

Editorial

The editors are pleased to welcome you to the second issue of the eighth volume of FULL, an open access international journal providing a platform for linguistic research on modern and older Finno-Ugric or other Uralic languages and dialects. FULL publishes comparative research as well as research on single languages, including comparison of just Uralic languages or comparison across family lines. We encourage both formal linguistic submissions and empirically oriented contributions.

The present issue contains two research articles. The first contribution is by Pauli Brattico, who re-examines the issue of free word order in Finnish. The article reviews and compares three existing hypotheses concerning the origin of the phenomenon: the nonconfigurationality hypothesis, according to which the Finnish clause is not hierarchically structured; the movement hypothesis, according to which the wide range of constituent order permutations are produced by syntactic movements; and the adjunction hypothesis, according to which thematic arguments can be freely attached in phrase structure as adjuncts. The author argues for a hybrid model, according to which word order in the clause results from both movement and adjunction. In this model, while operator positions are targeted by movement operations, nonsubject topicalization and post-verbal word order are accounted for by adjunction.

The second research article, by Ánges Bende-Farkas, is a case study of the grammaticalization of an adjective *egész* ‘entire, whole’ into a maximality operator, a determiner with universal-like quantificational force, in different varieties of Hungarian. According to the author’s portrayal, the grammaticalisation process of *egész* involved several types of changes, some of which are exclusive to Csángó and Transylvanian regional dialects of Hungarian. In Old Hungarian, *egész* combines with abstract nouns, and nouns denoting collective entities. In late Old Hungarian and in early Middle Hungarian, these expressions are reinterpreted as applying ‘pointwise’ to each member of the collective entity. In Csángó and Transylvanian dialects this construal is then extended to count nouns. It is in these varieties that the determiner *egész* can be preceded by a definite article and can be used as a full DP, meaning ‘all (from a given set)’. If in this construction *egész* receives an adverbial suffix, it yields the meaning ‘all from a given set’. The paper is a richly illustrated, insightful guide through these grammaticalization pathways.

We take this opportunity to thank the anonymous reviewers who generously lent their time and expertise to FULL. Our publications can be freely accessed and downloaded without any need for prior registration. At the same time, those who register, or have already registered, are provided with the benefit of getting notified of new issues, calls, etc. via email. FULL welcomes manuscripts from all the main branches of linguistics, including phonology, morphology, syntax, semantics and pragmatics, employing a diachronic or synchronic perspective, as well as from first language acquisition and psycholinguistics. Whatever the theoretical or empirical orientation of the contributions may be, our leading principle is to maintain the highest international standards.

The Editors

Word Order in Finnish: Nonconfigurationality, movement or adjunction?

Pauli Brattico

Finnish word order is relatively free when compared with several Indo-European languages. This article reviews the literature and finds three existing hypotheses concerning the origin of the phenomenon: (1) the nonconfigurationality hypothesis, according to which Finnish lacks syntactic structure, either partially or fully; (2) the movement hypothesis, according to which the wide range of word order permutations are produced by movement; and (3) the adjunction hypothesis, according to which thematic arguments can be attached to the phrase structure as adjuncts and behave syntactically like adverbs. Of these three hypotheses the nonconfigurationality hypothesis finds no empirical support and is rejected. A hybrid model, according to which the word order results from both movement and adjunction, is considered to best account for the facts.

Keywords: *Finnish, word order, discourse-configurationality, configurationality, adjunction*

1 Introduction

Finnish exhibits relatively few constraints in word order in finite clauses (1–2) (e.g., Hakulinen 1975; Hakulinen & Karlsson 1979; Holmberg & Nikanne 2002; Lindén 1947; Palander 1991; Vilkkuna 1989).^{1,2}

- (1) *Jari lainasi kirja-n Merjalle.* (canonical word order)
Jari.NOM lend.3SG book-ACC to.Merja
'Jari borrowed a book to Merja.'
- (2) a. *Kirjan lainasi Jari Merjalle.* b. *Kirjan lainasi Merjalle Jari.*
c. *Merjalle lainasi Jari kirjan.* d. *Merjalle lainasi kirjan Jari.*
e. *Merjalle Jari lainasi kirjan.* f. *Merjalle kirjan lainasi Jari.*
g. *Kirjan Jari lainasi Merjalle.* h. *Kirjan Merjalle lainasi Jari.*
i. *Jari kirjan lainasi Merjalle.* j. . . . and so on.³

At least three hypotheses have been explored in previous literature concerning the origin of the phenomenon: the *nonconfigurationality hypothesis*, according to which the

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² Abbreviations and glosses: 0 = default third person agreement or no agreement ("agreement" is systematic covariation in phi-features between a predicate and a local DP argument); ACC = accusative case (any form); EXPL = expletive; GEN = genitive case; HAN = a second position clitic; IMPASS = impersonal passive form (active or passive voice); NOM = nominative case; PAR = partitive case, PL = plural; PX = possessive suffix (PX/3SG = third person possessive suffix, etc.); SG = singular; TUA = TUA-adverbial (roughly 'after doing something'); Q = yes/no particle *-kO*. Capital letters will be used to represent vowel harmony (e.g., *talo-kO* 'house-Q', *yö-kÖ* 'night-Q').

³ Not all word orders are possible, though; what the permissible orders are will be discussed later in this article.

phenomenon results from lack of hierarchical syntactic structure (e.g., Karttunen & Kay 1985; Sammallahti 2002, 2003; Välimaa-Blum 1988; Vilkuna 1989; see also É. Kiss 1987 for Hungarian); the *movement hypothesis*, which claims that the various word orders are generated from a canonical structure by means of grammatical movement (e.g., Boef & Dal Pozzo 2012; Hakulinen 1975; Holmberg 2000; Holmberg & Nikanne 2002; Holmberg, Nikanne, Oraviita, Reime, & Trosterud 1993; Huhmarniemi 2019; Kaiser 2000, 2006; Koskinen 1998; Nelson 1998; Vainikka 1989; Vilkuna 1995), and the *adjunction hypothesis*, according to which also thematic arguments, and not only PPs and adverbials, can be adjoined to the clause (Brattico 2016, 2018). I will argue in this article that none of these hypotheses, when taken in isolation, can explain the full range of facts. The movement and adjunction hypotheses are both argued to be necessary, while the nonconfigurationality hypothesis is rejected.

The term “discourse-configurational” is often used in connection with Finnish word order. Discourse configurationality refers to a property a language (or part of its grammar) has when discourse functions (and not, e.g., grammatical roles) are articulated by means of word order. As pointed out by Surányi (2016), whether a language is discourse-configurational in this sense is in principle orthogonal to the issue of configurationality: one can develop a discourse-based explanation for word order with or without full phrase structure syntax. I will return to this issue at the end of this article.

2 The nonconfigurationality hypothesis

2.1 Introduction

The nonconfigurationality hypothesis explains (1–2) by asserting that Finnish is, either in part or in whole, a nonconfigurational language: it lacks asymmetric syntactic structure to sustain rigid word order. Helasvuo (2013) summarized the idea by hypothesizing that while phrase structure is essential for the explanation of word order in configurational languages such as English, in nonconfigurational languages, such as Finnish, word order is “based on pragmatic factors” (p. 67) and does not rely on structure. Indeed, because the word orders reported in (1–2) do correlate with discourse properties, Helasvuo’s claim that Finnish word order is “pragmatic” should not be ignored without consideration.

Another version of the nonconfigurationality hypothesis claims that Finnish can be described by relying on word meanings, possibly in conjunction with case morphology, but without phrase structure. Sammallahti (2002, 2003) proposes to replace phrase structural grammar with a descriptive system that relies on word meanings and (non-formal, intuitive) semantic dependency relations between words, and then claims that the role of structural, syntactic properties has been “exaggerated” (Sammallahti 2002, 536, my translation). Specifically, linguistic elements (words and concepts) combine with each other based on their functional and semantic properties, while phrase structural categories such as IP, VP or PP are considered to be nothing but illusory “terms” (p. 550). To claim that they represent something real rather than spurious descriptive ideas is, according to Sammallahti, an “amateurish error” (p. 550) because (the author claims) they can be replaced without residuum by his lexico-semantic theory; a theory that Chomsky and the generativists will likewise, again rephrasing from the original source, inevitably adopt as time goes on (Sammallahti 2003, 58–61). He further proposes that the difference between human and nonhuman animal linguistic behavior, such as that

between a human and a parrot, is quantitative, not qualitative (Sammallahti 2002, 550). Free word order results from linearization: semantic-conceptual representations are linearized by ordering semantic concepts on the basis of “pragmatic intentions” (Sammallahti, 2003, 55), at least in some languages such as Finnish. No details of the linearization procedure are provided, however.

Sammallahti’s position represents the more radical end of nonconfigurationality. A less radical version, argued by É. Kiss for Hungarian (É. Kiss 1987), is that part of the standard phrase structure syntax (hierarchical structure in the postverbal domain of the Hungarian sentence in this case) is missing or is impoverished in some way. This could be applied to Finnish, a distantly related Finno-Ugric language, in order to explain why its word order is free.

These three examples do not exhaust the range of possible nonconfigurational hypotheses that have been proposed in the literature or that could be proposed by following some reasonable canon of rationality; they serve to illustrate the nonconfigurationality hypothesis.⁴ I will consider the relevant empirical evidence next. The discussion in this article is mostly limited to finite clauses; Finnish infinitival word orders remain poorly understood and deserve their own study.

2.2 Preverbal syntax

2.2.1 *The structure of the Finnish preverbal field*

Descriptive properties of the Finnish preverbal field, as they are understood today, were provided by Vilkuna (1989). She argued that the Finnish preverbal syntax contains two “fields” that are defined, at least in part, by their discourse functions.⁵ The first field (called the “K-field”) is associated with a corrective or contrastive interpretation, while the second field (“T-field”) is associated with a topic interpretation. The high complementizer *että* ‘that’ caps the finite clause (3).

- | | | | | | | | |
|-----|-----------------|---------------------|-----------------|----------------|----------------|----------------|------------------|
| (3) | ... <i>että</i> | [<i>uutta</i> | <i>auto-a</i>] | [<i>Jari</i> | <i>maalasi</i> | (<i>ei-kä</i> | <i>talo-a</i>) |
| | that | new | car-PAR | Jari.NOM | painted | (not-Q | home-PAR) |
| | | <i>K-field</i> | | <i>T-field</i> | <i>Verb</i> | | Postverbal field |
| | | ‘contrastive focus’ | | ‘topic’ | ‘event’ | | |
- ‘...that it was the new car (focus) that Pekka (topic) painted, not house.’

The analysis, which has stood the test of time as a descriptive generalization, is motivated by the fact that almost any kind of phrase can occur in either of these positions.

⁴ An anonymous reviewer of an earlier version of this article claims that the paper involves a “plot” to dismiss “all non-Generativist frameworks,” such as dependency grammar. This is not my intention. The reason I do not review other nonconfigurationality hypotheses is because, as I will argue in this article, I failed to find any supporting evidence for nonconfigurationality itself. In addition, sourcing, e.g., dependency grammatical explanations for the data discussed in this paper proved difficult. Sammallahti (2002, 2003) constitutes a typical example of this genre: virtually everything that bears on the issue of configurationality is ignored. For example, he suggests that topicalization involves linearization to the left (see Sammallahti 2003, 55) but provides nothing to capture the constraints that regulate the process (Section 2.2.3 in the present article).

⁵ Vilkuna’s earlier position (Vilkuna 1989) towards phrase structure syntax can be described as “agnostic,” in that she ignored the role of syntax and syntactic-structural phenomena. In later work she acknowledged the role of phrase structure syntax and argued for a fully configurational analysis (Vilkuna 1995).

Conversely, the behavior of these fields is not governed by syntactic labels (e.g., N, V) or morphosyntax (e.g., Case, phi-agreement, grammatical subjecthood). Vilkuna also demonstrated that the constituent in the K-field (if any) reads as being the contrastive/corrective focus/topic of the clause, whereas the constituent in the T-field constitutes the topic. These two fields, and the fact that a phrase of almost any kind can occur in them, captures a wide range of Finnish word order facts. This is illustrated by (4). Notice how word order correlates with discourse interpretation provided in the translations.

- (4)
- | | | | | |
|----|---|-----------------|-----------------|------------------|
| a. | <i>Kirja-n</i> | <i>lainasi</i> | <i>Merjalle</i> | <i>Jari</i> |
| | book-ACC | lent.3SG | to.Merja | Jari.NOM |
| | ‘A book was lent to Merja by Jari.’ | | | |
| b. | <i>Kirja-n</i> | <i>lainasi</i> | <i>Jari</i> | <i>Merjalle.</i> |
| | book-ACC | lend.3SG | Jari.NOM | to.Merja |
| | ‘A book was lent by Jari to Merja.’ | | | |
| c. | <i>Merjalle</i> | <i>lainasi</i> | <i>Jari</i> | <i>kirja-n.</i> |
| | to.Merja | lent.3SG | Jari.NOM | book-ACC |
| | ‘To Merja, Jari lent the book.’ | | | |
| d. | <i>Merjalle</i> | <i>lainasi</i> | <i>kirja-n</i> | <i>Jari.</i> |
| | to.Merja | lent.3SG | book-ACC | Jari.NOM |
| | ‘To Merja, it was Jari who lent the book.’ | | | |
| e. | <i>Merjalle</i> | <i>Jari</i> | <i>lainasi</i> | <i>kirja-n.</i> |
| | to.Merja | Jari.NOM | lent.3SG | book-ACC |
| | ‘To Merja, Jari lent the book.’ | | | |
| f. | <i>Merjalle</i> | <i>kirja-n</i> | <i>lainasi</i> | <i>Jari</i> |
| | to.Merja | book-ACC | lent.3SG | Jari.NOM |
| | ‘To Merja, a book was lent by Jari.’ | | | |
| g. | <i>Kirja-n</i> | <i>Jari</i> | <i>lainasi</i> | <i>Merjalle.</i> |
| | book-ACC | Jari.NOM | lent.3SG | to.Merja |
| | ‘It was the BOOK that Jari lent to Merja.’ | | | |
| h. | <i>Kirja-n</i> | <i>Merjalle</i> | <i>lainasi</i> | <i>Jari.</i> |
| | book-ACC | to.Merja | lent.3SG | Jari.NOM |
| | ‘It was the BOOK that Merja was given by Jari.’ | | | |
| i. | <i>Jari</i> | <i>kirja-n</i> | <i>lainasi</i> | <i>Merjalle.</i> |
| | Jari.NOM | book-ACC | lent.3SG | to.Merja |
| | ‘A book was lent to Merja by JARI.’ | | | |
| j. | etc. | | | |

These data might be interpreted as suggesting that the Finnish finite clause is best described as being discourse-configurational. Although (4) does show that discourse plays a role in Finnish word order, a fact to which I will return later in this article, it provides very little to decide on the role of syntax. Does syntax have a role?

To find out, we examine if the operations that fill in the K-field and the T-field are structure-dependent or discourse-based. Considerable amount of evidence has accumulated suggesting that they are regulated by syntactic conditions (e.g., Brattico, Huhmarniemi, Purma, & Vainikka 2013; Holmberg & Nikanne 1993, 2002; Huhmarniemi 2012; Huhmarniemi & Brattico 2013a; Koskinen 1998; Manninen 2003; Vainikka 1989; Vilkuna 1995, to mention a few). This is corroborated by evidence from Hungarian, a distantly related Finno-Ugric language, in which we find a similar profile (É.

Kiss 2002): preverbal syntax is regulated by structural constraints. Let us briefly examine the evidence, well-known but worth repeating and expanding.

2.2.2 The K-field

While it is true that a contrastive focus or topic typically fills in the K-field, the phrase in the K(contrast)-field must always match with an empty gap in the same clause (5a-d).

- (5) a. *Ketä₁* *Jari* *ihaili* ___₁?
 who.PAR Jari.NOM admired
 ‘Who did Jari admire?’
- b. **Ketä* *Jari* *ihaili* *Merja-a?*
 who.PAR Jari.NOM admired Merja-PAR
- c. *Ketä₁* *Jari* *sanoi* *että Merja* *ihaili* ___₁?
 who.PAR Jari.NOM said that Merja.NOM admired
 ‘Who did Jari say that Merja admired?’
- d. **Ketä₁* *Jari* *sanoi* *että Merja* *ihaili* *Jukka-a₁?*
 who.PAR Jari.NOM said that Merja.NOM admired Jukka-PAR

A description in which an element in the K-field is associated with a discourse interpretation is not sufficient to account for the attested word orders. One must also capture the properties of the co-occurring gap. Once we do this, several facts emerge suggesting that the explanation cannot rely on discourse alone. For example, morphosyntactic properties of the word or phrase at the K-field must match those of the gap, as shown in (6). The gap is in the position that is assigned the partitive (6a), the same case that must be assigned to the corresponding filler element in the K-field.

- (6) a. *Jari* *ihaili* *Merja-a* b. **Kuka₁* *Jari* *ihaili* ___₁?
 Jari.NOM admired Merja-PAR who.NOM Jari.NOM admired
 ‘Jari admired Merja.’
- c. *Ketä₁* *Jari* *ihaili* ___₁?
 who.PAR Jari.NOM admires
 ‘Who did Jari admire?’

Morphosyntactic properties of the element in the K-field (here the interrogative pronoun *kuka* ‘who’) depend, moreover, on the structural position of the gap, not on its discourse interpretation. This is not surprising if there is a structural dependency between the fronted constituent and the gap. This assumption is supported by the observation that the dependency follows standard structural conditions of filler-gap dependencies (operator movement) observed in English and other languages (Chomsky 1977; Huhmarniemi 2012). Some of these limitations are demonstrated in (7).

- (7) a. *No movement out of a DP*
 **Kenen₁* *Jari* *ihaili* *kaunista* ___₁ *koti-a?*
 whose.GEN Jari.NOM admired beautiful home-PAR
 Intended: ‘Whose beautiful home did Jari admire?’
- b. **Mikä₁* *Jarin* *ehdotus* *ostaa* ___₁ *tyrmättiin?*
 what.PAR Jari.GEN proposal to.buy was.rejected
 Intended: ‘Jari’s proposal to buy what was rejected?’

- c. *No movement out of an adverbial*
 **Minkä*₁, *Jari* *sai rangaistuksen riko-ttua-an* ___₁?
 what-ACC Jari.NOM got punishment break.TUA-PX/3SG
 Intended: 'For breaking what was Jari punished?'
- d. *No movement from a conjoined clause*
 **Minkä*₁, *Jari* *osti pyörän ja lainasi* ___₁?
 what.ACC Jari.NOM bought bicycle and borrowed
 Intended: 'What was it that Jari borrowed?'

The K-field is perhaps best described as the final landing site of a movement deriving an operator-variable construction, hence it constitutes an “A-bar position” in the standard generative theory. To account for the word order principles involved with the Finnish K-field, one must, therefore, posit an A-bar dependency; merely documenting the fact that a phrase fills in the K-field is insufficient. On the same grounds we can reject any proposal suggesting that these word orders are produced from a semantic representation by linearization guided by “pragmatic intentions” as insufficient.

One principle regulating the dependency between an element in the K-field and the gap in Finnish is c-command. C-command is usually defined in the literature as a variation of the following core definition: X c-commands Y if and only if the sister of X dominates Y, where “sister” and “dominates” rely on phrase structure geometry. Example (8) illustrates violations of c-command in connection with filler-gap dependencies created by an element in the K-field. All these examples are impossible with the given interpretations.

