslim. This rule questions the whole European legal system. After all, even if a dhimmi judge gives a verdict on a Muslim, it is virtually unenforceable – that is illegal - in the sense of Sharia.

There is also a third group in the religious sense, the so-called kafirs. The Arabic word kafir means unbeliever, nonbeliever. The term refers to a person who rejects or disbelieves in God (Allah) or the tenets of Islam, denying the authority of God, and is thus often translated as infidel. Unbelievers include atheists, non-believers, non-monotheist believers like Hindus or Buddhists, and are considered apostates with whom Muslims are at war. Only Muslims who have denied Islam are ranked below the kafirs, and they are not regarded as a community, but as criminals who are sentenced to death. In case of war however, the sharia is no more forgiving to the kafirs. Extreme Islamist groups legitimize their actions on the basis of what has been revealed in the Qur'an.

So, when you meet those who disbelieve [in battle], strike [their] necks until, when you have inflicted slaughter upon them, then secure their bonds, and either confer favour afterwards or ransom them until the war lays down its burdens. (47:4) (URL1)

Women

Islamic law also makes a legal distinction between men and women: women have less rights than men. Although in some respects the sharia actually protects women's rights, this protection is primarily limited to property and contract law. This can be called the lack of the principle of equality (Kovács, 2015a). In Islamic society, women are subordinated to men. The husband's right is to educate the woman, which can be exercised within the "regulated limits" by corporal punishment. The Qur'an declares: Men are in charge of women by [right of] what Allah has given one over the other and what they spend [for maintenance] from their wealth. So righteous women are devoutly obedient, guarding in [the husband's] absence what Allah would have them guard. But those [wives] from whom you fear arrogance - [first] advise them; [then if they persist], forsake them in bed; and [finally], strike them. But if they obey you [once more], seek no means against them. Indeed, Allah is ever Exalted and Grand (URL2).

The subordinate relationship detailed above also extends to sexuality. In Islam, it is the woman's duty to please her husband, and this duty can only be denied in special cases, such as during the menstrual cycle. As a general rule, a woman may not deny sexual contact with her husband, but if she nevertheless escapes the request, the husband shall wait no more than three days.

Women are also discriminated against men in other areas of law, such as inheritance law or testimony. When it comes to testimony, a woman's word is half that of a man, and the same proportion is true to inheritance: a daughter and a sister get half the man's share unless there is a male relative in the same line. The husband receives half of the estate after the wife (if they have children), while the woman receives only a guarter of the man's estate. It is thus clear that the legal position of women in Islam is far below the requirement for gender equality in Western societies. Beyond the fact that women's rights are by definition restricted to men's rights, Islam distinguishes between Muslim and non-Muslim women, as well as moral and immoral women under Islamic rules. It follows that, although fornication and rape (Kovács, 2017) are both condemned and severely sanctioned by Sharia, the extent of the crime is not the same in the case of the above-mentioned violent crimes. Violence against a religious, respected Muslim wife is subject to completely different legal, social and moral judgments than violence against a dressed "whore", an "infidel" woman who does not live in accordance with Islamic rules.

Judicial institution in Islamic law

In Islamic litigation, the conduct of trial and judgment is concentrated in the hands of a judge, the "bath". In the case of classical Islamic law, it is for the litigants to prove, the judge will make a judgment on the basis of the information available and will not take part in the procedure of proof. It is a general feature of Islamic procedural law that there is no strict separation between civil and criminal matters and their rules of procedure (Jany, 2011). In civil law-suits, criminal proceedings are automatically triggered if there is a suspicion

of a crime. Proceedings may be opened ex officio if initiated by an authority, but in this case the criminal and civil proceedings may be mixed, as the court may order the person who has been convicted in the criminal proceedings to pay compensation for the damage and if found to have committed a crime, you can sanction it.

In classical Islamic law, there is no court of appeal, only if the judge renders a ruling contrary to Islamic rules or if the judge makes a procedural mistake. For example, in the case of a Muslim, it bases its judgment on the testimony of a non-Muslim witness, or the accused may not properly express his position. The system of courts is similar to modern legal systems, but the legal system of Muslim countries with constitutional and written law is familiar with the institution of appeal. In Kuwait, for example, the judiciary is structured in three levels: the Courts of First Instance, the three-judge The Courts of Appeal and the supreme council (URL3). In the classical Islamic legal system, judges were appointed directly by the ruler. Max Weber described it as "bathtub judging" being judged by subordinate clerks to which the ruler can intervene at any time (Jany, 2006). The reality is more sophisticated in the modern age for Muslim countries with a written legal system, but the fact is that the judiciary is under the control of the executive branch, which may, to varying degrees, undermine independent judgment.