- (8) a. **Pekka* *kysyi* ___₁ *että keneltä₁ hän voisi lainata polkupyörä-n.*
 Pekka.NOM asked that of.who he could borrow bicycle-ACC
 Intended: 'Pekka asked from x: could he borrow a bicycle from x?' or
 'Which person x: Pekka asked from x: could he borrow a bicycle from x?'
- b. **[Kenen₁ veli]* *halusi* ___₁ *nukkumaan?*
 who.GEN brother wanted to.sleep
 Intended: 'Which x: the brother of x wanted x to sleep?'
- c. **Sinun₁-ko* *Jari palautti* ___₁ *tietääksesi kirja-n Merjalle?*
 You.GEN-Q Jari returned to.your.knowledgebook-ACC to.Merja
 Intended: 'Was it according to you that Jari returned the book to Merja?'

Structural properties therefore play a role. Consistent with this explanation, only one phrase per clause can occur in the K-field.

- (9) a. **Ketä₁ viime vuonna₂-ko* *Jari* *ihaili* ___₁ ___₂?
 who.PAR last year-Q Jari.NOM admired
 Intended: 'Was it last year that who Jari admired?'
- b. **Ketä₁ viime vuonna₂-han* *Jari* *ihaili* ___₁ ___₂?
 who.PAR last year-HAN Jari.NOM admired
 Intended: 'Who did Jari admire last year?'

The clause contains a limited number of syntactic slots or positions (here only one such position, the “K-field” itself). There are no higher structural positions for heads or phrases in the Finnish left periphery, so that only one element (head or phrase) may

occupy the CP-layer. A further constraint is that if a head is dislocated to the K-field (10a), no phrase can do the same (10b).

- (10) a. *Ihaili₁-ko Jari ___₁ Merja-a?*
 admire-Q Jari.NOM Merja-PAR
 b. **Ketä₁ ihaili₂-ko Jari ___₁ ___₂?*
 who.PAR admire.Q Jari.NOM
 ‘Did Jari admire Merja?’

Therefore, not only is it impossible to fit two phrases in the K-field, but also the combination of a head and a phrase inside the same field is illicit. Consider (11a–d).

- (11) a. *Pekka-ko ihaili Merja-a?*
 Pekka-Q admired Merja-PAR
 ‘Was it Pekka that admired Merja?’
 b. *Merja-a-han ihaili Pekka.*
 Merja-PAR-HAN admired Pekka.NOM
 ‘It was MERJA who Pekka admired.’
 c. **Pekka-ko Merja-a-han ihaili?*
 Pekka-Q Merja-PAR-HAN admired
 d. *Pekka-ko-han Merja-a ihaili?*
 Pekka-Q-HAN Merja-PAR admired
 ‘Was it PEKKA that admired Merja?’

Examples (11a) and (11b) illustrate two types of phrases that can occur in the K-field: phrases that are suffixed with the yes/no question clitic *-ko*, glossed as Q in this article, and phrases that are suffixed with the second position clitic *-han* (whose semantics are still unclear and not relevant here). What is impossible is a configuration in which both types of phrases are fronted simultaneously (11c). The key observation is (11d), which shows that both features/clitics can be part of the same clause, but only as long as they are at the same element. The features do not clash semantically; the bottleneck is in the syntax, which makes room for one position for an element that carries them. The same pattern extends to all features associated with the K-field. For example, it is possible to combine *-ko* and *-han* with the *wh*-feature to generate an interrogative pronoun such as (*kuka-ko-han* ‘who-Q-han’) but only as long as all features (*wh*, *ko*, *han*) accumulate on the same element.

Also the claim that the K-field is associated with contrastive interpretation has to be amended. It is only partially true: relative pronouns use the same position (Brattico et al. 2013; Huhmarniemi 2012; Huhmarniemi & Brattico 2013b; Vilkuna 1989, 38), as shown in (12).

- (12) *unsi anto jota₁ Pekka maalasi ___₁*
 new car which.PAR Pekka.NOM painted
 K-field T-field V

The relative pronoun does not evoke a contrastive discourse interpretation; it has logico-semantic function (Heim & Kratzer 1998). Discourse does not exhaust the semantic role of the K-field in Finnish. The Finnish K-field seems to constitute a left-peripheral

position targeted by A-bar/operator movement (Huhmarniemi 2012) and is therefore best characterized as an operator position (Brattico et al. 2013).

Sammallahti's (2002, 2003) claim that phrase structural notions such as CP or IP (and therefore also notions such as “c-command” or “syntactic position”) are fictional objects that can be replaced without residuum by a lexico-semantic theory and a tentative linearization algorithm guided by “pragmatic intention” must be evaluated against the type of facts just cited. The facts do not support the nonconfigurationality hypothesis; they support the opposite conclusion.

2.2.3 *The T-field*

Moving next to the second preverbal subject position, the T-field in Vilkuna's analysis, this position is usually said to be associated with the topic (Holmberg & Nikanne 2002; Huhmarniemi 2019; Koskinen 1998; Vainikka 1989; Vilkuna 1989). A phrase from almost any category can occur in this position and is typically interpreted as the topic of the clause. For example, in a typical OVS clause, the direct object is prototypically interpreted as the topic, while the postverbal subject constitutes the information focus (13).

- (13) a. *Pekka* *ibaile-e* *laulaj-i-a.*
 Pekka.NOM admire-3SG singer-PL-PAR
 ‘Pekka (topic) admires the singers (focus).’
- b. *laulaj-i-a* *ibaile-e* *Pekka.*
 singer-PL-PAR admire-3SG Pekka.NOM
 ‘Pekka (information focus) admires the singers (topic).’

The nature of the topic interpretation associated with the preverbal T-field is a matter of debate, but the position is under syntactic control. Some of the most important syntactic properties are as follows. First, the phrase that fills in the T-field must correspond to an empty gap in the same clause, and the thematic and case features of the preverbal phrase are computed on the basis of its canonical position and thus on the basis of where the gap is (14).

- (14) *Merja-a,* *Pekka* *rakasta-a* *—.*
 Merja-PAR Pekka.NOM love-3SG
 ‘Pekka loves Merja (topic).’

Second, the preverbal T-field cannot remain empty, but must be filled in (by an expletive if nothing else), and thus it exhibits a formal EPP feature of some kind (15).

- (15) a. **Ibaile-e* *Pekka* *Merja-a.*
 admire-3SG Pekka.NOM Merja-PAR
 ‘Pekka admires Merja.’
- b. *Sitä* *oltiin* *taas* *ryypäämässä.*
 EXPL were.IMPASS.0 again drinking
 ‘One has again been drinking.’

Third, filling in the T-field is sensitive to S–V agreement or some related condition:

- (16) a. *Pekka sa-a tavata laulaja-n.*
 Pekka.NOM can-3sg to.meet singer-ACC
 ‘Pekka can meet the singer.’
 b. *Laulaja-n sa-a tavata Pekka.*
 singer-ACC can-3SG to.meet Pekka.NOM
 ‘It is Pekka that can meet the singers.’
- (17) a. *Peka-n täytyy tavata laulaja.*
 Pekka-GEN must.0 to.meet singer.NOM
 ‘Pekka must meet the singer.’
 b. **Laulaja täytyy tavata Peka-n.*
 singer.NOM must.0 to.meet Pekka-GEN
 ‘Pekka (focus) must meet Merja (topic).’

Fourth, topicalization is subject to structural island constraints (18–19) and it cannot be long distance (20):⁶

- (18) **Huomenna-ko Merja-n₁ Pekka lainaa —₁ kalliin pyörän?*
 tomorrow-Q Merja-GEN Pekka.NOM borrows expensive bicycle
 ‘Is it tomorrow that, as for Merja, Pekka will borrow her expensive bicycle?’
- (19) **Huomenna-ko kilpailu-n₁ Pekka harjoittelee [voittaakseen —₁]?*
 tomorrow-Q competition-ACC Pekka practices in.order.to.win
 ‘Is it tomorrow that, as for the competition, Pekka practices in order to win it?’
- (20) **?Huomenna-ko kilpailun₁ väitti Pekka että Merja voittaa —₁?*
 tomorrow-Q competition claimed Pekka that Merja wins
 ‘Is it tomorrow that, as for the competition, Pekka claimed Merja will win it?’

The above list contains some of the most salient syntactic properties of the T-field. They are all structural. I am not aware of any proposal explaining any of these observations by relying on discourse properties, communicative pragmatics, or “pragmatic intentions,” to borrow Sammallahti’s phrase. Furthermore, the discourse property of ‘topic’ is insufficient to explain what can appear in the T-field. The expletive, which occurs in the same position (Holmberg & Nikanne 2002), does not constitute a topic. In addition, the preverbal T-field can be filled in by nontopics, such as indefinite quantifiers (21) (Huhmarniemi 2017, 2019).

- (21) *Ilmeisesti joku ihaile-e Merja-a.*
 apparently somebody.NOM admire-3SG Merja-PAR
 ‘Apparently somebody admires Merja.’

In sum, Finnish preverbal syntax appears to be configurational: the K-field is filled in by A-bar movement, and while the ultimate explanation of what fills in the T-field is still debated, it is not controversial that the operation is regulated by structural principles.

⁶ A temporal adverb *huomenna-ko* ‘tomorrow-Q’ appears as a first element in these examples in order to avoid an unintended interpretation in which the moved constituent is interpreted as occurring in the K-field. This is not irrelevant, because long-distance A-bar movement, unlike long-distance topicalization, is possible in Finnish.

Finnish is therefore like Hungarian, a distantly related Finno-Ugric language with relatively free word order but configurational preverbal syntax (É. Kiss 1987, 2002).

2.3 Postverbal syntax

While the claim that Finnish preverbal word order is configurational can be regarded as well-argued, the situation with its postverbal syntax is perhaps less so. Moreover, there is a convincing argument, presented in various forms in the literature since the late 1980s, that the Hungarian postverbal syntax is “flat” (É. Kiss 1987, 2008).⁷ Because Hungarian is distantly related to Finnish, it is possible that the same applies to Finnish. The data we currently have nevertheless suggests that also Finnish postverbal syntax is configurational.

First, although the order of thematic arguments along the projectional spine of the finite clause structure is relatively free, positioning of the grammatical heads is not (Manninen 2003). In a sentence such as (22), only the surface order between grammatical heads is possible; most variations are ungrammatical, extremely marginal or poetic deviations.

- (22) a. *Pekka ei ole halunnut harjoitella kilpailuun.*
 Pekka not be to.want to.practice to.competiton
 ‘Pekka has not wanted to practice for the competition.’
 b. **Pekka ole ei halunnut harjoitella kilpailuun.*
 c. **Pekka halunnut ole ei harjoitella kilpailuun.*
 d. **Pekka harjoitella halunnut ole ei kilpailuun.*
 e. etc.

While Manninen’s claim is true, there are interesting exceptions. One is generated by head movement to the K-field, which can be local (23a) or nonlocal (23b).

- (23) a. *Käski-kö Pekka — hei-dän auttaa Merja-a?*
 order-Q Pekka.NOM they-GEN to.help Merja-PAR
 ‘DID Pekka order them to help Merja?’
 b. *Auttaa₁-ko Pekka käski hei-dän —₁ Merja-a?*
 to.help-Q Pekka.NOM asked they-GEN Merja-PAR
 ‘Was it to help/helping that Pekka asked them to do to Merja?’

Infinitival phrases can move and pied-pipe their heads, producing noncanonical orders between grammatical heads:

- (24) *Pekka-ko [hei-dän nukkua]₁ käski —₁ ?*
 Pekka-Q they-GEN to.sleep asked
 ‘Was it Pekka that asked them to sleep?’

While these data show that the ordering between heads can be noncanonical, the process is regulated by structural principles. The following is a partial list of some of the relevant conditions: heads cannot move downward (e.g., **Pekka —₁ ole nukkunut ei₁* lit. ‘Pekka _

⁷ This position has not been uncontested, however. Surányi (2006) mentions several papers developing the configurational approach to Hungarian syntax and himself argues for a hierarchical postverbal field within which leftward scrambling applies to adjoined positions.

had slept not’); only one head can move to the K-field (**Eikö_i ole-ban₂ Pekka₋₁ -₂ nukkunut?* lit. ‘not-Q be-hAn Pekka₋₁ -₂ slept’); a head cannot move to the K-field if a phrase is moved there (**Pekka-ban₁ ei-kö₂ -₁ -₂ ole nukkunut* lit. ‘Pekka-hAn not-Q₋₁ -₂ had slept’); heads cannot freely reverse positions (**Pekka ole₁ ei₋₁ nukkunut* lit. ‘Pekka had not slept’); heads cannot often be clause-final (*Pekka ole nukkunut ei* lit. ‘Pekka had slept not’); head movement and adjunction is limited to local domains (*...ett-ei Pekka₋₁ ole nukkunut* lit. ‘that-not Pekka₋₁ had slept’ vs. **...ett-ei miksi Pekka₋₁ ole nukkunut* lit. ‘that-not why Pekka₋₁ had slept’). In conclusion, ordering of grammatical heads is rigid, as argued by Manninen, and when variations do occur, they too are syntactically regulated and hence structure-dependent.

Evidence from sentence fragments and coordination further suggests that Finnish does have a VP structure below the finite verbal elements of the clause (25).

- (25) (Manninen 2003, ex. 55–56, p. 38.)
- a. *Mitä Sirkku tekee? Syö suklaa-ta.* (sentence fragment)
 What Sirkku does? Eats chocolate-PAR
 ‘What is Sirkku doing? Eating chocolate.’
- b. *Tytöt söivät ja joivat vatsansa täyteen.* (coordination)
 girls ate and drank stomachs full
 ‘The girls ate and drank so that their stomachs were full.’

Evidence of this type was discussed by Hakulinen & Karlsson (1979), who mention, among other relevant phenomena, VP-deletion (p. 226):⁸

- (26) a. *Saat auttaa, jos osaat (~~auttaa~~).* (=ex. 7b in the original)
 can.2SG help if you.can (help)
 ‘You can help if you can.’
- b. *Kalle saa tanssia kun hän haluaa (~~tanssia~~).* (=ex. 8)
 Kalle can dance when he wants (to.dance)
 ‘Kalle can dance when he wants.’

Third, and perhaps most importantly, Manninen shows (2003, 39–40) that binding is sensitive to postverbal word order:⁹

- (27) a. *Matkalle Espanjaan vei [Pekka äiti-nsä].*
 to.trip to.Spain got Pekka_i.NOM mother-PX/3SG
 ‘Pekka took his mother to a trip to Spain.’
- b. **Matkalle Espanjaan vei [äiti-nsä Peka-n].*
 to.trip to.Spain took mother-PX/3SG Pekka_i.ACC
 Intended: ‘His_i mother took Pekka_i to a trip to Spain.’

Furthermore, while word order is “free” in the finite clause, the phenomenon disappears in infinitival environments (Brattico 2016) (28).

⁸ The authors, while presenting convincing evidence for the existence of the VP-structure in the Finnish finite clause, are only able to reach the conclusion that the existence of the Finnish verb phrase is “unclear” (p. 228). What prompted this skepticism is left unstated.

⁹ The binder in these examples is the third person possessive suffix, glossed as PX/3SG. It requires a c-commanding antecedent.

- (28) a. *Pekka käski [Merja-n harjoitella kilpailuun.]*
 Pekka asked Merja-GEN to.practice to.competition
 ‘Pekka asked Merja to practice for the competition.’
- b. **?Pekka käski [kilpailuun harjoitella Merja-n.]*
 Pekka asked to.competition to.practice Merja-GEN
- c. **?Pekka käski [harjoitella Merja-n kilpailuun.]*
 Pekka asked to.practice Merja-GEN to.competition
- d. **Pekka käski [harjoitella kilpailuun Merja-n.]*
 Pekka asked to.practice to.competition Merja-GEN

Hakulinen & Karlsson (1979) argue that the explanation and description of Finnish nonfinite complement clauses such as (29) requires or at least benefits from the postulation of the VP. The fact that the ordering of infinitival heads *and* their arguments is fixed supports this hypothesis further.

- (29) *Marja haluaa [VP lähteä kotiin nukkumaan.] (=ex. 11a)*
 Marja.NOM wants to.go home to.sleep
 ‘Marja wants to go home to sleep.’

Control also distinguishes postverbal arguments from each other. In the example (30), the thematic null subject of the adverbial (PRO) must refer to the thematic subject of the main clause, and does so even if both arguments remain in the postverbal field, and irrespective of their mutual order.

- (30) a. *Sitä voitti Merja₁ Sirku-n₂ [PRO_{1,+2} juoksemalla]*
 expl won Merja.NOM Sirkku-ACC by.running
 ‘Merja won Sirkku again by running.’
- b. *Eilen voitti Sirku-n₂ Merja₁ [PRO_{1,+2} juoksemalla]*
 yesterday won Sirkku-GEN Merja.NOM by.running
 ‘Yesterday, Sirkku was beaten by Merja by running.’

The Finnish particle *-kin* that triggers a pair-list reading for multiple *wh*-interrogatives also distinguishes the two arguments. In the example below, I use a triple-*wh*-interrogative construction to keep the two interrogative pronouns in their postverbal positions and then show that their postverbal order matters.¹⁰

- (31) a. *Milloin voitti kuka kenet-kin?*
 when won who.NOM who.ACC-KIN
 ‘When did who beat who?’
 (only pair-list reading possible with the particle *-kin*)
- b. **Milloin voitti kuka-kin kenet?*
 when won who-KIN who.ACC
- c. *?*Milloin voitti kenet-kin kuka ?*
 when won who.ACC-KIN who.NOM

¹⁰ Example (31c) is perhaps only marginal. The pair-list reading is hard to get, but not impossible. The construction is quite likely derived by fronting the direct object interrogative to the edge of vP. If this sentence is not ungrammatical, then it is possible that postverbal scrambling can be reconstructed for the purposes of computing the pair-list reading generated by the occurrence of the *-kin* particle.

Finally, I could not find any independent evidence from a published source that Finnish postverbal syntax would be nonconfigurational.

In conclusion, from the evidence currently available it appears possible to reach the conclusion that Finnish is a configurational language, as argued previously by van Steenbergen (1989) and Manninen (2003). The facts warrant even more general conclusion, namely, that in every language, even in those with a “free word order,” the “restrictions on order are quite severe, and therefore rules of realization of abstract structures are necessary” (Chomsky 1965, 134).

3 The movement hypothesis

3.1 Introduction

Perhaps the standard view today, at least within generative theorizing, relies on movement in explaining Finnish noncanonical word order (Hakulinen 1975; Holmberg & Nikanne 2002; Huhmarniemi 2012, 2019; Koskinen 1998; Manninen 2003; Vainikka 1989). I call this the *movement hypothesis*. The movement hypothesis has several variants, discussed below, but where they all agree is in the claim that there exists canonical, fully recursive phrase structure that is manipulated by grammatical operations whose output creates the attested word orders. I will assume that the category of “grammatical operation” is construed in the broadest sense, including any formal-computational mechanism (e.g., standard movement, stylistic movement, rightwards movement, linearization algorithm) that can scramble elements in the canonical structure.¹¹

The movement hypothesis connects word order with discourse interpretation by maintaining that movement is triggered by, or associated with, discourse features. Holmberg & Nikanne (2002), who represent this view, assume that the feature that triggers movement to the subject into the T-field in (3) is a non-focus (topic) feature. The mechanism is syntactic, but the feature triggering the operation has discourse-semantic interpretation. Huhmarniemi (2012) explores the K-field from essentially the same perspective. She assumes that phrases that occur inside the K-field have been moved there from their canonical positions by A-bar movement to check the criterial *wh*-feature and other operator features. In sum, the movement hypothesis does not deny that word order and discourse interpretation correlate; it assumes that they do and tries to explain why the correlation exists.

The movement hypothesis explains the asymmetric properties of both the preverbal and postverbal field, reviewed in the preceding sections, by relying on the notion of *canonical structure*. Binding, control, morphosyntax (in particular, case assignment), canonical word order, thematic role assignment, adverb scope, many movement restrictions and other phenomena occur at the canonical structure (sometimes also called “d-structure”). Noncanonical word orders, which do not participate in determining the above-mentioned phenomena, are derived by manipulating the d-structure.

¹¹ It is of course possible to combine a system of computational word order permutations with nonconfigurationality. Sammallahti, for example, assumed a linearization algorithm that applies to lexico-semantic, conceptual representations (see Section 2.1 in the present article).

We can discern at least three types of approaches assuming the movement hypothesis. One approach (e.g., Chomsky 1965: §4.4) takes the position that what we intuitively view as “discourse-motivated nonconfigurationality” constitutes “stylistic movement” that takes place outside of syntax proper, perhaps at the syntax–phonology interface or as part of the performance component of grammar (see also Chomsky, Gallego & Ott 2019). Vainikka (1989) assumed that several Finnish word order permutations are created in this way. It is possible that, as Vainikka argued, some word order permutations are created inside syntax, while others are more peripheral. Another possibility is that the word order permutations are created by standard movement, such as A-movement and A-bar movement. Finally, it is also possible that at least some word order permutations are generated by nonstandard movement, such as extraposition and/or other forms of “rightward” movement.¹²

3.2 Standard (A and A-bar) movement

Are Finnish word order permutations created by movement and, if they are, is the operation stylistic displacement, standard movement or some form of nonstandard movement? I will simply assume from now on, following Huhmarniemi (2012), that the K-field is filled in by A-bar movement. Nothing in the current literature suggests otherwise.

Let us consider the T-field. A movement hypothesis for topicalization was first assumed in Vainikka (1989) and then further developed or assumed by several authors (e.g., Holmberg 2005; Holmberg & Nikanne 2002; Huhmarniemi 2019; Koskinen 1998; Vilkuna 1995). Holmberg and Nikanne, specifically, proposed that the preverbal T-field is filled in differently by grammatical subjects and nonsubjects: the former is moved to the position by means of A-movement, the latter by means of A-bar movement. The idea is illustrated in (32).

- (32) a. [*Jari*]_i *osti* ______i *uuden* *auto-n*. (subject movement)
 Jari.NOM bought.3SG new car-ACC
 ← (A-movement)
 ‘Jari bought a new car.’
- b. [*Uuden auto-n*]_i *osti* ______i *Jari* ______i. (nonsubject movement)
 new car-ACC bought.3SG Jari.NOM
 ← (A-bar movement)

If the K-field is filled in by A-bar movement, and the T-field as in (32), then a substantial amount of Finnish word order can be captured by assuming nothing but the canonical structure and two standard movement operations, A-movement and A-bar movement. The data examined in Section 2, suggesting that these word order variations have a structural component, no longer pose a problem: the explanation relies on structure.

I agree with the idea that subject topicalization involves A-movement (see also Huhmarniemi 2019) but remain skeptical that nonsubject topicalization constitutes A-bar movement (Brattico 2016, 2018). One reason is that unlike long-distance A-bar movement, long-distance topicalization is not possible (33). (The K-field is filled to avoid

¹² The extraposition approach has not been pursued in the literature. Because it has not been applied to Finnish, I will not discuss it in detail in this article. It merits an article-length treatment.

an interpretation in which the direct object of the embedded clause is A-bar moved to the contrastive focus position.)

- (33) a. **Tänään-kö Merja-n₁ väitti Pekka että tapasi ___₁?*
 today-Q Merja-ACC claimed Pekka.NOM that met
 ‘Was it today that, about Merja, Pekka claimed that he will meet her?’
 b. *Mitä tulee Merjaan...*
 ‘When it comes to Merja...’
 **tänään-kö hänet väitti Pekka että tapasi ___?*
 today-Q she.ACC claimed Pekka that met
 ‘...was it today that Pekka claimed that he met her?’

Long-distance A-bar movement is possible (34).

- (34) *Merja-n-ko₁ Pekka väitti että tapasi ___₁?*
 Merja-ACC-Q Pekka claimed that met
 ‘Was it Merja that Pekka claimed that he met?’

Thus, while topicalization is restricted to the minimal finite clause, A-bar movement is not. The second difference is that while Finnish A-bar *wh*-movement obeys Heck’s edge generalization (Heck 2009; Huhmarniemi 2012), topicalization does not. Example (35) illustrates the edge generalization in connection with A-bar/operator movement. The *wh*-element must occur at the left edge of the phrase that is pied-piped to the sentential scope position at the left edge of the interrogative clause. If any of the movement operations are left undone, the result is ungrammatical (or constitutes an echo-question).

- (35) [[*Mitä kaupunkia₁ kohti ___₁*]₂ *virtaamalla ___₂*]₃ *Seine saavuttaa valtameren ___₃?*
 what.PAR city.PAR towards by.floating Seine reaches ocean-ACC
 ‘By flowing towards which city does Seine reach the ocean?’

This condition is not true of topicalization. Suppose that we topicalize the complement of the preposition *kohti* ‘towards’ in (35). There is no equivalent edge generalization forcing topicalized DPs to occur at the edge of a phrase that is moved to the T-field. All word orders in (36a–c) are acceptable.

- (36) *Mitä tulee Pariisiin...*
 ‘When it comes to Paris...’
 a. [*virtaamalla kohti sitä*]₁ *saavuttaa Seine valtameren ___₁.*
 by.floating towards it reaches Seine ocean
 b. [*virtaamalla [sitä₂ kohti ___₂]*]₁ *saavuttaa Seine valtameren ___₁.*
 by.floating it towards reaches Seine ocean
 c. [[*sitä₂ kohti ___₂*]₃ *virtaamalla ___₃*]₁ *saavuttaa Seine valtameren ___₁.*
 it towards by.floating reaches Seine ocean
 ‘... by flowing towards it will Seine reach the ocean.’

In addition, while discourse context can affect the position of the topic in a sentence, it cannot change the outcome of A-bar/operator movement. In (37a), context creates a

situation in which the topic is in a postverbal position; there is no context that licenses the same position for an interrogative pronoun (37b).

- (37) *Mitä tulee Pekkaan...*
 ‘When it comes to Pekka...’
- a. ... *Merja yritti soittaa hänelle.*
 Merja.NOM tried to.call him (= postverbal topic)
 ‘Merja tried to call him.’
- b. ... **Merja yritti soittaa hänelle-kö?*
 Merja.NOM tried to.call him-Q

Phrases hosting operator features occur in the K-field, while the topic can be situated virtually anywhere in the clause (provided a licensing context). This is possibly related to the fact there is no requirement that the topic *must* be situated in the Finnish preverbal T-field. Even indefinites can occur in this position (38) (see also (21) above).

- (38) *Joku maalasi tämän seinä-n.*
 somebody.NOM painted this wall-ACC
 ‘Somebody painted this wall.’

The ‘subject/topic’ in the preverbal T-field thus behaves differently from a *wh*-pronoun’ in the K-field: the former represents a tendency, modulated by discourse context, the latter a grammatical law rejecting modulation by discourse context.

Finally, the pair-list generator particle *-kin* is sensitive to A-bar movement but not topicalization. In Finnish multiple *wh*-interrogatives, *-kin* must be suffixed to an interrogative element that is c-commanded by another (binding) interrogative at s-structure (39a–b). Examples (39b–d) show that the output of topicalization is not relevant in licensing the *-kin* particle; what matters is the output of A-bar movement.

- (39) a. *Kuka osti mitä-kin?*
 who.NOM bought what.PAR-KIN
 ‘Who bought what?’ (only pair-list interpretation)
- b. **Mitä-kin kuka osti?*
 what.PAR-KIN who.NOM bought
- c. *Mitä kuka-kin osti?*
 what.PAR who.NOM-KIN bought
 ‘What did who buy?’ (only pair-list interpretation)
- d. **Kuka₁-kin mitä₂ osti?*
 who-KIN what.PAR bought

In sum, the hypothesis that Finnish nonsubject topicalization is due to A-bar movement cannot be taken for granted.

3.2.1 Stylistic movement

Let us consider the hypothesis that Finnish discourse-motivated word order variations (topicalization among them) constitutes “stylistic movement,” perhaps post-syntactic displacement taking place in the phonological branch of the derivation. This alternative is assumed by Vainikka (1989), but essentially without argument. I have presented several arguments against this hypothesis (Brattico 2018), but the basic justification is that word

order permutations in Finnish *are* sensitive to syntactic and semantic conditions, such as the EPP principle (40a), phi-agreement (40b), a finite/non-finite distinction (Section 2.3), logical scope and pair-list readings (see the previous section) and discourse properties. Moreover, a head or phrase that is in the K-field cannot be moved out (41), a fact that would remain unexplained if movement were literally post-syntactic.

- (40) a. **Ihailee Pekka Merja-a. / Pekka ihailee Merja-a.*
 admires.3SG Pekka.NOM Merja-par Pekka.NOM admires.3SG Merja-PAR
 ‘Pekka admires Merja.’
- b. **Uusi auto täytyy ostaa Peka-n.*
 new car.NOM gets.3SG to.buy Pekka-GEN
 ‘Pekka must buy a new car.’
- c. *Uuden auton saa ostaa Pekka.*
 new car.ACC must.0 to.buy Pekka.NOM
 ‘Pekka can buy a new car.’
- (41) a. *Ketä₁ Pekka ihailee –₁?*
 who.PAR Pekka.NOM admires –₁?
 ‘Who does Pekka admire?’
- b. **–_{1,2} Pekka ihailee –₁ ketä₂.*¹³
 Pekka.NOM admires –₁ who.PAR

Finally, topicalization is ungrammatical if an indefinite argument is topicalized over a definite subject, showing that the operation is sensitive to quantificational properties of the moved constituents (42) (Brattico 2019c; Holmberg 2005; Välimaa-Blum 1988).

- (42) **Mitä tahansa tekee Aili. / Aili tekee mitä tahansa.*
 what ever does Aili Aili does what ever
 ‘Aili can do anything.’

Perhaps because of the above-mentioned reasons, no well-argued position exists in print explaining Finnish free word order as a ‘phonological’ or ‘extrasyntactic’ phenomenon.¹⁴ The issue requires further scrutiny, however.

3.2.2 *Extraposition and rightward movement*

Another variation of the movement hypothesis is to say that Finnish word order permutations are or can be generated by rightward movement or extraposition. This idea has never, to my knowledge, been proposed seriously for Finnish, yet there are several reasons why it should not be rejected without consideration. First, several Finnish word order permutations, such as topicalization or rightward focusing, are limited to the

¹³ In this example the interrogative pronoun first moves the K-field by A-bar movement (trace 1) and then to the rightward position by the hypothetical post-syntactic displacement rule (trace 2).

¹⁴ Chomsky (1965) discusses such a theory in Section 4.4 and points out that the phenomenon of free word order, or what he calls “stylistic reordering,” falls outside the domain of the theory of ordinary transformations. This is the position taken in the present paper as well. He further suggests, however, that the phenomenon “has no apparent bearing, for the moment, on the theory of grammatical structure” (p. 136). The latter thesis does not follow from the former. This is because while Finnish “stylistic reordering” might not be standard movement, it interacts with several core grammatical principles (e.g., finiteness, agreement, EPP, definiteness, and others).

minimal finite clause, and so is extraposition (Ross 1967). Second, as reported in detail in Brattico (2016, 2018) and already observed in Vilkuna (1989), arguments *can* move into rightward and/or downward direction (43)–(44).

- (43) a. *Varastetun pyörän₋₁ käski Merja-n palauttaa omistajalleen Pekka₁.*
 stolen bicycle asked Merja-GEN to.return to.owner Pekka
 ‘Pekka asked Merja to return the stolen bicycle to its owner.’
 b. *?Varastetun pyörän₋₁ käski Merja-n palauttaa Pekka₁ omistajalleen.*
 stolen bicycle asked Merja-GEN to.return Pekka to.owner
 ‘Pekka asked Merja to return the stolen bicycle to its owner.’
 c. *?Varastetun pyörän₋₁ käski Merja-n Pekka₁ palauttaa omistajalleen.*
 stolen bicycle asked Merja- GEN Pekka to.return to.owner
- (44) *Parisiin halusi₋₁ ajaa autollaan kesällä ilman taukoja Pekka₁.*
 to.Paris wanted to.drive with.car at.summer without pauses Pekka.
 ‘Pekka wanted to drive to Paris during the summer.’

Third, extraposition does not obey the standard properties of A-movement or A-bar movement; but neither do Finnish word order permutations.¹⁵ But there are also problems that might explain why the hypothesis has never been entertained. One problem is that Finnish word order permutations are not limited by direction. Leftward operations, such as those in (45), are also possible.

- (45) a. *Miksi Jukalle₁ lainasi Pekka auton₋₁?*
 why to.Jukka lend Pekka.NOM car
 ‘Why did Pekka lend the car to Jukka?’
 b. *Pekka käski Jukalle₁ Merjan palauttaa avaimet₋₁.*
 Pekka asked to.Jukka Merja.GEN to.return keys
 ‘Pekka asked Merja to return the keys to Jukka.’
 c. *Avaimet käski Jukalle₁ palauttaa Pekka₋₁.*
 keys.ACC asked to.Jukka to.return Pekka.NOM
 ‘Pekka asked to return they keys to Jukka.’

What these data show is that rightward movement together with standard movement are not sufficient to account for the phenomenon as a whole.

3.2.3. Interim conclusion

A good heuristic generalization – not exceptionless, but a good starting point – is to assume that in Finnish a thematic argument can occur in any position in the finite clause. A phrase can undergo leftward movement (e.g., movement to the K-field or to the T-field), rightward movement, and from almost any position into any position, including positions in the ‘middle’ of the sentence. The hypothesis that the phenomenon results from nothing but grammatical movement should therefore be viewed with skepticism, or at the very least something that still requires strong justification. Furthermore, a general notion of “movement” capturing all attested word orders would render the notion of

¹⁵ An anonymous reviewer points out that rightward movement does obey some principles of standard A/A-bar movement, such as island conditions. That is true. To my knowledge the issue remains unaddressed for Finnish.

“grammatical movement” devoid of empirical content, allowing movement into any direction and position. An empirical phenomenon, noncanonical word order in this case, would be explained by relying on a theoretical construct, grammatical movement, that has no direction and bears no resemblance to anything existing in previous literature.

4 The adjunction hypothesis

If the hypothesis that Finnish is configurational is well-supported, but the idea that it is explained in its entirety by relying on A-bar movement, stylistic movement or extraposition is not, what is the alternative? Let us begin with the observation that many free word-order variations behave as if they were not interacting syntactically with the surrounding structure. Consider the following noncanonical positioning of the grammatical subject:

- (46) a. *Illalla auto-n palautti Jariille Pekka.*
 evening car-ACC returned to.Jari Pekka.NOM
 ‘In the evening, Pekka returned the car to Jari.’
 b. *Illalla auto-n palautti Pekka Jariille.*
 evening car-ACC returned Pekka.NOM to.Jari
 ‘In the evening, Pekka returned the car to Jari.’

Whether the grammatical subject occurs, for example, in the last position (46a) or the second last position (46b) has no impact on selection, thematic role assignment, case assignment or labeling. Developing the original proposal by Baker (1996), Chomsky (1995: 4.7.3) and Jelinek (1984), I have proposed that thematic arguments, such as the grammatical subject in (46), can be attached to the phrase structure as case-licensed adjuncts (Brattico 2016, 2018, 2019b). Specifically, after being first-merged to the structure in their canonical positions (where they receive thematic roles and are decorated with morphosyntactic properties), arguments can be remerged or “floated” into a different position as an adjunct. The fact that thematic arguments can be attached to the phrase structure as adjuncts explains why their ordering is free and why they behave as if they were not part of the structure. I call this the *adjunction hypothesis*. The key idea is that instead of unifying the free word order phenomenon with standard movement, it is unified with the placement of adverbials.

One motivation for this analysis is the fact that the distribution of adverbials is similar to the distribution of arguments in Finnish. Both adverbial dislocation and free word order are limited to the minimal tensed clause. No long-distance adverbial displacement is possible (47).

- (47) **Kuka nopeasti_i sanoi että Merja juoksi _{-i}?*
 who fast said that Merja ran
 ‘Who said that Merja ran fast (=topic)?’

Second, while the positioning of thematic arguments correlates with discourse, the same is true of adverbials. In (48a), in which the adverbial is in the topic position, it is interpreted as representing something familiar from prior discourse. For example, it is implied that it has already been discussed or at least mentioned that somebody’s going to sleep. If the adverbial occurs towards the end of the clause, as in (48b), it is interpreted as

being either in the informational focus or as being in a neutral, canonical (all-new) position. This mirrors the discourse interpretation of arguments.

- (48) a. *Kuka [mentyään nukkumaan] kuorsasi koko yön?*
 who went.TUA.3SG to.sleep snored whole night
 ‘Who snored the whole night after s/he went to sleep?’
 b. *Kuka kuorsasi koko yön [mentyään nukkumaan?]*
 who snored whole night went.TUA.3SG to.sleep
 ‘Who snored the whole night after s/he went to sleep?’

Third, the fact that both the thematic argument and the adverbial are adjoined to the structure explains why their position is “free.” Much like thematic arguments, an adverbial in Finnish can occur almost in any position.

- (49) *Pekka käski Merja-n (huomenna) palauttaa (huomenna) kirjan*
 Pekka asked Merja-GEN (tomorrow) to.return (tomorrow) book.ACC
(huomenna) Jukalle (huomenna)
 (tomorrow) to.Jukka (tomorrow)
 ‘Pekka asked Merja to return the book to Jukka tomorrow.’

Free word order and adverbial dislocation are both directionless. A manner adverbial that occurs towards the end of the clause in a canonical configuration can dislocate to the left, whereas a sentential adverbial that occurs canonically towards the left of the clause can move to the right (49). Although the distribution of adverbials and thematic arguments is not identical, there are similarities that do not seem to be accidental. Moreover, a theory of the “free” adverb ordering is required independently; thus, it remains a theoretical possibility that such a theory, when developed formally, generalizes automatically to thematic arguments. Finally, adjunct and adverbial displacement do not obey the edge generalization, which distinguishes the operation from standard operator/A-bar movement. If nonsubject topicalization is adjunction, then the lack of a snowballing/edge generalization in connection with such an operation no longer poses a problem.

The adjunction hypothesis has several problems, however. One problem is that the adjunction operation was not formalized in the sources cited, and so we do not know what it is and how it works, making it difficult to know what exactly this hypothesis predicts. The movement hypothesis fares much better in this arena, relying on fifty years of literature discussing such operations. The problem is not only that without a formal, rigorous theory of adjunction it is difficult to say what the theory predicts, but also because the operation of ‘adjunction’ itself is controversial in current linguistic theorizing. This is problematic also from the point of view of the fact that adverbials and thematic arguments do not have identical distribution. For example, it is well-known that the referential properties of arguments, e.g., whether they are definite or indefinite, affects their ordering (Brattico 2019c; Välimaa-Blum 1988); adverbials do not exhibit such properties. Thus, unlike in the case of the standard movement hypothesis discussed

earlier, the adjunct hypothesis has not yet been sufficiently developed so that it could be tested or compared with the movement hypotheses.¹⁶

5 Discussion and conclusions

The nonconfigurationality hypothesis, the movement hypothesis and the adjunction hypothesis were considered as explanations for the Finnish free word order phenomenon. The nonconfigurationality hypothesis explains free-word order by assuming that Finnish has no syntax, but it suffers from lack of supporting evidence. The movement hypothesis assumes that Finnish has phrase structure syntax and derives word orders by applying grammatical operations to a canonical structure. Indeed, both preverbal and postverbal word orders are controlled by syntactic conditions in Finnish. However, a variation of the movement hypothesis that relies on standard forms of movement suffers from the fact that not all word order possibilities obey such standard conditions. A movement hypothesis that relies on nonstandard forms of movement remains a possibility but has not been argued in print. Finally, the adjunction hypothesis, the third hypothesis examined in this paper, wrongly predicts that the distribution of arguments should be the same as the distribution of other sentential adjuncts, and furthermore relies on the grammatical operation of ‘adjunction’ that is controversial.