Some of the key crimes in Sharia and in continental law systems (Hungarian Criminal Code)

Homicide

The Hungarian Criminal Code orders the punishment of all forms of homicide, except for the legitimate protection of life. Under the Criminal Code Article 21 (2) states that an unlawful assault shall be deemed to have been aimed at extinguishing the life of the defender. The Sharia, on the other hand, has several exceptions in which it does not sanction homicide at all, but instead regards it as a legitimate act. The 14th hadith on the actions of the Prophet Mohammed (collection of oral communication) states: "*It is not legal [to spill] the blood of a Muslim except in one of three cases: the fornicator who has previously experienced legal sexual intercourse, a life for a life and one who forsakes his religion and separates from the community*". (al-Bukhari, Muslim) (URL4) This means that in the above mentioned three cases - adultery, murder and apostasy - sharia law legitimizes homicide.

Assault

Sharia does not make legal distinction between minor and grievous bodily injury, the penalty in each case is in proportion to the extent of the injury. In punishment the eye for an eye principle prevails, which can cause injury to the offender commensurate with the damage inflicted unlawfully. For example, if the offender breaks the hand of the victim, the offender's hand is also broken. Corporal punishment, or in extreme cases mutilation – long forbidden in European legislation -, can be converted into financial redemption if the victim, or the victim's family permits it, in which case the offender pays in instalments for the offended up to three years. Although the judge of all criminal cases is the qadi, that is the judge, but the qualifications a qadi must possess is not uniform. There is a minimal requirement, that is a qadi must have the same qualification as a witness in court, meaning he should be free, sane, adult, trustworthy and a Muslim. Thus, it often happens that from the point of view of European law system, the verdict may seem vigilante justice.

Sexual offences

Sexual offenses are punishable both by Hungarian Criminal Code and by Islamic law, however, the judgments of certain acts are very different, while in certain cases one legal system regards an act or behaviour as a crime, the other system does not (Kovács, 2015b).

One of the most striking differences are in regard of sexual exploitation and sexual abuse (Kovács, 2015c) (Criminal Code § 196 and § 198) 10. Sharia basically is stricter in case of sexual crimes than the European legal systems, the punishment is very rigorous (for example in Saudi Arabia rape is punished by capital punishment), but in some cases, such as the situation of a wife or slaves, offers virtually no protection to the victim. As it has already mentioned above, it is the inalienable right of a husband to have sexual intercourse with his wife, which may be physically enforced. The same is true for slaves, and although Muslim law prohibits slavery almost without exception, in extremist organizations such as the Islamic State or Al-Qaeda, and in some lesser developed areas such as Pakistan or parts of Afghanistan, slavery (primarily the debtor's slavery) is an institution that still exists today. In addition to sexual exploitation, sexual abuse of a young or a child also has a largely different interpretation. It should be noted here that Islamic law imposes stricter sanctions (even death penalty) for committing the above offense, but again has different set of laws on who

the subject of the offense may be and on the determination of the motive for the offense. Islam considers child marriage as fundamentally legitimate, women have inherently more limited rights than men, and there is no clear, valid directive for everyone from which age a girl can marry or can be taken as a wife.

Although in most Islamic countries there is an age limit, it is often lower than in Europe, and in some cases, such as Yemen (URL5), there is no such regulation at all.

Terrorism - jihad and territorial conquest of the land of unbelievers

The Arabic term "jihad" literally means striving or struggling, to express the utmost effort in order to achieve a purpose.14. In religious terms it means all efforts to make personal and social life meet God's will, such as struggle against one's evil inclinations, proselytizing (da'wah), or efforts toward the moral improvement of the ummah, though it is most frequently associated with war. The spiritual form of this is the so-called "great jihad", that is to overcome one's own ego and desires by voluntarily submitting oneself to the will of God. The "little jihad" is the armed struggle prescribed by Allah. The latter may be a defensive, patriotic war, but it may also be an offensive or a preventive one, or a struggle to spread the Islamic faith (da'wah).

The Qur'an writes of the essentially conquering "holy war": Fight in the way of Allah those who fight you but do not transgress. Indeed. Allah does not like transgressors. And kill them wherever you overtake them and expel them from wherever they have expelled you, and fitnah (disbelief and worshipping of others along with Allah) is worse than killing. And do not fight them at al-Masjid al-Haram (the sanctuary at Makkah) until they fight you there. But if they fight you, then kill them. Such is the recompense of the disbelievers.

And if they cease, then indeed, Allah is Forgiving and Merciful.

Fight them until there is no [more] fitnah and [until] worship is (acknowledged to be) for Allah but if they cease, then there is to be no aggression except against the oppressors. Fighting in the sacred month is for (aggression committed in) the sacred month, and for (all) violations are legal retribution. So, whoever has assaulted you, then assault him in the same way that he has assaulted you. And fear Allah and know that Allah is with those who fear Him (URL6).

This quotation from the Quran illustrates one of the most fundamental moral differences between Western, European legal systems and the Islamic legal system. In the latter "disbelief and worshipping of others along with Allah" is more serious a crime than murder. It is clear to what extent religion and the legal system is intertwined within the framework sharia, the Islamic law, in which religion basically precedes everything and, in the name of defending religion, legitimizes even a territorial campaign. Adding to the above mentioned differentiation between Muslims and non-Muslims, and keeping in mind that sharia uses this differentiation not only in case of criminal law but also in case of land and property law it can be quite understandable why many religious Muslims morally do not regard illegal crossing of the border or illegal residence in EU territory as criminal offenses.