Perhaps the most conservative position, taking all the facts into account, is an analysis which relies both on movement and adjunction. The evidence in favor of the hypothesis that the Finnish operator position is filled in by standard A-bar/operator movement is overwhelming and cannot in my view be rejected on rational grounds. The filler–gap dependency created by the K-field satisfies all the criterial properties of A-bar movement (Chomsky 1977). It would be pointless to try to argue that such word orders are created by adjunction or communicative pragmatics. At least *some* word orders are produced by standard operator movement. As argued by Huhmarniemi (2012) and Huhmarniemi & Brattico (2013a), the same logic applies to Finnish internal operator movement. Consider, for example, the free ordering of arguments inside phrases that undergo *wh*-pied-piping in Finnish. The phenomenon is illustrated by (50) and (51). In (50), the DP-complement of an adposition occurs both in the prepositional (a) and postpositional (b) positions, with little or no difference in meaning. The same reasoning could apply also to the argument–adverbial ordering exhibited by (51).

- (50) a. *Seine virtaa [kohti Pariisi-a.]*
 Seine.NOM flows towards Paris-PAR
 ‘Seine flows towards Paris.’
- b. *Seine virtaa [Pariisi-a kohti ____.]*
 Seine flows Paris-PAR towards
 ‘Seine flows towards Paris.’
- (51) a. *Pekka parantui [syömällä lääkkei-tä.]*
 Pekka healed by.eating medicine-PAR
 ‘Pekka was cured by eating medicine.’

¹⁶ I have developed the proposal formally in unpublished work (Brattico, 2019a, 2019b) that will not be discussed in this review. The main point is that in order to compare the adjunction hypothesis and the movement hypothesis some formalization is necessary.

- b. *Pekka parantui [lääkkei-tä syömällä —].*
 Pekka healed medicine-PAR by.eating
 ‘Pekka was cured by eating medicine.’

It is possible that these variations are created by internal A-bar movement similar to internal *wh*-movement reported in the sources cited. While this does not constitute a demonstration that these *are* instances of A-bar movement, it remains a possibility, suggesting that A-bar/operator movement could have a larger role in explaining Finnish word order than just filling in the sentential operator field. Disentangling A-bar movement from, e.g., adjunction or other displacement operations constitutes an interesting topic that remains unexplored.

The status of the T-field is controversial. There is agreement in the literature that the position is configurational, in fact most likely the Spec,TP or Spec,FinP position of the standard theory (Holmberg & Nikanne 2002; Huhmarniemi 2019; Vainikka 1989; Vilkuna 1995). Several papers have proposed that subject topicalization is a form of A-movement (Brattico 2019c; Holmberg & Nikanne 2002), but the matter remains difficult to argue due to the limited number of relevant constructions and the local nature of the operation, rendering convincing experimentation difficult. Nonetheless, there is no direct evidence against the hypothesis. Nonsubject topicalization has been treated as standard movement or adjunction; it is too nonlocal and morphosyntactically inert to constitute A-movement. I have proposed that nonsubject topicalization is adjunction, which tries to capture the several differences between A-bar movement and topicalization. For example, nonsubject topicalization, like adverbial topicalization, is limited to the minimal finite clause, whereas A-bar/operator movement is not. A proponent of the movement hypothesis should find an alternative explanation for these differences, a task that remains to be done.

Postverbal word order remains understudied. I see little prospect in capturing the phenomenon in its entirety by relying on extraposition or nonstandard stylistic/phonological movement; the latter because many of these operations are under syntactic control, the former because the postulated “rightward movement” must then target almost any position to the right of the canonical position. The adjunction hypothesis was proposed to handle these cases, as adverbials exhibit similar freedom in ordering. Specifically, adverbial order does not care about the left-right direction or the landing site (i.e. whether it is leftmost, rightmost or something between). A-bar movement could still, even if the adjunction hypothesis were partly true, be applied to some cases of postverbal word ordering; yet convincing and theory-neutral evidence is hard to come by.¹⁷

The correlation between word order and discourse merits a comment. The correlation itself is uncontroversial; what is subject to controversy is the direction of causality. Since there is no evidence for radical nonconfigurationality, the idea that Finnish word order could be explained by relying on discourse or communicative pragmatics without structural constraints does not look promising. All of the facts mentioned in Section 2 would remain unaccounted for. The evidence supports a less radical starting point. The existence of both syntax and discourse should perhaps be assumed, and then the problem should be formulated as a question concerning their interaction. One possibility is that in Finnish discourse-semantic properties are ‘read off’ from the syntactic structure (or that they guide “free choice” in linguistic production) but

¹⁷ That is, evidence that can distinguish the adjunct hypothesis from the movement hypothesis.

are not otherwise part of narrow syntax. Another possibility is that the discourse features are part of narrow syntax. There exist uncontroversial examples of both situations. Consider the semantic property of ‘being round and red’. Whether some constituent denotes something that has this property is not visible in narrow syntax: there are no syntactic laws, conditions or principles that are sensitive to such a property. On the other hand, the property of being ‘definite’ belongs to the second group: some syntactic laws are sensitive to this attribute. When it comes to discourse, the matter therefore boils down to the question of whether there are or are not (structure-dependent) syntactic laws, conditions or principles that are sensitive to notions such as ‘topic’ or ‘focus’. An argument for such laws must show what the laws are and how they are supported by empirical evidence; and the opposite conclusion can be supported by showing that the proposed laws do not exist and/or they are better explained by relying on something else (for recent discussion, see Chomsky, Gallego & Ott 2019).

Consider the fact that a phrase that occurs in the preverbal subject position in Finnish typically receives the topic interpretation. This led many authors, including Holmberg & Nikanne (2002), to assume that the preverbal position involves the checking of a topic feature (or ‘non-focus’ feature). But the problem, well-known at least since Vilkuna (1989), is to explain the grammaticality of finite clauses in which the preverbal subject is *not* a topic, such as expletive constructions and sentences of the type (52). In this sentence, the direct object constitutes the topic while the preverbal subject is an indefinite DP.

- (52) *Mitä tulee Pekkaan, joku yritti tavoitella hän-tä.*
 when it comes to Pekka, somebody.NOM tried to.reach he-PAR
 ‘When it comes to Pekka, somebody tried to reach him.’

In addition, I have argued based on these and other facts that the preverbal T-field is not associated with topic interpretation but with definiteness (Brattico 2019c). The fact that a logico-semantic relative pronoun can fill in the K-field suggests that discourse-configurationality plays only a secondary role in the K-field. Whether there are laws, conditions or principles regulating Finnish preverbal syntax while relying on discourse notions such as topic or focus is therefore not known. In sum, then, whether Finnish is discourse-configurational is currently an open problem; whether it is configurational is not.

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'The Whole of Us Were There'

A Little-known Grammaticalisation Process in Hungarian

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The first aim of this work is to provide an explanation to an exotic-looking expression used in Transylvania and in the Csángó regional variant of Hungarian. *Az egészen* lit. 'the whole-N' is synonymous to *mind* 'all (from a given set)'. This expression is shown to be the product of a grammaticalisation process starting with *egész* 'healthy', 'whole', 'complete'. This was to be expected, as such processes have occurred in several languages, and there is even an ongoing process in present-day German (Haspelmath 1995). Historical records have provided the missing links between the adjective *egész* and the operator *az egészen*. Records have revealed that this process in fact followed two diverging tracks, which is a finding of theoretical, as well as empirical, interest. One of these tracks characterises the entire Hungarian linguistic community, and only the last stages of the second track (*az egész* as a universal determiner of count nouns) are confined to Transylvania and the csángó variant. Yet another track we discovered was the reanalysis of adverbs derived from *egész*: some of these adverbs entail a so-called individual-oriented reading (paying the money in full entails paying all the money). Such readings could have facilitated the emergence of today's *az egészen*, but they are also relevant in their own right.

Keywords: *grammaticalisation, diachronic semantics, quantification.*

1 Introduction

This contribution was motivated by an observation: there is a peculiar expression in present-day Hungarian, *az egészen* lit. 'the whole-N', which is used synonymously with *mind*, *mindnyájan* 'all'.¹ The suffix *-n* is the same suffix that attaches to numerals of determiners (e.g. *hármán* 'three-N', or *sokan* 'many-N'); this suffix will receive some discussion in Section 2. A first example with *az egészen* is (1) below. *Az egészen* is typical of Transylvania and the Csángó regional variant of Hungarian (spoken in the Moldova/Moldavia region of Romania), and is not used by speakers in Hungary. It is sub-standard, and is judged as inappropriate or 'ugly' by educated speakers in Transylvania. Data from present-day Csángó

¹ This paper uses the following abbreviations for grammatical terms: ABL = Ablative, ACC = Accusative, ADJ.SFX = adjectival suffix, CAUS = Causative verbal suffix, CAUSFIN = Causal Final, COND.OPT. = Conditional Optative, DAT = Dative, DEF.ART = definite article, DEFO = verbal suffix for definite object, DELA = delative, DIMIN = diminutive suffix, ELA = Elative, FEM = feminine, ILL = Illative, IMP = Imperative, INE = Inessive, INF = Infinitive, INSTR = Instrumental, MASC = masculine, MOE = Modal-Essive, PART = Participle, PASS = Passive, PFX = Prefix, PL = Plural, POSS = Possessive, PRES = Present, PRES.PART = Present participle, REFL.SFX = reflexive verbal suffix, SG = Singular, SOC = Sociative, SPRESSV = Superessive, SUBL = Sublative, SUBJ = subjunctive, TEMP = Temporal, TERM = Terminative.

have revealed that there is also a quantificational determiner *az egész* lit. ‘the whole’, which can combine with count nouns, and acts like a universal quantifier. This will be discussed in detail in section 4.

- (1) *Meg-érkez-t-ünk az egész-en.*
 PFX-arrived-PAST-1PL the whole-N
 ‘All of us have arrived.’

The guiding hypothesis of this work has been that *az egész-en* is the result of a grammaticalisation process attested in several languages (Haspelmath 1995): An open-class adjective (or adverb) meaning ‘entire’, ‘whole’ is reanalysed as a maximality operator meaning ‘all’. The existence of suffixed *az egész-en* indicates that a similar process must have been at work during the history of Hungarian, so that the adjective *egész* ‘whole’, ‘entire’ has evolved into an operator/quantifier. Throughout this paper *az egészen* will be taken as a synonym of *mind* ‘all’; *mind* in turn was defined in earlier work as a maximality operator that takes a collection as input, and returns the maximal individual from that collection. Since this paper does not offer a rigorous formal analysis, nothing hinges on the assumption that *az egészen* is equivalent to *mind*.

The principal aim of this paper is to find evidence for such a process, and to map its stages. The data (collected from several sources, including Old Hungarian codices, and the Historical Dictionary of Transylvanian Hungarian) confirm the existence of a grammaticalisation process. In addition, there are several unexpected results. Perhaps the most conspicuous finding is that the evolution of (*az*) *egész* involved several pathways so to speak, and that some of these paths are not exclusive to Transylvania or the Csángó community. The data have also raised several questions relating to semantic theory, more exactly, to the semantics of plurals and mass terms, and to the mapping between individuals and events. These issues are clearly outside the scope of this paper; here, we could but hint at them.

This paper is structured as follows.² Section 2 presents the main data on *az egész-en* from Modern Hungarian, and a brief description of the syntax-based semantics of *az egész-en* is offered. Section 3 presents a cross-linguistically attested grammaticalisation path, from adjectives meaning ‘whole’, ‘entire’, to quantifiers/operators meaning ‘all’; presentation will follow Haspelmath (1995) quite closely. The next section presents diachronic data, which show that (i) this grammaticalisation process did in fact take place, and (ii) it was not confined to Transylvania or the Csángó region. In section 4.7 it is shown that *egész* is used as ‘all’ in the entire Hungarian linguistic community, albeit with special construals. With these construals, *az egész* has practically replaced *mind* (the ‘official’ entry for *all*). Against this background, the original data from present-day Transylvanian and Csángó are shown to be the final stage of the grammaticalisation process. That is, we need to revise our initial assumption that *az egész-en* is the reflex of an ongoing process.

² This paper contains a large quantity of data. Readers more interested in discussions can skip the data and jump to summaries and discussions. In particular, subsections 2.1, 4.4 and 4.5 can be skipped altogether.

2 *Az egészen*: Data from the 20th and 21st centuries

In this section we present and discuss data with *az egészen* ‘all’, gathered from the Internet. Most of these hits either quote spoken utterances, or are written (directly on the Web) by speakers of a ‘substandard’ register. (The discussion in 2.2 will also present data generated by the author.)

2.1 The data proper

The example in (2) illustrates a salient property of *az egészen* ‘all’: A collective entity (a team of thirty or forty people) is introduced in the first sentence, and *az egészen* in the second sentence refers back to this entity.

- (2) a. *Amikor Brassó-ba ér-t-ünk, harminc-negyven fő-s csapat*
 when Braşov-ILL arrive-PAST-1PL, thirty-forty head-ADJ.SFX team
le-tt-ünk. ...
 became-PAST-1PL. ...
 ‘By the time we arrived in Braşov (by train), we became a team of thirty or forty.’
- b. *Este a szentgyörgy-i vonat-on egy fülké-ben*
 evening the St.George-ADJ.SFX train-SPRESSV one compartment-INE
ül-t-ünk az egészen-en.
 sat-PAST-1PL the all-N
 ‘In the evening, on the train to St. George, all of us would be sitting in the same compartment.’
 (Edó Gergely’s blog, edo.transindex.ro, 3 May 2012)

The following example, (3), is relevant because it is from Slovakia. This is the only attested example from outside Romania.

- (3) a. *Nagymama oszt vissza-jöt karácsony-kor is,*
 Granny then back-came Christmas-TEMP too,
 ‘Then Granny came back at Christmas as well,’
- b. *it ül-t-ünk az egészen-en.*
 here sit-PAST-1PL the all-N
 ‘all of us would be sitting here’ (L. Juhász 2002, 160)

In example (4) the relevant collection is spelled out: It is the sum of the addressee’s stepfather, his brother, and the addressee himself.

- (4) a. *“azt mondta na, mi itt, itt vagy-unk az egészen-en.*
 that-ACC said well, we here, here be-PRES.1PL the all-N
 ‘He (the stepfather) said, well, all of us are here now.’
- b. *Itt van mostohaapá-d, Jani bátyá-d, és ... itt vagy te*
 here is stepfather-POSS.2SG, Jani brother-POSS.2SG, and ... here are you
is, ...”
 too, ...
 ‘Your stepfather is here, your brother Jani is here, and ... you too are here’
 (muvelodes.ro, Csongor Könczei quoting Sándor Netti Fodor, 2008)

The attentive reader may have noticed that all the examples so far involve a group that includes the speaker; the associate of *az egész-en* in these cases is a first person plural pronoun (overt or covert). One may wonder (as, indeed, a reviewer has wondered) whether the use of *egészen* is confined to such deictically anchored groups. The following examples show that this is not always the case. Although the overwhelming majority of cases involve groups including the speaker, it is also possible to have groups that include the hearer, or even groups that lack any kind of deictic feature.

- (5) *ők Peti, Robi és Tomi, és az egész-en egy kis szobá-ban lak-nak*
 they Peti, Robi and Tomi, and the whole-N one little room-INE live-3PL
 ‘they (a group of comedians) are Peti, Robi and Tomi, and they all share one small room.’
 (transindex.ro, *A Szomszédnéni Produkciós Iroda ismét támad (The Neighbour Auntie Bureau on the Offensive Again)*, 7 March 2002)

The following is from a novel by Gábor Boros of Máramarosziget, the author of several romances and fantasies.

- (6) *–Gondol-t-am, hogy er-re fog-tok gondol-ni az egész-en! – néz-ett*
 –thought-1SG, that this-SUBL FUT.AUX-2PL think-INF the whole-N – looked
vég-ig az ember-ünk a család többi tagjá-ra
 end-TERM the man-POSS.1PL the family other member-POSS.3SG-SUBL
 ‘–I knew all of you would think of this – our man swept his gaze over the other members of the family.’ (Boros, 189)

Interlude: Why *az egészen* is officially unacceptable

Currently, *az egész-en* is used relatively frequently in Transylvania and in the Csángó community, while a kind of collectively formed normative judgement (discernible from online discussions) condemns it.³ One reason for this could be that speakers are aware that it is not part of the over-all Hungarian inventory; another reason could be that Hungarians in Transylvania (most of whom are also speakers of Romanian) perceive a parallel with Romanian *tot, toți* ‘entire’, ‘all’, which could very well ‘taint’ *az egészen* for them.

- (7) a. *Ion a măturat toat-ă cas-a.*
 John has swept all-FEM.SG house-DEF.ART.FEM.SG
 ‘John has swept through all the house/the entire house.’
 b. *Ion a măturat (prin) toat-e case-le.*
 John has swept (through) all-PL.FEM house-DEF.ART.FEM.PL
 ‘John has swept (through) all the houses.’ (not necessarily a full sweep in each house) (Romanian)

The plural form of *tot*, viz. *toți*, can also be used on its own, to link to a familiar collection:

³ *Az egész-en* is hard to find, especially in written texts, since it is substandard. With the advent of the Internet, and with formal registers losing some of their prestige, *az egész-en* is expected to be more frequent. At present the author has a mini-corpus of about 100 sentences, culled from the Internet.

- (8) a. *Toț-i au venit*
 All-PL.MASC have come
 ‘All of them have come.’
- b. *Suntem aici toț-i/cu toț-ii*
 Are-PL.1 here all/with all-DEF_ART.PL.MASC
 ‘All of us are here.’ (Romanian)

Even though the presence of Romanian *tot–toți* could have facilitated the evolution of *egész* in Transylvania, it is useful to bear in mind that diachronic data will show that this process can be detected over the entire Hungarian linguistic community. The influence of Romanian may have led to some divergences between ‘mainstream’ Hungarian on the one hand and Transylvanian, Csángó on the other, but it was by no means the sole factor in the evolution of *az egész-en*.

2.2 *Az egészen* and the suffix *-n*

The following is a concise checklist of morphosyntactic and semantic properties of the data shown so far. Discussion will eventually shift to the syntax and semantics of the suffix *-n*.⁴

1. In the examples shown here, *az egész-en* is interpreted as ‘all from a contextually given set’. As such, it is a synonym of *mind* ‘all’ or *mindnyájan* ‘all from a given set’. The set ‘invoked’ by *az egészen* can be made explicit in discourse, but it can also be deictically given, or inferred.
2. *Az egész-en* has become a fixed expression, the definite article being mandatory, as noted by a reviewer. (Later examples will show that the determiner *az egész* ‘all’ is also of this form.) This is similar to *az összes* ‘all’, and *a legtöbb* ‘most’, which are used by the entire linguistic community. These expressions seem to conform to the thesis in Matthewson (2001), viz. universal/strong determiners contain, or involve, a definite article; at this stage, however, there has been no in-depth analysis of Hungarian determiners that would explain the obligatory presence or absence of the article. The reviewer also mentioned *az összes-en*, derived from the determiner *az összes*, similarly to *az egész–az egész-en*. The possibility of suffixing *az összes* and *az egész* with *-n* is limited to Transylvania and the Csángó region (cf. remarks in Schvarcz 2019).
3. The data collected so far do not make it clear whether *az egész-en* is compatible with a (genuinely) collective or a reciprocal reading. According to our own judgement, the collective reading of (9a) is at least awkward, whereas (9b) is acceptable. It is noteworthy that *mind* ‘all’ behaves in a similar manner:

- (9) a. *??Az egész-en / ??Mind fel-vitték a zongorá-t az emelet-re.*
 the all-N / all up-took the piano-ACC the upper.floor-SUBL.
 ‘All of them carried the piano upstairs.’ (Intended: ‘The piano was carried upstairs, and all of them participated in this event.’)
- b. *Az egész-en / mind körül-áll-t-ák a bíró-t*
 the all-N / all around-stand-PAST-3PL.DEFO the referee-ACC
 ‘They all surrounded the referee.’

⁴ It has been suggested by a reviewer that the suffix *-n* deserves a lengthier discussion, perhaps a separate section or subsection. This would unfortunately have made this paper even longer; luckily, a meticulous and formally explicit analysis has recently been offered in Schvarcz (2019).

Reciprocal readings are acceptable, whether it is with the reciprocal pronoun *egymás* ‘each other’, or with a verbal suffix. Again, *az egészen* patterns with *mind* ‘all’.⁵

- (10) a. *Az egész-en / Mind keze-t fogtak egymás-sal.*
 The all-N / All hand-ACC grab-PAST-3PL each.other-INSTR
 ‘They all shook hands with each other.’
 b. *Az egész-en / Mind össze-vere-ked-t-ek.*
 The all-N / All together-beat-REFL.SFX-PAST-3PL
 ‘All of them started to beat up on each other.’

Collective predicates and reciprocals show *az egészen* patterning with *mind* ‘all’, from which we can conclude that *az egészen*, like *mind*, does not require distribution over single atoms.

4. The suffix *-n* is the same suffix that in Hungarian (in the entire linguistic community) is attached to numerals and determiners. The exact nature of its output is a matter of debate. According to Csirmaz & Szabolcsi (2012), Hungarian has a single, semantically underspecified suffix *-n*. This suffix can yield an adverb (e.g. *gyors* ‘quick’, ‘fast’ vs. *gyors-an* ‘quickly’, ‘fast’, ex. (2) on p. 400). In addition, “[t]he same suffix on a quantifier yields a predicative element. The predicative quantifier requires a human argument” (Csirmaz & Szabolcsi 2012, 400).⁶ Indeed, in all of Csirmaz and Szabolcsi’s examples the suffixed numeral/determiner contributes a property of an overtly introduced collection:

- (11) a. *{A diákok / *a könyvek} hárm-an voltak*
 the students / the books three-N were
 ‘The students/the books were three.’
 b. *A legtöbb-en {az elsős diákok/??a vadász-kutyák} voltak*
 the most-N the first.year students/the hunting-dogs were
 ‘The first-year students/the hunting dogs were the most numerous.’
 c. *{A diákok/*a könyvek} mindannyi-an a szobában voltak*
 the students/the books all.as-many-N the room-INE were
 ‘The students/the books were all in the room.’
 (Csirmaz & Szabolcsi 2012, ex. (3), 400)

⁵ DPs with *minden* ‘every’ do not ‘tolerate’ collective predicates or reciprocals:

- (i) a. *??Minden fiú fel-vitte a zongorá-t az emelet-re.*
 every boy up-took the piano-ACC the upper.floor-SUBL
 ‘Every boy carried the piano upstairs.’
 b. *??Minden fiú körül-áll-t-a a bíró-t.*
 every boy around-stand-PAST-3PL-DEFO the referee-ACC
 ‘Every boy surrounded the referee.’
 c. *??Minden fiú keze-t fogott egymás-sal / össze-vere-ked-ett.*
 every boy hand-ACC grabbed each.other-INSTR / together-beat-REFL.SFX-PAST
 ‘Every boy shook hands with each other/started to beat up on each other.’

⁶ The term ‘predicative quantifier’ is directly related to Keenan’s Questionnaire (Keenan 2012), viz. whether a language can have bare quantifiers as predicates.

Csirmaz and Szabolcsi do not discuss cases when the N-marked quantifier has subject-like properties, and appears, for instance, in the preverbal Topic position:

- (12) *Három-an* már meg-érkez-t-ek
 Three-N already PFX-arrive-PAST-3PL
 ‘Three (of them) have already arrived.’

According to Schvarcz (2019), the suffix that attaches to numerals/determiners is a modal-essive (MOE) suffix, and its output is a ‘nominal’, ‘nominal’ in this context meaning ‘DP denoting a collection’. Indeed, *hároman* in (12) appears to be the subject of the sentence. For Schvarcz’s analysis ‘predicative’ construals of MOE-marked determiners are derived, whereas on Csirmaz and Szabolcsi’s account it is the quasi-nominal, or DP-like construal of ‘predicative quantifiers’ that requires an explanation. In this paper we cannot go into a detailed commentary of these two types of approaches, nor can we develop our own analysis. That being said, the intuition is that the DP-like construal of MOE-marked determiners is their primary construal, and a predicative construal needs to be derived, perhaps similarly to the manner that predicative interpretations of indefinites and other DPs are derived (Partee 1987).

5. As regards their syntactic category, determiners suffixed with *-n* look like DPs, with a silent NP component. The silent NP has to be at least animate, as seen in the contrast between (14a) and (14b) (and also in (11), cited from Csirmaz & Szabolcsi 2012).⁷

- (13) a. *Egy kosár-csapat-ban öt-en* vannak
 one basket-team-INE five-N are
 ‘A basketball team has five players.’
 b. *Egy kosár-csapat-ban öt játékos* van
 one basket-team-INE five player is
 ‘A basketball team has five players.’
- (14) a. *Egy kosár-csapat-ban a játékos-ok öt-en* vannak
 one basket-team-INE the player-PL five-N are
 ‘In a basketball team the players are five (in number).’
 b. *??Egy víz-molekulá-ban a hidrogén-atom-ok kett-en* vannak.
 one water-molecule-INE the hydrogen-atoms two-N are.
 Intended: ‘Water molecules contain two hydrogen atoms.’

Since *az egész-en* is clearly synonymous with *mind* ‘all’, which has tested positive for adverbial tests (e.g. Hámori 1957, Bende-Farkas 2014b), it is tempting to define *az egészen* as an adverb. Pending a more detailed investigation of *az egészen*, we will simply label all *-n*-marked DPs as XPs.

6. Syntax, in the sense of sentence-internal distribution: Like other XP-s with *-n*, *az egészen* can only be a subject. Whether *az egészen* is a subject in its own right, or whether it doubles a covert subject is a matter for syntactic research.⁸

⁷ In the remainder of this section, unless otherwise indicated, all examples with *az egészen* have been generated by the author, for testing purposes.

⁸ A syntactic difference between *az egészen* and *mind* ‘all’ is that floating *mind* can associate with an overt subject or object:

- (15) a. **Meg-buk-tat-t-am kett-en-t / az egész-en-t.*
 PFX-flunk-CAUS-PAST-1SG two-N-ACC / the whole-N-ACC
 Intended: ‘I’ve flunked two/all of them.’
 b. **A tanár jeles-t adott kett-en-nek / az egész-en-nek.*
 the teacher A.plus-ACC gave two-N-DAT / the whole-N-DAT
 Intended: ‘The teacher gave an A-plus to two/all of them.’

When preverbal, *az egészen*-XPs are typically part of the so-called preverbal Focus field, an ‘area’ for expressions that are somehow marked from an information structure point of view. (The Hungarian Focus field is said to properly include the Focus position itself, and is also the natural habitat of XP-s with *is* ‘too’ or *még ... is* ‘even’. The concept was introduced in Brody 1990; see also Piñón 1992.) Returning to *az egészen*-XPs: They cannot occupy the Focus position itself, as indicated by the position of the verbal prefix *el-* ‘away’.⁹

- (16) *Tegnap az egész-en / mind el-jöttek / *jöttek el.*
 yesterday the whole-N / all away-came / came away
 ‘Yesterday all of them came around.’

The following two examples show that such an XP can have a Focus discourse function, without actually occupying the Focus position itself. That is, *az egészen* (like *mind* ‘all’ and its ilk) can be congruent to a question such as (17a), even though it does not fill the Focus position itself. (On the discrepancies between the Focus discourse function, viz. question–answer congruence, and Hungarian syntactic Focus, cf. Kenesei 1998, Kenesei 2009, or Roberts 1998.)

- (17) a. *Hány-an buktak meg?*
 how.many-N flunked PFX
 ‘How many (students) have flunked?’
 b. *Kett-en buktak meg.*
 two-N flunked PFX
 ‘Two (students) have flunked’

-
- (i) a. *A lány-ok (mind) meg-érkez-t-ek (mind).*
 the girl-PL (all) PFX-arrive-PAST-3PL (all)
 ‘The girl-PL have (all) arrived.’
 b. *János mind el-olvas-t-a az újság-ok-at.*
 John all PFX-read-PAST-3SG-DEFO the paper-PL-ACC
 ‘John has read all the newspapers.’

Where *az egészen* is concerned, it is less clear what its exact syntactic status is in the presence of an overt subject. It could be argued, for instance, that in such a case it ‘reverts’ to its property-denoting role, as proposed by Csirmaz and Szabolcsi.

- (ii) *A lányok meg-érkez-t-ek az összes-en*
 the girl-PL PFX-arrive-PAST-3PL the whole-N
 ‘The girl have all arrived.’

⁹ In Hungarian, if the Focus position is filled, the lexical verb is ‘attracted’ to a Focus-adjacent position, and the verbal particle — if there is one — is left behind.

- c. *Az egész-en / mind meg-buktak*
 the whole-N / all PFX-flunked
 ‘All (students) have flunked.’

Az egész-en XPs cannot occupy the preverbal Topic position, unlike weak XPs like *ketten*, *hárman* (‘two-N’, or ‘three-N’). Under special circumstances they can, however, be contrastive Topics.

- (18) a. **Az egész-en tegnap jeles-t kaptak.*
 the whole-N yesterday A.plus-ACC received
 Intended: ‘As for all of them, they each got an A+ yesterday.’
 b. *Az egész-en ↗ nem ↘ kaptak jeles-t*
 the whole-N not received A.plus-ACC
 ‘Not all of them got an A+.’
 c. *Mind/Mindnyáj-an ↗ nem ↘ kaptak jelest*
 all/all-flock-N not received A.plus-ACC
 — Same as (18b) —

Sentence (18a) shows that *az egészen*-XPs cannot be ‘plain’ topics. Sentence (18b) shows that they can be contrastive Topics when other universal-type XPs can be contrastive Topics; in this case *az egész-en* is marked with a rising intonation contour, and the negative particle *nem* ‘not’ is marked with a falling contour (Büring 2002, on Hungarian: Gyuris 2002). That is to say, as regards (non-)occurrence in left peripheric positions, *az egészen* behaves like other universal(-like) expressions. (The reader could see that *az egészen* patterned with *mind* ‘all’, *mindnyájan*, *valamennyien* ‘all of them’.)

7. It is important to recall that the modal-essive suffix operates on determiners/DPs, yielding XPs. The diachronic significance of this fact is that the adjective *egész* ‘whole’ cannot take this suffix. That is, in the grammaticalisation process that led to *az egész-en* ‘all’ there has to have been a stage when (*az*) *egész* was a determiner.

2.3 What we have learned about *az egészen*

In this section we have introduced a Hungarian maximality operator, *az egész-en* lit. ‘the whole-N.’. It is used in Transylvania and among speakers of the Csángó variant of the language.

It has been established that *az egészen* ‘associates’ with a collective entity, which can be mentioned in preceding discourse, but its existence can also be inferred, or it can be salient in extralinguistic context. *Az egészen* bears the modal-essive suffix *-n*, which attaches to numerals or quantifiers (quantifying determiners), and yields XPs. *Az egészen* is thus an XP, with a silent NP component.

Az egészen exhibits the properties typical of XPs marked with the suffix *-n*; in particular, it cannot be a direct object or an oblique. In the class of *-n*-marked XPs, *az egészen* patterns with strong XPs: it cannot occupy the preverbal Focus position, it cannot be Topicalised, but it can be a Contrastive Topic under the same circumstances when strong (universal) XPs can be Contrastive Topics.

There have been some broad hints in this section that we take *az egészen* to be the product of a grammaticalisation process. We have even established that in Transylvania or in the Csángó community the Romanian language may have facilitated this process, or it may have caused some divergences from Hungarian as spoken in Hungary. Furthermore, we have stated that, since (i) *az egészen* clearly goes back to the adjective *egész* ‘whole’, ‘entire’, and (ii) the suffix *-n* can only attach to determiners or DPs, there must have been a stage in the grammaticalisation process when *az egész* must have been a determiner (a Det or a QP).

Therefore, we now set aside the issue of the suffix *-n* and the intriguing puzzles of its syntax and semantics, and will instead concentrate on the evolution of *egész* (initially ‘whole’, ‘entire’) and its cohort of adverbs.

3 A grammaticalisation template: from *whole* to *all*

3.1 Prelude: Quantifiers and Operators

In this brief prelude we informally present the relevant array of Hungarian quantifiers (adverbs or determiners), together with a discussion of their semantically relevant properties. This discussion relies on Generalised Quantifier Theory (Barwise & Cooper 1981), and on the results of empirical work, for instance, the Amherst Project on Quantification from the nineteen-nineties (Bach et al. 1995; see also Szabolcsi 2010 and Szabolcsi 2015).

Hungarian *mind* ‘all’ is not inherently distributive: it is compatible with distributivity operators, as well as with collective predicates (*körüláll* ‘surround’), expressions marking collective readings (*együtt* ‘together’), and with reciprocals (*egymás* ‘each other’, ‘one another’). (This was seen in 2.2). In earlier work (Bende-Farkas 2014b) *mind* was not analysed as a universal quantifier complete with Restrictor and Nuclear Scope. Instead, it was defined as a maximality operator that presupposes the collection on which it operates.

Hungarian *minden* ‘every’ resembles English *every*. On its evolution and some subtle differences between *minden* and *every* the reader is referred to Bende-Farkas (2014b).

Where *az egész* is concerned, two cases need to be distinguished: (i) Modal-essive marked *az egészen* resembles floating *mind* ‘all’. Pending further research, it is assumed to have the same definition as *mind*. (ii) The determiner *az egész* (lit. ‘the whole’) is not always interchangeable with *minden* ‘every’. Similarly to another late development, *az összes* (‘the sum-total’), or to German *gesamt*, it appears to involve a Restrictor–Nuclear Scope division, but is more ‘tolerant’ of collective predication (cf. Tovena 2003, or Champollion 2010 and Beck 2017 on recent changes involving English *every*). In the paper the determiner *az egész* is sometimes paraphrased as ‘all’, which is not entirely accurate, but it is meant to convey precisely the compatibility of *az egész* (and *az összes*) with certain forms of collective predication.

3.2 From *whole* to *all*

In several languages maximality operators with the meaning of *all* have evolved from an adjective with the meaning ‘whole’, ‘intact’, ‘complete’. We will review some cases, to show

that Hungarian *egész* is by no means unique. (This section follows Haspelmath 1995 quite closely.)

One case relevant for this paper is the evolution of Latin *totus* ‘entire’, ‘whole’ into Romance *tous, tutti, toți, ...*, all of which mean ‘all’. According to Haspelmath, the turning point is when a plural noun is *quantified over* by TOT(+PL), as shown in the contrast between Latin (19b) and Romanian (20b) (and also (7) in the preceding section):

- (19) a. ... *cuj senatus tota-m re-m publica-m commiserat*
 who.DAT senate whole-ACC thing-ACC public-ACC had.entrusted
 ‘... to whom the senate had entrusted the whole state.’ (Cic.Mil. 23, 61)
- b. *Pervigilat noct-es tota-s.*
 remain.awake night-ACC.PL whole-ACC.PL
 ‘She remains awake during entire nights.’ (Latin)
 (Plaut. Aul. 1, 1, 33; Haspelmath 1995, (1a–b), 365)
- (20) a. *toat-ă noapte-a*
 TOT-FEM.SG night-DEF.FEM.SG
 ‘all night long’, ‘during the entire time-span of one night’
- b. *toat-e nopți-le*
 TOT-FEM.PL night-PL-DEF.FEM.PL
 ‘all nights’, ‘every night’
- c. *nopți-i întreg-i*
 night-PL whole-.PL
 ‘entire nights’, ‘full nights’ (Romanian)

The same contrast can be observed between Ancient Greek *hólos* and Modern Greek *ólos* ‘all’:

- (21) a. *hólēn tēn hēméran*
 whole the day
 ‘the entire day’
- b. *hólous oíkous*
 entire families
 ‘entire families’ (not ‘all families’) (Ancient Greek)
- (22) a. *óli tí méra*
 entire the day
 ‘the entire day’
- b. *óla tá spítia*
 all the houses
 ‘all the houses’ (Modern Greek)
 (this and example (21): Haspelmath 1995, (3–4), 365)

In present day German the adjective *ganz* ‘whole’, ‘entire’, can mean ‘all’ (with plural noun phrases). The examples cited in Haspelmath are not entirely standard, but can be understood by speakers of German.

- (23) a. *Wer hat denn die ganz-en Punkte hier gemalt?*
 who has then the.FEM.PL.ACC whole-PL points here painted
 ‘Who painted all these points here?’
 b. *Die ganz-en Tassen sind verschwunden!*
 the.FEM.PL whole-PL cups are vanished!
 ‘All the cups have vanished!’ (Haspelmath 1995, (6a–b), 366) (German)

The richness of crosslinguistic evidence on the evolution of an adjective (to be exact, a plural-marked adjective) into a maximality operator reinforces the hypothesis that the Hungarian adjective *egész* ‘entire’, ‘whole’ has evolved into a determiner with the meaning of ‘all’. In Hungarian it was the form unmarked for number that evolved: in this language plural meaning is often unmarked; in fact, attributive adjectives are never marked for number. The situation is similar to the case of English *all*, where there is no plural marking on *all* itself. So, we expect the Hungarian operator to be of the form *egész* and not *egész-ek* (lit. ‘whole-PL’). The (expected) turning point is when (*az*) *egész* combines with a count noun, and yields a quantificational reading, as in the hypothetical example (24) below.

- (24) *az egész ház(-ak)*
 the whole house(-PL)
 Old meaning: ‘the entire house’, ‘the entirety of (some) houses’
 New meaning: ‘every house’ or ‘all houses’

4 Historical data involving *az egész-en*

This part presents the data documenting the evolution of (*az*) *egész*. As the reader will see, *egész* associated with collective and abstract nouns from early on. Its use as a determiner-operator with count nouns can be attested in Transylvania at least from the first part of the 17th century. What is conspicuous in its absence is MOE-marked *az egész-en* ‘all’, although several adverbs marked with a modal suffix *-n* contribute to sentence meanings very similar to those with MOE-*az egész-en*.