Sanctions in Islamic law

In terms of Islamic and Hungarian law there are two very important differences between the penalties that can be imposed. On the one hand, the type of penalties that can be imposed and, on the other, the principle of imposing sanctions. The most important difference between the types of crimes is that, unlike Sharia, the Hungarian legal system does not apply death penalty and corporal punishment. In Islam law these are not only applied, but very often combined, therefore torture as such is part of the punishment, like stoning. Less serious penalties that may be imposed include flogging or mutilation. As for the principle of sanctions, sharia divides crimes into two main categories, one is crime against God, the other is crime against people. Crime against God are the "hudud" crimes, that is they violate God's boundaries (hudud), the punishment for these crimes are specified in the Quran. In the case of these crimes, the extent of the punishment is at the disposal of God, so that no consideration can be given to them when the penalty is imposed. An example of such a crime is theft, which the Quran writes as follows: "Cut off the hands of thieves, whether they are man or woman, as punishment" (URL7). In this case, however brutal it sounds, the legal dispute is only about how to punish recidivists. According to Shafi Law School, in the second offense, the thief's left leg should be cut off, followed by his left hand, and his right foot a fourth time. Paradoxically, the fifth offense is not ordered to be punished because the penalty cannot be enforced on the offender. For other, non-hudud crimes, the court has discretion. When imposing sanctions, the judge relies primarily on prophetic traditions and, in many cases, the law of retaliation principle also appears. The concept of 'blood money' is also unknown in the European legal system. According to the Sharia, the relatives of the murdered victim may renounce their vengeance and, instead, charge the offender a blood money, in which case the offender is not subject to any

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further penalty by the court. "Kaffara", meaning penance or penitence, is also unknown in the European legal system. Kaffara can be fasting, helping the poor, donating, or slaughter a sacrificial animal (Almohideb, 1996). In extreme cases Islamic law imposes death penalty on magic, apostasy or adultery. In Saudi Arabia, the penalty even nowadays for adultery by one who is married or has been married is stoning (Peiffer, 2015). In sum, the Sharia judges crimes differently to the European legal systems, distinguishes between crimes committed against God and man, the severity of the punishments that can be imposed are different from those imposed in the western legal systems, and in some cases the severity of the punishment is extremely brutal and cruel.

References

- Almohideb, A. M. (1996): Criminal procedures relevant to crimes of killing in the Kingdom of Saudi Arabia. PhD thesis, 93.
- Jany J. (2011): *A világ főbb jogrendszerei [The main judicial systems in the world]*. Egyetemi jegyzet. Pázmány Péter Katolikus Egyetem Bölcsészettudományi Kar, 62.
- Jany J. (2006): Klasszikus iszlám jog egy kultúra természetrajza [Classical Islamic law– natural history of a culture]. Budapest: Gondolat Kiadó, 259.
- Kovács I. (2019a): Egy empirikus kutatás részletei: a prostitúció jelensége, és társadalmi kontrollja napjainkban [Details of an empirical research: phenomenon and social control of prostitution nowadays]. Budapest: Dialóg Campus, 1-248.
- Kovács I. (2019b): IKARUSZ the new Model, which is able to handle the Hungarian Phenomenon of Prostitution. Journal of Criminology and Criminal Law, 3, 115-139.
- Kovács I. (2015a): The enforcement of crime prevention duties of the Police, in relation of youth - especially juvenile prostitution - and the practical experiment in Hungary. Műszaki Katonai Közlöny, 1, 231-245.
- Kovács I. (2017): *Is the prostitution a threat/danger to a country's (national)security?* Nemzetbiztonsági Szemle, különszám, 12-24.
- Kovács I. (2015b): Az üzletszerű kéjelgéssel kapcsolatos rendőri visszaélések etikai vonatkozásai [Ethical relations of police abuse in connection with prostitution]. Belügyi Szemle, 4, 99-125.
- Kovács I. (2015c): "Olajozás", szervezett bűnözés és prostitúció a 90-es években Magyarországon ["Oiling", organised crime and prostitution in Hungary in the 90s]. Nemzetbiztonsági Szemle, 1, 114-145.
- Salamon A. Munif A. F. (2003): Saria, Allah Törvénye Az iszlám jog különös világa. Budapest: Presscon Kiadó, 32.
- Peiffer, E. (2005): *The Death Penalty in Traditional Islamic Law and as Interpreted in Saudi Arabia and Nigeria.* William & Mary Journal of Race, Gender, and Social Justice, 3, 522.

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- URL4: *Hadith 14. Prohibition of a blood of a Muslim.* https://hadithcommentary.com/nawawi/ hadith14/8
- URL5: Lukács A. (2013). *Gyerekházasság Jemenben*. https://hvg.hu/vilag/20130916_Gyerekhazassag Jemenben

URL6: Quran 2:190-194. https://quran.com/2/190-194

URL7: Quran 5:38. https://quran.com/5/38

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