4.1 Codices, Bible translations

The earliest attested occurrences of the adjective *egész* show a variation in meanings. According to the Historical-Etymological Dictionary of Hungarian (Benkő 1964–1987) *egész* could mean the following:

1. *Egész*: ‘healthy’, ‘hale’:

- (25) *De mert akoron egez barat-ok es beteg-ek nagy vjgasag-ual elnek uala*
 But because then hale friar-PL and sick-PL great joy-INSTR live PAST
 ‘Since at that time hale friars and sick people lived with great joy.’¹⁰
 (Jókai Codex 91)

¹⁰ A reviewer inquired whether *egez* in (25) does indeed mean ‘hale’, ‘healthy’, and whether it is in fact related to today’s *egész* ‘whole’. In Old Hungarian there was no regular orthography to speak of: vowel length was rarely marked; the letter ‘z’ could mark the sounds /s/ or /z/. For instance, the word *zyz* clearly means ‘virgin’, and corresponds to today’s *szűz*. The first letter ‘z’ could be rendered as /s/ or /z/. Returning to *egez*

2. *Egész*: ‘entire’, approx. German ‘gesamt’:¹¹

- (26) *En kedeeg azt mond-om mind egez embõri nemzet-nek*
 I then that-ACC say-1SG all full human kind-DAT
kep-e-ben...
 image-POSS.3SG-INE
 ‘Then I say in the name of all humankind...’ (Piry P.)

The sentence in (26) is the first attested example with an abstract/collective noun phrase (*embõri nemzet* lit. ‘the human nation’, ‘humankind’). Here it denotes one (collective) entity, yet its presence is a necessary condition for distributive construals of similar collective nouns, which will characterise later examples.

The adverb *egész-len* meant ‘fully’, ‘completely’:

- (27) *Mert nem csak tjed-et beusegest ad-a-d es cristus-nak*
 For not only yours-ACC plentifully give-PAST-2SG and Christ-DAT
zerelm-j-ert egez-len el oztad ...
 love-POSS.3SG-CAUSFIN completely away dispersed ...
 ‘It’s not only that you gave generously from what was yours, and for the love of Christ gave it away completely/gave all of it away’ (Jókai Codex 24)

The adverb *egészlen* ‘completely’ can have an ‘individual-oriented’ reading, entailed by its ‘event-related’ reading: A complete giving away of someone’s assets implies that the entirety of these assets has been given away. The fact that such an individual-oriented, distributive reading is entailed by (27) is an important stage (or at least an important factor) in the grammaticalization of *egész*.

The adverb *egész-en* (where *-n* is a manner suffix) could have the following meanings:

1. *Egészen*: ‘in health’, ‘in a healthy state’:
 (Scenario: Saint Margaret of Hungary is contemplating the large numbers of people

from the example: the ‘healthy’ construal can be deduced from contrast with *beteg-ek* ‘ill-PL’. Its membership in the *egész*-family can be deduced from other occurrences of this stem in the same codex, cf. *egészlen* in (27) below.

¹¹ Sentence (26) shows two operator-like expressions, *mind* ‘all’ and *egez* ‘whole’/‘entire’. Such ‘doubling’ of *mind* with another operator(-like) expression has been quite regular since Old Hungarian. This is problematic if *mind* and its companion are indeed taken to be bona fide operators. Indeed, this point has been raised by one of the reviewers. To this we can reply that perhaps neither *mind* nor its companion (with the possible exception of *ki-ki* (lit. ‘who-who’, meaning ‘each’)) are genuine operators; they could merely signal the presence of a covert operator in their immediate environment, as proposed in Szabolcsi (2015) for similar expressions in a variety of languages. This question is left open in this paper, since working out the implications of the ‘non-operator’ conjecture would be a long-term project in its own right. Two observations may offer some guidance: 1. While *mind* on its own can be a floating expression, all attested examples of *mind -az- egész*, *mind teljes*, *mind -az- összes*, ... are adjacent to their NP. 2. When the associate of *mind* was an abstract or collective noun phrase, *mind* did not float; it remained left-adjacent to its associate. That is, examples like (i) are not attested.

- (i) *Jeruzsálem meg-ijede mind (az egész).*
 Jerusalem PFX-got.frightened all (the whole)
 ‘All Jerusalem was frightened.’

suffering, in pain, who have gathered in the church. The reading of the adverb *egezz-en* can be deduced from the contrast between the sickness seen by Margaret and her own state of health.)

- (28) *bala-t ado-k az en teremte-m-nek ... engem-et*
 gratitude-ACC give-1SG the I creator-POSS.1SG-DAT ... me
egezz-en teremt-et. es mjnd ez ma-y nap-yk
 health-ADV.SFX created. and all this today-ADJ.SFX day-TERM
egezz-en fel neuelt.
 health-ADV.SFX up brought
 ‘I am grateful to my Creator ...who created me to be healthy and has raised me in health to this very day.’ (Margaret’s Legend 30r/59)

2. *Egészen*: ‘completely’, ‘entirely’, ‘all the way’:

- (29) *(az angyal) kez-e-tt fog-uan frater Bernald-ot*
 (the angel) hand-POSS.3SG-ACC take-PARTICIPLE brother Bernard-ACC
zem-nek egy pjllontas-a-ban az vjz-nek mas fel-e-re
 eye-DAT one glimpse-POSS.3SG-INE the water-DAT other part-POSS.3SG-SUBL
egezen uette.
 completely took
 ‘the angel took Brother Bernard’s hand and in the blink of an eye he carried him all the way to the other bank.’ (Jókai Codex 19)

Strictly speaking, (29) can have two readings: In the first reading, taken for granted in the English paraphrase, *egezz-en* ‘measures out’ a spatial Path. In the second reading *egezz-en* could be called ‘object-oriented’, and the sentence would say that Brother Bernard was taken to the other shore intact, without any harm.

Our observation is that already in the first attested occurrences of *egész* and related adverbs, there is at least the possibility of a maximality reading that comes very close to an operator-like use. This is apparent when *egész* combines with a collective noun (viewed as an ‘atomic collection’), as in (26), or when the adverb *egészlen* ‘completely’ has an ‘individual-oriented’ reading, as in (27) from the Jókai Codex.

4.2 Letters

In a collection of letters and secular documents (from the late Old Hungarian period) one finds uses of *egész-en* where it means ‘all’.¹² The starting point is when *egész* associates with a collective entity such as a city council in (30) below. Our conjecture is that via metonymy (a council in its entirety → the individual members of that council) *egész* could acquire a distributive construal *after* was introduced in discourse, as in the switch to the plural ‘my good lords and neighbours’ in (30). We also find underspecified cases, as in (31).

¹² Letters are presented separately, not only because they are more recent than the codices, but also because they represent a different register.

- (30) *Ez level ada-ss-ek barthva-n az egress tanacz-nak nekem*
 This letter give-PASS-SUBJ-3SG Bártfa-SPRSSVE the entire council-DAT Dat-1SG
vra-ÿ-m-nak esss somsjd-im-nak.
 lord-POSS.1SG.PL-DAT and neighbour-POSS.1SG.PL-DAT
 ‘Let this letter be delivered to the entire council of Bártfa, to my good lords
 and neighbours.’
 (1530, János Tarczay to the council of Bártfa (Barejov, Slovakia), letter 94)

In sentence (31) *az egész dolgod* lit. ‘the whole affair of yours’ is underspecified: it can be about the entirety of one salient affair, or it can be about all the affairs of the addressee. (As suggested by a reviewer, this can ultimately be traced back to the underspecification of numberless nouns in Hungarian. *Dolog* lit. ‘thing’ in the context of the example can denote one affair or case, or it can denote a collection of several affairs/cases. The underspecification of *az egész* (the entirety of one affair vs all affairs) matches this.) Given the presence of *minden dolgodról* ‘about every your affair of yours’ in the preceding sentence, we are inclined to take *az egész dolgod* to mean ‘all your affairs’, ‘the totality of your affairs’.

- (31) *ÿr-ÿ ennek-em mjnden dolg-od-rolÿ mjnd az hedervarÿ*
 write-IMP.2SG dat-1SG every affair-POSS.2SG-DELA both the Hédervárÿ
ferench balal-a felol-ÿ es mjnd az eges dolg-od
 Ferenc death-POSS.3SG about-ADJ.SFX and all the entire affair-POSS.2SG
felol
 about
 ‘write to me about all your affairs, both about the death of Ferenc Hédervárÿ,
 and about your entire affair(=case) / about all your affairs’ (1533, Lőrinc Héder-
 várÿ to István Hédervárÿ, letter 118)
- (32) *farkas vram Rezedeth Belewlew kj wegÿjed, es*
 Farkas lord-POSS.1SG share-POSS.2SG-ACC from.it out take-IMP.2SG, and
Thÿzthan Egezlen lossonczÿ Isthwan wra-m-nak Bÿr-nÿ-a
 cleanly completely Losonczÿ István lord-POSS.1SG-DAT possess-INF-3SG
Enge-gÿjed
 allow-IMP.2SG
 ‘from the disputed possessions, my lord Farkas, take your share, and hand them
 over in their entirety to my lord István Losonczÿ’ (it is not clear what exactly,
 or how much is to be handed over)
 (1540, Judgement in the lawsuit between István Losonczÿ and Farkas Csapy,
 letter 201.)

In sentence (32) we have an object-oriented reading entailed by the event-related reading: if something is handed over in full, then all its parts are handed over.

4.3 Transylvanian data from the second half of the 16th century onwards

This part shows data from the Historical Dictionary of Transylvanian Hungarian (Erdélyi Magyar Szótörténeti Tár, Szabó T. ed.; henceforth, HDTH). The earliest data are from

second half of the 16th century: it should be noted that these are quite close in time to the latest of the codices and to most of the letters.¹³

Data from the HDTH confirms the initial hypothesis concerning the grammaticalisation of *egész*: *Az egész* could be used as a determiner of count nouns, with the meaning ‘all’, ‘every’. In addition, *egész* (and adverbs derived from it) is used instead of Old Hungarian *mind* with spatial or temporal expressions; object-oriented readings of adverbs derived from the adjective *egész* abound.

4.3.1 The adjective *egész*

According to the HDTH, the adjective *egész* ‘whole’, ‘entire’ could have as many as eight distinct construals. Of particular interest to us are meanings 3 to 7.

The scale of meanings could range from ‘basic’ ‘whole’, ‘full’ ‘complete’ (meaning 1) to ‘all’, ‘each and every’ (meaning 6). Meaning 7 is also noteworthy: ‘considered in its entirety, without exceptions or lacunae’. For the purposes of this article, meaning 6 (‘all’, ‘each and every’) is the most relevant, especially that it shows *az egész* combining with count nouns.

First, here are some examples illustrating meaning 3: ‘regarded/considered as a complete, full assembly or collection’. The third type of meaning is found with collective nouns that can get a ‘direct’ or ‘indirect’ distributive interpretation. By ‘indirect’ we mean that the *egész*-DP itself is interpreted collectively, but its denotation/referent is interpreted distributively later in discourse, or even in the same sentence.

- (33) a. *egyz waros kyp-y-ben paranchiolat-tal hyw-a-nak mynk-et*
 entire town image-POSS.3SG-INE order-INSTR call-PAST-3PL we-ACC
 ‘we were summoned with an order issued in the name of the entire town’
 (1572 Dés (Dej) DLt 184)
- b. *Teczet eo kegm-ek-nek egez waros-sul hogy semmy*
 Pleased he lordship-POSS.3PL-DAT entire town-ADV.SFX that no
wetas-t ne(m) kelle-ne chyeleked-ny...
 innovation-ACC not have.to-COND.OPT accomplish-INF ...
 ‘It pleased their lordships, the entire town(ful of them) that they didn’t
 have to change anything’ (1579, Kv (Kolozsvár, Cluj) TanJk V/3 189b)

So, data illustrating this point involve *egész* associating with collective entities; sometimes the NP denoting the collective entity is further associated with a collective expression that can be distributed over, as in (33b).¹⁴

A wealth of examples show that *az egész* could be a determiner combining with count nouns. (Meaning/use number 6: ‘all’, ‘each and every’).

¹³ The HDTH provides detailed lexical definitions for words (not only stems but also compounds and affixed forms). Definitions are complemented by paraphrases in Romanian and German. Every distinct meaning/construal of a given word form is accompanied by a wealth of examples, mostly taken from local archives from all over Transylvania. In the HDTH the labels for original sources contain a multitude of abbreviations. Some of these will be unfolded here; for the rest, the reader is referred to the online edition of the HDTH.

¹⁴ *Lt* = levéltár, ‘archive’.

- (34) *Az Egez Istallo-k-ott zekerzentt vgy Czinal-tas-sa hogy mind Egy*
 The whole stable-PL-ACC cart.according.to so make-CAUS-3SG that all one
veg-b(en) le-gyen
 end-INE be-SUBJ.3SG
 ‘He should have all stables built according to the (measure of?) carts, so that all
 of them should be aligned’ (1623; Törzs. (core coll.) instructions from Prince
 Gabriel Bethlen)
- (35) a. *nem vgy mint an-nak előtt-e, banem ruttyat gyalazatos*
 not so like that-DAT before-POSS.3SG, but ugly miserable
az-ok-kal, az egesz Iffiu Mester-ek-et illet-uen
 those-INSTR, the whole young master-PL-ACC concerning
 ‘unlike before, he behaves miserably with those (people), involving all the
 young masters’ (1639/1650; Kv (Kolozsvár, Cluj); ÖCJk)
- b. *mindnyaja(n) az egesz Atyafi-ak kep-ek-b(en) azon*
 all the whole siblings image-POSS.3PL.PL-INE that
Testamentum-nak minden resz-e-i-ben contradict-nak
 will-DAT every part-POSS.3SG.PL-INE contradict-3PL
 ‘all of them, on behalf of all siblings and kin, contest all provisions of that
 will’ (Kv (Kolozsvár, Cluj); Tjk VIII/11. 112)
- c. *az szüret-re hu-nak oda ála mind az egesz Atyafi-ak*
 the grape.harvest-SUBL call-3PL there down all the whole siblings
 ‘all siblings and kin invite (us?) down there for the grape harvest’
 (1681 Körtvélyfája (Peris) MT; Bál 1)
- (36) a. *ittenis azonn nyavalya annyira el hatalmazott, hogy tsaknem egész*
 here.too that illness so.much away spread, that almost whole
Város-i Ember-eink Cseléd-estől ab-ban fetreng-nek
 town-ADJ.SFX people-POSS.1PL.PL servant-SOC that-INE writhe-3PL
 ‘that malady here too has spread so far and wide that almost all our towns-
 folk are suffering from it, along with their servants’
 (1730 Kv (Kolozsvár, Cluj); Ks)
- b. *az gész vér-ek-et [rokonokat] legitime meg kínál-tat-t-a (h)ogy*
 the whole kin-PL-ACC [relatives] lawfully PFX offered-CAUS-3SG that
ve-gy-ék meg, mert ...közelebb akar magá-nak venni (birtok-ot)
 buy-SUBJ-3PL PFX, for ...closer wants self-DAT buy-INF estate-ACC
 ‘he offered it lawfully to all his kinsfolk, because he wanted to buy an estate
 nearby’ (1733 Ap. 4 correspondence of Péter Apor)
- c. *Ha az erdély-i főgenerális el-esett, az*
 If the Transylvania-ADJ.SFX chief.general away-fell, the
erdély-i egesz vármegyé-k-et az fejérvár-i
 Transylvania=ADJ.SFX whole counties the Fejérvár-ADJ.SFX
főispán igazgatta harczon
 chief.prefect directed battle-SPRESSV
 ‘If the Transylvanian commander in chief fell (in battle), all the counties
 of Transylvania were led in battle by the prefect of Fejérvár.’
 (1736 MetTr 411)¹⁵

¹⁵ *MetTr* = *Metamorphosis Transylvaniae*, treatise by Péter Apor (1736).

The last two examples make it clear that *egész épületek* (lit. ‘whole buildings’) is to be understood as ‘all buildings’.

- (37) a. *Kereszturi Krisztina Kis Asszony vevé maga rész-é-re az*
 Kereszturi Krisztina Little Woman took self part-POSS.3SG-SUBL the
mostan-i Curia-(na)k Nap nyugot felöll valo rész-é-t
 now-ADJ.SFX Curia-DAT Sun down from VALÓ part-POSS.3SG-ACC
Egész rajta lévő épület-ek-ke
 whole on.it being building-PL-INSTR
 ‘Miss Krisztina Kereszturi took for herself the Western part of today’s
 Curia, with all buildings on it.’
 (1746, Náznánfv.(Nazna) MT; Berz. 13. IV/1)
- b. *Ezen eddig describált egész épületek ...alnak készülendő fél-ben*
 These so.far described whole buildings ...stand half.built half-INE
vakolatlan in Ruderibus
 unplastered in the.rubble
 ‘All these previously described buildings ...stand half-finished, unplastered,
 amidst the rubble.’ (1746 Branyicska (Brănișca) H; JHb LXXI 2. 23)

Example (37b) makes it clear that *egész épületek* lit. ‘whole buildings’ does not mean ‘entire buildings’, since these buildings are but half-ready. Rather, (*ezen...*) *egész épületek* means ‘all these buildings’.

4.3.2 The adverb *egész* and its kin

Egész could be used as an adverb on its own, and (as an adjective) it could take adverbial suffixes. We reproduce some examples here, in search of today’s modal-essive *az egész-en* (‘all from a given set’). Although we haven’t found any instances of today’s *az egész-en* in the mini-corpus of the HDHT, we did find (i) *Egész, egész-en* associating with temporal and spatial expressions. This association, as discussed in Section 4.7, represents a parallel track in the grammaticalisation of *egész*. (ii) We also found what can be called ‘individual-oriented’ readings of the adverb *egész-ben* ‘fully’ ‘in one piece’, and of the manner adverb *egész-en* ‘fully’, ‘completely’ (similarly to depictives, Rothstein 2001), which may have facilitated the emergence of modern-day *az egész-en*.

The adverb *egész* co-occurred with spatial and temporal expressions, marking the end of a temporal or spatial Path. It could be paraphrased as ‘all the way till ...’, or as ‘at all times until ...’.

- (38) *az en buza-m-at mind egez ueg-igh az*
 the my wheat-POSS.1SG-ACC all whole end-TERM the
brózda-ja-(n) el arat-t-uk
 furrow-POSS.3SG-SPRESSV away harvest-PAST-1PL
 ‘we have harvested my wheat (field) all the way to the end, along its furrows.’
 (1635 Mv (Marosvásárhely, Târgu Mureș); Mv Lt 290. 46b)
- (39) a. *semmi (eső) nem volt egész szent Márton nap-ig*
 nothing (rain) not was whole Saint Martin day-TERM
 ‘there was nothing (no rain) until Saint Martin’s day’ (1580 ETA I, 35BS)

- b. *egész tél-ig mind tarta a pestis*
 whole winter-TERM all lasted the plague
 ‘the plague (epidemic) lasted (all the time) until winter.’
 (1653, ETA I, 146 NSz)

The adverb *egészben*: In modern Hungarian, *egész* plus the inessive suffix *-ban*, *-ben* means ‘in one piece’, ‘intact’. In Middle and early Modern Hungarian it apparently meant ‘fully’, ‘completely’. In the sentence (40b) the adverb appears to be underspecified, in that it can modify the process of decay, but it can also be used in describing the individual affected by that process. In the latter case, *egészben* distributes over material parts of the church in question. In the case of (40a) we can also argue for a reading where the *egészben* ‘associates’ with the object affected by the writing event. In fact, in both cases, the event-oriented reading entails the individual-oriented reading. For the entailment relation to hold, it is necessary for the adverb to be underspecified vis-à-vis the kind of entity it operates on, eventualities or ‘plain’ individuals.

- (40) a. *egy arkos-nak a negyed-i-t egész-ben be-irta*
 one sheet-DAT the quarter-POSS.3SG-ACC whole-INE into-wrote
 ‘he completely filled (with writing) one quarter of a sheet of paper’
 (1736 MetTr 366)
- b. *Romlás-ban vagyon egész-ben a kis eklézsia-cská-ban a templom*
 decay-INE is whole-INE the small parish-DIMIN-INE the church
 ‘The church in the small parish is completely in ruins/all ruined.’
 (1755 Unoka (Onuca) MT; ETF 107.24)

Egész-en – the adjective *egész* could be suffixed with the manner suffix *-n*. (The manner suffix is homophonous with the MOE suffix *-n*, but its contribution is quite distinct.) According to the HDHT, the manner adverb *egész-en* could have the following meanings:

1. *Egészen*: ‘completely’, ‘fully’

- (41) *egész-en s nem csak rész szerent vesz-ünk el*
 completely and not only part acc.to perish-1PL away
 ‘We are going to perish completely, not only in parts.’(!!!)
 Possible reading: ‘All of us are going to perish, not only some of us.’
 (1659 Borb II ambassador’s report from Constantinople)

Sentence (41) looks strange at first sight: how is partial perishing possible? One explanation would rely on the literal meaning of the prefixed verb *elveszni*, which is ‘to be lost’. Arguably, it is possible for someone not to be completely lost. There, is, however, another explanation, which relies on the reconstruction of the first person plural subject. If the subject denotes an entire community, then the sentence conveys the meaning ‘Our community will perish completely, without any exception’. On this reading perishing affects an entire community, and it is entailed that no sub-group or individual member can survive. Consequently, *rész szerent* ‘in parts’, is not about being partly lost, or partly perished; instead, it is about only parts of the community perishing (as opposed to total extinction).

If it is true that an entire community perishes, it also holds that all its members perish. Hence, a sentence like (41) entails its modern day Transylvanian variant (42):

- (42) *Az egész-en el-vesz-ünk*
 The whole-N away-perish-1PL
 ‘All of us (will) perish.’

Modern-day *az egészen* ‘all from a given set’ is very different from Middle Hungarian individual-oriented *egészen* ‘completely’, nevertheless its over-all contribution to the sentence is quite similar.

2. *Egész-en* ‘completely, in full’

The sentences in (43) are further illustrations of ‘individual-oriented’ readings of adverbs. In (43a), full recovery of a sum of money entails the recovery of the entire sum. That is, the ‘individual-oriented’ reading is facilitated by the incremental object. In sentence (43b) the distributive reading is facilitated by metonymy: If a village is completely Catholic, this is tantamount to saying that everyone in it is a Catholic.

- (43) a. *ha pedig nem tseleked-ne egész-en meg ve-bes-sük rajta az*
 if and not act-COND.OPT. completely PFX buy-POSSBL-1PL on-him the
tizen harmadfel forint-ot
 ten three.and.half florin-ACC
 ‘and if he doesn’t act, we can fully recover from him those thirteen and a half florins’ (1682 Sz Jk 171)
- b. *mind egész-en papista az Falu a huva valo ő*
 all fully Popist the village that where.from be.PRES.PART he
 ‘the village he is from is all Popist.’ (1772 Köbölkút K; Bet. 6. Clara nobilis Georgii Kolosvarj conc. (53) (witness test.))
- c. *ugy hirdetik, hogy talám az Marokház-i erdő-k egészszen le*
 so say, that maybe the Marokháza-ADJ.SFX woods fully down
vágat-tat-ván, el ad-od-ná-nak
 cut-PASSIVE-PARTICIPLE, away give-PASS-COND.OPT-3PL
 ‘it is rumoured, that the woods of Marokháza, having completely been cut down, will be sold’ (1762 Dés (Dés); Ks 5. IX. 8 corresp. of Pál Haller)

Sentence (43c) is puzzling, in that it is not clear what would be for sale, the land, or the timber from the woods. What is even more puzzling is, what it means for a forest to be cut down (or to be completely cut down). One reading could be the atomic reading: the forest (as an atomic entity and/or as a piece of land with a forest on it) has been cleared of trees. The other reading is the distributive reading: all the trees in the forest are cut off. Again, we think, *egészen* is underspecified, and one reading entails the other. In this case it is the ‘atomic’ reading (the entire territory has been cleared of trees) that entails the distributive reading (all trees from that territory have been cut off).

3. *Egész-en*: ‘in its entirety’, ‘in full’:

In sentence (44) the individual-oriented reading is, we think, the primary reading, if the direct object *részét* (‘his share’) is interpreted as one entity. The incremental

reading is also possible (as pointed out by a reviewer), once the contribution of the partitive phrase (‘from carts and other household implements’) is also factored in.

- (44) *Balasi Peter allattya hogj néki Ap-ja Az Szeker-ből és holmi ház-beli eszközb-öl rész-é-t egészszen ki nem adta*
 Balassi Peter claims that DAT-3SG father-POSS.3SG the cart-ELA and some house-ADJ.SFX utensil-ELA share-POSS.3SG-ACC fully out not gave
 ‘Peter Balasi is claiming that his father hasn’t given him his full share of carts and other household items’ (literally: ‘his father hasn’t fully given him his share’) (1701 Kissolymos (Şoimuşu Mic) U; Blev.)

Sentence (45b) is like (44), in that world knowledge blocks the reading where the validity of one law is only partial. What we take (45b) to mean is that all parts of a legislative system, or all parts and paragraphs of one law remain valid. That is, we take (45b) to have a distributive reading, entailed by the ‘atomic’ reading (‘the law/the legislation remains valid in its entirety’).

- (45) a. *itt valo Udvarbiro azon föld-ről a Runkán Gabor Buza-ja-t egészszen el vi-tet-é*
 here being court.judge that plot-ADE the Runkán Gabor wheat-POSS.3SG-ACC entirely away take-CAUS-PAST-3SG
 ‘the magistrate from here had Gabor Runkán’s wheat taken away completely(!) from that field’ (1742 Bányabükk (Válcele) TA; JHb XIII/16)
- b. *A’ Bírák eo kglmek törvénye egészszen helyben marad*
 the judges he lordships law-POSS.3SG fully in.place remains
 ‘legislation by their lordships the judges remains fully valid / valid in its entirety’ (1746 Torockó (Rimetea); Bosla)

Sentence (45a) can have two readings, which, unlike other examples with *egészen* and *egészen*, do not entail each other. In (45a) *egészen* could in principle associate with a covert spatial Path, and then the sentence would mean that the wheat was carried all the way to some contextually given destination. In the other reading *egészen* ‘in its entirety’ is individual-oriented, and the sentence says that all the wheat was taken away. The ‘spatial’, or Path-oriented reading is unlikely: in spatial or temporal associations of *egész-* the ‘associate’ is practically always overt, denoting the Goal, and, accordingly, marked with the terminative suffix *-ig*.

4. *Egész-en*: ‘in its entirety’:
 The sentence in (46) is puzzling on a first or even second reading. The source of the puzzle is the phrase *egészen illető* ‘fully concerning’ or ‘fully involving’. One one reading the letters concern the town of Dés, and no-one else (similarly to the English phrase ‘this is all yours’, i.e. this doesn’t involve or belong to anyone else’. On another reading the letters involve all the town; a third, less likely, reading would be about the total number of letters involving the town. That is, in the first reading *egészen* operates indirectly on the object by excluding the involvement or concern of other individuals. In the second reading *egészen* operates directly on the object: the English paraphrase would be ‘The number of letters that involve the entire town is ...’. On the third, less likely reading, *egészen* operates on the subject, yielding the

largest number of letters, or the totality of letters, s.t. this collection has a given cardinality.

- (46) *Nemes Des Vaross-a-t egészszen illető Level-ek-(ne)k*
 noble Des town-POSS.3SG-ACC fully relevant.for letter-PL-DAT
szam-ok ekkípen vadnak ...
 number-POSS.3PL like.this are ...
 ‘The number of letters fully involving (addressed to?, affecting?) the noble town of Dés is like this ...’ (end of 17th century, Dés (Dej); DLt 509)

5. *Egész-en*: ‘in full’, ‘without exception’:

- (47) *az orzag güles-e-re avagy tiszt uramek, vagy*
 the country assembly-POSS.3SG-SUBL either officer lord-POSS.1SG-PL, or
v(a)r(me)gye követ-i Le vigyek az Levele-k-ett
 county delegate-POSS.3SG.PL down take-IMP.3PL the letter-PL-ACC
egészszen
 fully
 ‘The letters are all to be taken to the session of parliament, either by my lords the officers or by the delegates of the county’
 ‘The entire package of letters must be taken to the session of parliament...’
 (1682 Felőr (Uriu) SzD; Ks 21. XVII. 12)

Sentence (47) comes very close to Modern Hungarian *az egész-en* ‘all from a given set’ (similarly to sentence (41)). As with example (41), surface similarity and closeness in meaning conceals differences in syntax and semantics.¹⁶ Note, for instance, that in (47) *egészen* combines with the inanimate direct object *az Levelekett* ‘the letters’, whereas modern day MOE-*az egész-en* cannot be a direct object or associate with one. Also, the associate of today’s *az egész-en* cannot be a collection of inanimate objects. Nevertheless we hypothesise that examples like (47) and its kin facilitated the attachment of the modal-essive suffix *-n* to the determiner/DP *az egész* ‘all’.

6. *Egész-en*: ‘all the way to ...’, ‘from end to end’:

Like the adverb *egész*, *egész-en* can also associate with a spatial Path:

- (48) *A föld szél-e régebben bé nyult le egészen a’*
 The land edge-POSS.3SG of.old into stretched down all.the.way the
kaszáló rét-ig
 scythe(verb)-PRES.PART meadow-TERM
 ‘The edge of the plot used to stretch all the way to the hay meadow’ (1799 Gyéresszentkirály (Ghiriş-Sâncrai) TA; Ks 89)

4.3.3 *Interim summary*

Data from the HDTH have shown examples of:

¹⁶ As in the case of (45a), *egészen* might have a spatial associate: ‘The letters have to be taken all the way to the session’. This reading is highly unlikely, again for the reason that the relevant expressions are not of the right form.

1. The determiner (*az*) *egész* ‘all’, ‘every’ combining with count nouns. In examples (34)–(37) it clearly quantifies over its NP, so no metonymy is needed to provide access to individual members of a collective entity.
2. The adverb *egész* ‘completely’, and also the manner adverb *egész-en* ‘completely’, ‘all the time until’, ‘all the way to...’ associate with temporal and spatial expressions. We will see in section 4.7 that in these cases *egész-en-* is synonymous with (Old and Middle Hungarian) *mind* ‘all’. Indeed, in present-day Hungarian, *egész-en-* has all but replaced such uses of *mind*.
3. The adverbs *egész-ben* ‘in its entirety’, and *egész-en* on its ‘in its entirety’ construal have a distributive ‘individual-oriented’ reading, which is entailed by an event-related or collection-as-atom oriented reading. The emergence of present-day *az egészen* ‘all from a given set’ has at least been facilitated by the distributive readings of examples like (41) or (47).

4.4 Csángó examples from the 21st century

This brief subsection presents data from the Csángó regional variant of Hungarian. They are especially relevant for attesting the continued presence of the determiner *az egész* ‘all the’.

The first three examples are children’s reports on a camping trip in 2010. The children are from the village Lészped (Lespezi) in the Moldova (Moldavia) region of Romania.¹⁷

- (49) *szombat-on az egész-en men-t-ünk haza*
 Saturday-SPRSSIVE the whole-N go-PAST-1PL home
 ‘On Saturday we all went home’ (Péterke Bálint)

Sentence (50b) shows the determiner *az egész*. Note that the NP and the verb are in the plural. This was quite common in Old and Middle Hungarian (there is no exact count), but is no longer present in Modern Hungarian.

- (50) a. *Szerdán csinál-t-unk csapat-ok-at hat-hat gyermek-ből,*
 Wednesday-SPRESSV make-PAST-1SG team-PL-ACC six-six child-ELA,
 ‘On Wednesday we formed teams of six children each’,
 b. *és az egész csapat-ok tanul-t-ak, hogy ostoroj-za-nak, és*
 and the whole teams learned that crack.whip-SUBJ-3PL, and
búj-z-anak a nyíl-val,
 pull-SUBJ-3PL the arrow-INSTR
 ‘and all the teams learned how to crack a whip and to shoot with a bow and arrow.’ (Anna Julianna Bálint)

In (51a) we see the DP *az egész*, with the meaning ‘everyone’, ‘all of them’.

¹⁷ These examples were all taken from the web page of the Union of Hungarian Schoolteachers in Romania (rmpsz.ro), more exactly, from a subdomain dedicated to the teaching of standard Hungarian to Csángó children.

- (51) a. *Szombat-on el-men-t-ünk haza. Meg-puszil-t-uk az egész-et*
 Saturday-SPRESSV away-go-PAST-1PL home. PFX-kiss-PAST-1PL the whole-ACC
 ‘On Saturday we went home. We kissed all of them /everyone.’
 b. *és mond-t-uk, hogy találko-z-unk jövő-ben.*
 and say-PAST-1PL that meet-1PL future-INE
 ‘and said that we would meet the following year’ (Anna Julianna Bálint)

The second part of this subsection presents a sample of elicited and spontaneous utterances recorded at the Csángó Workshop at the Research Institute for Linguistics of the Hungarian Academy of Sciences (March 2013). Our informants were GyB and ÁN, a married couple. (B and N stand for honorific terms.)

In (52) we see *az egész* as a determiner. The context is that, according to custom, the bride at a wedding would give each of her godmothers a napkin as a present.

- (52) *nyírásza adott nekijek mindig egy-egy servet-et, vetett az egész keresztany-já-nak külön külön...*
 bride gave them always one-one napkin-ACC, gave the whole godmother-POSS.3SG-DAT apart apart...
 ‘The bride always gave them a napkin each, she gave one to each of her godmothers...’ (ÁN, File 1)

In the dialogue from (53) we see the interaction of (*mind* ‘all’) *az egész* with distributive marking. If there is no overt distributivity marking on the direct object, subject-*az egész* has a cumulative reading (as indicated in ÁN’s response in the last sentence). The distributive reading is present, for instance, in the presence of reduplicated *egy-egy*, as in sentence (53b).

- (53) a. *S ha mondja, vót három leány, s mind az egész kapott egy-egy tizenöt-öt,*
 and if say, was three girl, and all the whole got one-one fifteen-ACC,
 ‘And if you say that there were three girls, and each of them received fifteen.’ (ÁBF)
 b. *Az egész egy-egy tizenöt-öt*
 the whole one-one fifteen-ACC
 ‘All of them got fifteen (each).’ (ÁN)
 c. *És azt mond-om, hogy az egész-en kap-t-ak?*
 and that-ACC say-1SG, that the whole-N received-PAST-3PL
 ‘And if I say that all of them received (fifteen)?’ (ÁBF)
 d. *Akkor az egész mind a három egy hee-tt*
 then the whole all the three one place-LOCATIVE
 ‘Then it’s all three of them together.’ (lit. ‘in one place’; ÁN; File 1)

In (54) we encounter the determiner *az egész* ‘every’, ‘all’. In (54b) it is made clear that it is distributive; the difference between (53c)–(53d) and this example is presumably

due to the internal structure of the direct object or the Predicate Phrase. The distributive reading of (54b) may also be facilitated by world knowledge about car ownership.

- (54) a. *Az egész politikus szereti a pénz-t*
The whole politician loves the money-ACC
‘All politicians love money.’ (ÁN, File 2)
- b. *zégész politikus-nak van autó-ja*
whole politician-DAT is car-POSS.3SG
‘Every politician has a car’ (ÁN, File 2)

Sentence (55) shows *az egész* as a DP:

- (55) *Böcsülje meg a zégész-et, ki-t ismer*
Cherish-SUBJ-3SG PFX the whole-ACC, who-ACC know
‘He should cherish and respect everyone he knows’ (ÁN, File 5)

Example (56) again shows the DP *az egész*, with plural marking on the verb, as in (50b) earlier.

- (56) *akkor oda-gyűl-t-ek az egész*
then there-assemble-PAST-3PL the whole
‘then all of them gathered there’ (ÁN, File 3)

The examples in (57) again show *az egész* as a determiner, and its interaction with other DPs in the sentence.

- (57) a. *Egy fá-n vot az egész madar*
One tree-SPRSSVE was the whole bird
‘All the birds were in one tree.’ (‘One tree held all the birds’, ÁN, File2)
- b. *Az egész fá-n van egy-egy madar*
The whole tree-SPRESSV is one-one bird
‘There is a bird in every tree.’ (ÁN, File2)

The examples in (58) and (59) show the negation of *az egész*: (58a) looks like constituent negation; in the other cases the preverbal negation particle *nem* has scope over postverbal *az egész*.

- (58) a. *Nem az egész-nek vót a kez-i-be éveg*
bot the whole-DAT was the hand-POSS.3SG-ILL bottle
‘Not all of them had a bottle in their hands’ (GyB, File2)
- b. *Nem játsz-ott-ak az egész-szel, de csak az egész egy-egy-vel.*
bot play-PAST-3PL the whole-INSTR, but only the whole one-one-INSTR
‘They didn’t play with all of them, each one of them played with only one’
(ÁN, File2)
(Scenario: Every boy is playing with a ball, there is a ball no-one is playing with)
- (59) *Nem vett az egész egy-egy tíz lej-t.*
bot cast the whole one-one ten leu-ACC
‘Not all of them gave ten lei (each).’ (ÁN, File 4)

Finally, (60) shows *az egész* with the MOE suffix *-n*. This is relevant, because earlier our informants denied the possibility of such a combination. When queried explicitly, they exchanged *az egész-en* for expressions like *mindenki* ‘everyone’ or *az egész*.

- (60) a. *Három nap-ig imádkozik az egész család, ...?*
 three day-TERM prays the whole family, ...?
 ‘The whole family prays for three days...?’ (Linguist 2)
- b. *Három nap-ig imádkoz-t-unk...*
 three day-TERM pray-PAST-1PL...
 ‘We prayed for three days...’ (GyB)
- c. *Az egész-en...*
 the whole-N...
 ‘All of us...’ (ÁN; the entire exchange is from File 5)

To conclude the presentation of the Csángó data, we would like to point out the following:
 In the Csángó regional variant of Hungarian:

1. *Az egész* can be a determiner; its NP can be unmarked for plural, or it can be in the plural (as in earlier stages of Hungarian).
2. *Az egész* can be a DP, with the meaning ‘all of them’, ‘everyone’.
3. *Az egész* can take the MOE suffix *-n*. *Az egészen* means ‘all from a given set’.

4.5 Data from Transylvania and Hungary (21st century)

In this part we present recently discovered data from modern Transylvania and Hungary. The data from Transylvania indicate that *az egész* as a determiner of count nouns has not become totally extinct there. The data from Hungary on the other hand indicate that the quantificational use of *az egész* is an option that is in principle available to the entire linguistic community, even if in the case of speakers from today’s Hungary this manifests itself as an isolated, individual creative ‘act’. (In the case of adult speakers from Hungary this may be facilitated by increased contact with Transylvanian speakers.)

Data from modern Transylvanian have been selected from Diószegi (2002); additional data can be culled from the Internet.

In (61) singular *az egész* ‘associates’ with a plural DP; it is thus on a par with standard Hungarian *mindegyik* ‘each and every one’, or *az összes* (lit. the sum total).

- (61) *Sies-s, leány-om, hoz-z-ad le a zsák-ok-at*
 hurry-IMP-2SG, daughter-POSS.1SG, bring-IMP-2SG down the the
a padlás-ról az egész-et!
 sack-PL-ACC the attic-DELA the whole-ACC!
 ‘Hurry up, my daughter, bring down the sacks from the attic, all of them!’
 (Diószegi 2002, 33)

In the next batch of examples *az egész* combines with NPs denoting amounts or quantities. In some cases the non-plural NP it combines with is understood as a collection (or, which is almost the same thing, it is understood as the portion of matter that makes up a collection

of objects). In (62) one has a quantity of feathers, in (63) one has a quantity of sowing seeds. Similarly, in (64) one has an amount of clothes to be washed.

- (62) *A háziasszony le-hozta az egész toll-at, ami volt a padlás-ra kosara-k-ba té-ve szárad-ni*
 the hostess down-brought the whole feather-ACC, what(REL) was the attic-SUBL basket-PL-ILL put-PASS.PART dry-INF
 ‘The hostess brought down all the feathers, which had been stored in baskets in the attic, to dry out.’ (Diószegi 2002, 41)
 (girls would gather at houses to prepare feathers and down for filling pillows, a.s.o.)
- (63) *Végre Apá-m el-szórta az egész mag-ot*
 finally Father-POSS.1SG away-scattered the whole seed-ACC
 ‘At last Father had sown all the seeds/the entire quantity of seeds.’
 (Diószegi 2002, 55)
- (64) *Másnap már ki-mos-t-am az egész fehér ruhá-t*
 next.day already out-wash-PAST-1SG the whole white clothing-ACC
 ‘The following day I had already washed all the white garments/clothing.’
 (Diószegi 2002, 111)

The last example in the series of numberless NPs denoting amounts is (65); it is perhaps the most conspicuous illustration of the ‘collectivisation’ underlying these examples. The point is, the default interpretation of *murok* ‘carrot’ is ‘atomic’, or ‘singular’, whereas in (65) it denotes an amount of carrots. (The sentence is about the carrots harvested from a plot of land, which then have to be carted home.)

- (65) *fél-rak-t-uk ott a sötét-ben jó magas-ra az egész murk-ot*
 up-load-PAST-1PL there the dark-INE good high-SUBL the whole carrot-ACC
 ‘There in the dark we loaded/piled high all the carrots (onto the cart).’
 (Diószegi 2002, 187)

Examples like those in (65) rely on the over-all semantics of number marking in Hungarian: the plural is marked, so *toll-ak* ‘feather-PL’ denotes at least two feathers, whereas *toll* can denote either a single feather, or several. *Az egész* then combines with the collective or mass variant of a numberless NP. That is, such examples rely on ‘standard’ semantic possibilities available to all Hungarians, and then the question could be how come speakers from other regions do not exploit these possibilities.

The last two examples from 20th century Transylvania involve plural NPs. In these cases (as we have seen in the earlier examples in 4.3) *az egész* is a universal determiner on a par with *minden* ‘every’ or *az összes* ‘every’, ‘the totality of’.

- (66) *Mikor az egész Magyar utca-i szép hóstát-i*
 when the whole Magyar street-ADJ.SFX beautiful hostat-ADJ.SFX
báz-ak-at le-bont-ott-ák, ő kacag-ott
 house-PL-ACC down-demolish-PAST-3PL he laughed
 ‘When all the beautiful Hóstát houses of Magyar street were demolished, he laughed.’ (Diószegi 2002, 87)

- (67) *Én meg-mutatom az egész ruhá-ink-at*
 I PFX-show-1SG the whole clothes-POSS.1PL-ACC
 'I'll show you all our clothes.' (Diószegi 2002, 96)

Data from present day Hungary: to date, we have two utterances, reported by Tamás Halm (p.c.).

- (68) *az egész mindenki, az egész gyerek-ek*
 the whole everyone, the whole child-PL
 'everyone', 'all children' — 4 year old boy, born in Budapest, no previous contact with Transylvanians (Tamás Halm, p.c., 19 January 2019)
- (69) *Az antifóná-t először el-énekel-jük mi, aztán az egész hív-ek*
 The antiphony-ACC first(Adv) PFX-sing-3PL we, then the whole churchgoer-PL
 'The antiphony will be first sung by us, and then by all the congregants' Choirmaster's instruction in Budapest, 2 June 2019 (Tamás Halm, p.c.)

4.6 Interim summary

In this section we have seen data that show that the adjective *egész* 'whole', 'entire', Old Hungarian 'healthy' has evolved into a maximality operator / universal quantifier. As an operator, it can be a determiner or a DP.

The stages of grammaticalisation can be pinpointed as follows:

1. With abstract nouns (often denoting institutions) and nouns denoting collective entities, *egész* means 'entire', 'in its entirety', 'all' (collective), as in example (26).
2. These expressions are reinterpreted 'pointwise', presumably due to metonymy. Thus 'all Jerusalem' comes to mean 'everyone in Jerusalem', as in examples from letters, and from (71b). (Metonymy was also possible with *mind* 'all', as seen in (71a).)
3. The 'all' construal is extended to count nouns: As seen in the examples from 4.3, *egész* building(s) comes to mean 'all buildings' (and not 'the entirety of some buildings'). This is in fact the Hungarian variant of Haspelmath's point of no return in the grammaticalisation process of adjectives meaning 'whole'.
4. *Az egész* can also be used as a full DP, meaning 'all (from a given set)', as in (51a).
5. The suffix *-n* can be attached to *az egész*, yielding an expression with the meaning 'all from a given set'.

The first stage of the grammaticalisation of *egész* can be attested in Old Hungarian. The second stage is detected in late Old Hungarian and early Middle Hungarian. These stages characterise the entire linguistic community. Data from letters are suggestive that the third stage may have commenced in Hungarian spoken in today's Hungary, but in later documents it is not attested with count nouns denoting 'ordinary' individuals. The

last three stages, we claim, were confined to Transylvania and the Csángó community. (A possible counterexample is (3), the single example from Slovakia. Until we are able to obtain more data from that area, we maintain our claim in its original form.)

4.7 *Az egész, space-time, and a branching model*

One important aspect of the evolution of *az egész* has not received a full discussion so far. The reason for is that the symptoms are hard to detect. If we take an ‘oblique’ approach, first looking at the evolution of the *synonyms* of *az egész*, we can see that an exchange has taken place.

In earlier work on quantification in Old Hungarian (Bende-Farkas 2014a,b, 2015), we noticed that Old Hungarian *mind* ‘all’ could be used with a very large variety of expressions, denoting practically anything from ordinary individuals (atoms and collective entities), to temporal intervals, spatial paths, scales (age scales, quantities of money), stages of an eventuality, and so on. In Modern Hungarian *mind* associates almost exclusively with individual-denoting expressions; its other uses are preserved in fossils such as *mind-halálíg* ‘(at all times, always) until death’, or *mind-végig* ‘at all times/stages till the end’. (Examples will be provided in the Appendix.)

In Modern Hungarian, the ‘non-individual’ uses of *mind* have been replaced with *az egész* or *az összes* ‘all’, ‘the sum total of’. NB in Modern Hungarian abstract and collective nouns associate with *az egész* and not with *mind*. The associates of present-day *mind* are collections of atoms or quantities of matter.

- (70) a. **mind* a rendőrség
all the police
‘all police’, ‘the entire police force’
b. *Mind* ki-bányászták az arany-at
all out-mined the gold-ACC
‘All the gold has been extracted.’
c. *Mind* meg-érkeztek a vendég-ek
all PFX-arrived the guest-PL
‘The guests have all arrived.’

The replacement of *mind* with *az egész* is illustrated first in (71) below. It is a quote from the Gospel of Matthew (II:3), translated into Hungarian in 1486 and 1561, respectively.

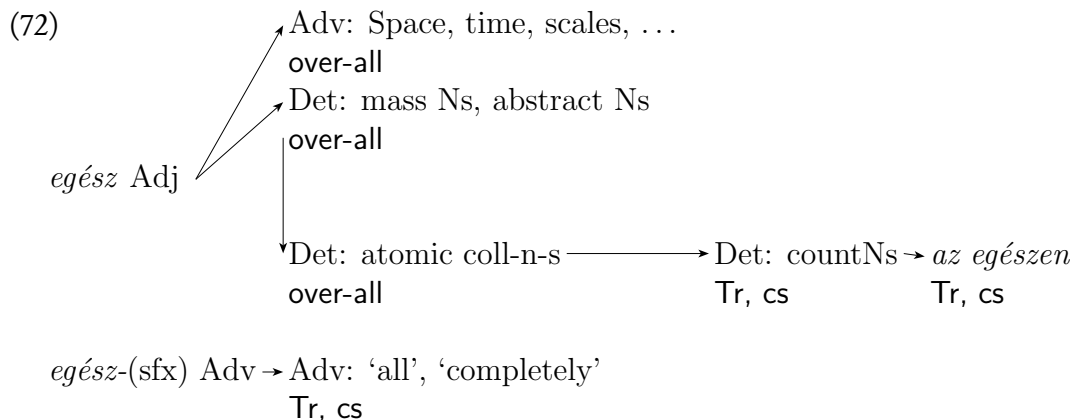
- (71) a. *Haluan ke. herodes királ’ meg zomorottatec & mend ibřlm o*
hearing and Herod king PFX saddened and all Jerusalem he
vèlè
INSTR-3SG
‘When Herod the king had heard these things, he was troubled, and all Jerusalem with him.’
(OH: Munich codex, 1466, 8va-vb; English: King James Bible 1611)
b. *Mikoron kedig ezz-ek-et halotta vól-na Herodes király, meg*
when and this-PL-ACC heard be-COND.OPT-3SG Herod king, PFX
haborodéc, és egész Ierusalem o vele
maddened, and whole Jerusalem he INSTR-3SG

(Gáspár Heltai, A3r; 1561)

- c. Audiens autem Herodes rex turbatus est, et omnis Hierosolyma cum illo.
(Vulgate)

The Appendix to this paper contains an inventory of examples from the Old Hungarian period, all of which contain *mind* ‘all’, accompanied with their present-day paraphrases, most of which involve (*az*) *egész* lit. ‘the whole’, ‘the entire’, or *egészen* ‘entirely’, ‘all the way’/‘all the time’.

Data with spatial-temporal-scalar expressions show first and foremost that the grammaticalisation of (*az*) *egész* has by no means been confined to Transylvania and the Csángó area. The grammaticalisation ‘map’ of *egész* shows several divergent trajectories. From the data presented in this chapter the following types of change can be detected:



The map in (72) shows two kinds of change for the adjective *egész*. The lower branch encodes the change from adjective to a quantificational determiner, as outlined at the beginning of the Interim Summary to this section (4.6). The upper branch encodes the evolution of *egész* into a synonym of *mind* ‘all’ associating with times, spatial paths, scales, events, a.s.o. Eventually, *egész* supplanted *mind* in this role. Exchanging *mind* for *egész* characterises the entire linguistic community.

As said earlier, with mass terms and abstract nouns *az egész* can be argued to be a determiner, and can also be shown to be synonymous with *mind* ‘all’. Again, this characterises the entire linguistic community.

Az egész can combine with ‘atomic collections’ (collective entities regarded as one whole). This holds for the entire community, from Old Hungarian onwards: in (72), the first stage of this type of change is not confined to Transylvania and the Csángó area. What is not present in Hungarian spoken in today’s Hungary (at any stage of the language, with the possible exception of individual creative ‘acts’ such as (68), (69)) is (i) *az egész* combining with count NPs as a synonym of *minden* ‘every’, and (ii) the suffixation of *az egész* to yield *az egészen* ‘all from a given set’.

We have added the individual-oriented readings of adverbs derived from *egész*. These too are typical of Transylvania, and have reinforced and consolidated distributive readings with *egész*.

As regards MOE-marked *az egész-en* ‘all from a given set’, in (72) it appears as the final stage of a grammaticalisation process, whose earlier stages involved *az egész* as a quantificational determiner.

5 Summary and Conclusions

In this paper we have followed the grammaticalisation process of the Hungarian adjective *egész* ‘entire’, ‘whole’ into a determiner / DP synonymous with ‘all’. At least the necessary conditions for this change were already present in Old Hungarian. A crucial step in the process, the determiner *egész* ‘all’ combining with count nouns, can be attested from the Middle Hungarian period. The suffixed form *az egészen* ‘the whole-N’ has been found out to mark a relatively late stage in the process.

Somewhat surprisingly, adverbial forms of *egész* (*egészlen* in Old Hungarian, cf. (27), and *egészben*, *egészlen* in Middle Hungarian) have contributed to this process, through what we have called their ‘individual-oriented’ readings. These readings are entailed by the ‘official’ event-oriented reading.

The grammaticalisation process of *egész* ‘whole’ has proved to be more widespread and far-reaching than initially suspected: In present-day Hungarian *egész* has replaced an entire spectrum of uses for *mind* ‘all’, most conspicuously where spatial and temporal expressions are concerned. (Hungarian equivalents of *all the time*, *all the way*, and so on.) This process characterises the entire linguistic community.

We conclude therefore that the grammaticalisation process of *egész* involved at least three types of changes, two of which have occurred in ‘mainstream’ Hungarian. The third type of change, which lead ultimately to *az egészen* ‘the whole-N’, had several stages. The first stage was present in ‘mainstream’ Hungarian, and only the later stages were confined to Transylvania and to Csángó speakers. The first type of change (*egész* with spatial, temporal or scalar expressions), as well as the role of adverbs in the grammaticalisation of *egész* are to our knowledge novel in the literature, in that they add new tracks, or dimensions, to the single-track model of Haspelmath (1995).

This article concludes with several open questions. The most conspicuous open issue is the role of the MOE suffix *-n*, and a proper analysis of *az egészen* and other *-n*- marked determiners/DPs.

Another issue, not readily apparent from the discussion, is the semantics and pragmatics of plurals, in particular, the semantics of what we have dubbed as collections-as-atoms. The relationship between event-oriented and individual-oriented readings may be clarified along the lines of Champollion (2017).

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Appendix

In this Appendix we illustrate the ontological versatility of *mind* ‘all’ in Old Hungarian. In most cases, *az egész* replaces *mind* in Modern Hungarian paraphrases.

A few remarks are in order before the data are presented: First, it is not known whether old Hungarian *egész* could or could not associate with expressions of this ontological type. What we do know is that in the codices it is *mind* that usually associates with them, with *egész* (or *mind -az- egész* lit. ‘all the whole’) occasionally associating with collections-as-atoms. Also, it can be observed that *mind* is no longer used productively with temporal, spatial or scalar expressions; *egész* on the other hand is used in precisely those contexts where *mind* is no longer used. A precise count and a detailed road map of this ‘exchange’ is a task for the future.

Second, one might ask why an expression like *all the way* or a sentence like *the napkin was all dirty* would involve grammaticalisation. The answer to this is that in these uses *all*, together with Hungarian *mind* ‘all’ and *egész*, is like a micro-quantifier, distributing over all portions of matter, all times, all chunks of space, or all points on a scale (cf. Roberts (1987), where *all* is defined as a generalised distributivity operator).

- Collective individual, abstract entity:

(73) a. *mjnd az telljes conuent bjzonsag-ot tevt rol-a*
 all the full convent testimony-ACC did DELA-3SG
 ‘the entire convent corroborated it about it/her’ (MargL 11r)

- b. ?*Az egész zárda megerősítette*
 The whole convent confirmed
 ‘The entire convent corroborated it’

Sentence (73a) is one of the very few cases where *az egész* does not work as a replacement for *mind*. One reason could be the distributivity of (73a) (if the entire convent corroborated some piece of information, then every member of that convent corroborated it), and, possibly, with *egész*, taking the relevant collection as one undivided whole is still preferred.

The Modern Hungarian version of (73a) was found acceptable by one of the reviewers. That is, an ‘atomic collection’ marked with *az egész* can apply to a distributive predicate. Our finding is that judgements depend on the kind of predicate used:

- (74) *Az egész koalíció (éppen most) a menzá-n eszik*
 The whole coalition (right now) the mensa-SPRESSV eat-3SG
 ‘The whole coalition is having lunch at the mensa’
 ‘All members of the coalition are having lunch at the mensa’

In the sentences above, an atomic collection appears to be perfectly compatible with a distributive predicate, in an episodic sentence.

- Stages of change:

- (75) a. *Idumea királ-a-nac tètèm-i-t meg égètte mend*
 Idumea king-POSS.3G-DAT bone-POSS.3SG.PL-ACC PFX burned all
hamu-iglan
 ash-TERM
 ‘He burned the bones of the king of Idumea all the way, till they became ashes’ (Vienna C. 216)
- b. & a. *t̄plom mend föld-iglèn le-tor-èt-tèt-et*
 and the temple all ground-TERM down-break-PASSIVE-PAST-3SG
 ‘and the temple was demolished completely, to the ground’ (Vienna C. 261)

Modern Hungarian: *egészen a földig* (‘all the way to the ground’), *egészen csontig* (‘down to the bone’, all the way to the bone’).

- The end point of a scale:¹⁸

- (76) a. *mēd o-hoz-ia fvt-a-nac a küsdèd-tol fogvā mēd annagg-iclan*
 all he-ALL-3SG ran-3PL the small.child-ABL starting all the.big-TERM
 ‘they all ran to him, from small children all the way to grown-ups’ (Vienna C 38)
- b. *kicsiktől egészen a nagyokig* ‘from small children all the way to big ones’ (older children or adults)

¹⁸ In example (77a) *mind* ‘all’ can also associate with the direct object, as pointed out by a reviewer. Indeed, sentences with *mind* could be ambiguous in this respect, but this would take us to the semantics of Old Hungarian *mind*, a subject clearly outside the scope of this paper. The point here is simply that *mind* could associate with scalar expressions, marked with the terminative suffix *-ig-len*.

- (77) a. [*bogy meg-adassék a tartozás*] *mind* *men-től* *kiss-eb*
 [so-that PFX-give-PASSIVE-3SG the debt] all what-ABL smaller
fill'er-iglen
 penny-TERM
 ‘(so that all the debt should be repaid), down to the smallest penny’ (BodK 17v)
- b. **egészen** a legkisebb / az utolsó fillérig ‘down to the smallest/the last penny’

• Spatial trajectories:

- (78) a. *az ev kjaltass-ok mjnd menyorzag-iglan fel halljk* *vala.*
 the he cry-POSS.3PL all heaven-TERM up hear(middle) PAST
 ‘their cries could be heard all the way to Heaven’ (MargL 41v)
- b. ...**egészen** a menyorszáig..., ‘all the way to Heaven’

• Time: Expressions denoting full intervals:

- (79) a. *vjselven mjnd az tellyes nap-ot nagy aytatos sjralmas jmdsag-ban*
 carrying all the complete day-ACC great pious tearful prayer-INE
 ‘spending the entire day in greatly pious, tearful prayer’ (MargL 7r)
- b. MH: **az egész** napot: ‘the entire/whole day’

• Temporal expressions denoting the initial segment of an interval:

- (80) a. *mjnden eztendev-ben mynd att-ol fogva. hog zent margit*
 every year-INE all that-ABL starting. that saint Margaret
azzon-nac jjo okossag-a volt ...
 lady-DAT good cleverness-POSS.3SG was ...
 ‘every year, ever since Lady Saint Margaret’s intellect developed’ (MargL, 6v)
- b. MH: **egészen** attól fogva/kezdvé – ‘ever since’, ‘during the entire interval starting with a given time t’

• Temporal expressions denoting the end point of an interval:

- (81) a. *ezen-kepen al* *vala mjnd ebed-jg*
 this-FORMAL stand PAST all lunch-TERM
 ‘she would remain standing like this (all the time) till lunch’ (MargL 5v)
- b. MH: **egészen** ebédig — ‘(at all times) till lunch’
- (82) a. *banuazo zerda-tvl mjnd busvet-jk ciliciom-ot visel* *vala*
 ashing Wednesday-ABL all Easter-TERM nailed.belt wear PAST
 ‘from Ash Wednesday until Easter she would wear a cilice (nail-studded belt, worn for penance)’ (MargL 21r)
- b. MH: **egészen** Húsvétig — ‘(at all times) until Easter’

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