

**NULL PRONOMINAL OBJECTS IN HUNGARIAN:
A CASE OF EXAPTATION**

by

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Abstract¹

The paper argues against the wide-spread view that assumes a direct correlation between object–verb agreement and object pro-drop in Hungarian. Whereas object–verb agreement has been present in Hungarian since the first written sources, and can be traced back to Proto-Ugric and even Proto-Uralic, object pro-drop will be shown to be a sporadic phenomenon in Old Hungarian, spreading in Middle Hungarian, and becoming general only in the 20th century. Recent results concerning the evolution of object–verb agreement also argue against its direct relation to object pro-drop. Object-agreement morphemes evolved from topic-doubling pronouns, and originally they encoded the topicality of the object in an SOV sentence. The present function of object–verb agreement is due to iterated exaptation. When the evolution of topic movement rendered its topic-marking role redundant, it was reanalyzed as a marker of the definiteness of the object, and when the evolution of a system of articles rendered its definiteness-marking role redundant, it assumed the function of licensing object pro-drop.

1. The claim

It is a generally accepted view both in Hungarian historical linguistics and in Uralic comparative linguistics that object–verb agreement, the so-called ‘objective’ or ‘definite’ conjugation, arose as a means of representing the object in the sentence, i.e., as an alternative to a phonologically salient object pronoun. In other words, the definite conjugation evolved as the licenser of object pro-drop. This paper will claim on the basis of historical evidence that this view cannot be correct. The definite conjugation has been present in Hungarian since the earliest surviving documents (in fact, it is likely to have originated in Proto-Uralic), whereas object pro-drop is a comparatively recent phenomenon, sporadically present in Old Hungarian, spreading gradually only since the Middle-Hungarian period. It will be argued that Hungarian object pro-drop represents a case of exaptation. As suggested by Marcantonio (1985), object–verb agreement originally encoded the topic role of the object; then, after Proto-Hungarian had developed a topic movement rule, it came to mark the definiteness of the object. It was only after Old-Hungarian had evolved a definite

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and an indefinite article that it found its present-day function, the licensing of object pro-drop.

The paper is structured as follows: Section 2 briefly introduces the Hungarian definite conjugation and object pro-drop, and the standard views about their history and alleged co-evolution. Section 3 presents statistical data refuting the generally accepted theory of their correlation. Section 4 outlines an alternative route for the evolution of the definite conjugation, which is not related to object pro-drop. Section 5 concludes that object pro-drop arose owing to two shifts in the function of the definite conjugation, i.e., it represents a case of exaptation.

2. The definite conjugation and null pronominal objects

Hungarian allows not only null pronominal subjects, but also singular null pronominal objects. Their licensing is related to the so-called objective, or definite, conjugation, encoding the presence of a definite object.

The Hungarian verb has two paradigms in every tense and mood: a 'subjective', or 'indefinite' conjugation, used with intransitive verbs as well as transitive verbs taking an indefinite object, and the 'objective', or 'definite' conjugation, used in the presence of a definite object. Compare:

(1)a. Subjective conjugation:	b. Objective conjugation:
én látok (valakit)	én látom Pétert
I see-INDEF.1SG someone-ACC	I see-DEF.1SG Peter-ACC
te láatsz (valakit)	te látod Pétert
you _{SG} see-INDEF.2SG someone-ACC	you _{SG} see-DEF.2SG Peter-ACC
ő lát (valakit)	ő látja Pétert
(s)he see-INDEF.3SG someone-ACC	(s)he see-DEF.3SG Peter-ACC
mi látunk (valakit)	mi látjuk Pétert
we see-INDEF.1PL someone-ACC	we see-DEF.1PL Peter-ACC
ti láttok (valakit)	ti látjátok Pétert
you _{PL} see-INDEF.2PL someone-ACC	you _{PL} see-DEF.2PL Peter-ACC
ők látnak (valakit)	ők látják Pétert
they see-INDEF.3PL someone-ACC	they see-DEF.3PL Peter-ACC

If the verb is in the definite conjugation, and the sentence contains no overt object, a 3rd person singular null pronominal object is assumed, e.g.:

- (2) Ismerem *pro_{subj}* *pro_{obj}*
 know-PAST-DEF.1SG [I] [(s)he/it-ACC]
 'I know him/her/it.'

Plural pronominal objects cannot be dropped, obviously because their [plural] feature cannot be reconstructed from the verbal suffix.² Cf.

- (3)a. A fiú_i megérkeze-tt. Felismer-t-em *pro_i*.
 the boy arrive-PAST.INDEF.3SG recognize-PAST-DEF1.SG [him]
 'The boy arrived. I recognized him.'
- b. A fiúk_i megérkez-t-ek. Felismertem *őket/*pro_i*.
 the boys arrive-PAST-INDEF.3PL recognize-PAST-DEF1.SG them
 'The boys arrived. I recognized them.'

In fact, we do find plural null pronominal objects in the second conjuncts of coordinate sentences, or in answers to yes-no questions. They are allowed if their antecedent is an object in the previous clause, as well. These cases, however, involve VP-deletion (with the V raised out of the VP into T), which can affect definite and indefinite objects and non-object complements alike. Cf.

- (4)a. Az ismerőse-i-m-et keresem, de nem [_{TP} talál-om [_{VP} 0]]
 the acquaintance-PL-1SG-ACC seek-DEF.1SG but not find-DEF.1SG
 'I'm looking for my acquaintances but I do not find [them].'
- b. Ismerősöket keresek, de nem [_{TP} talállok [_{VP} 0]]
 acquaintance-PL-ACC seek-INDEF-1SG but not find-INDEF.1SG
 'I'm looking for acquaintances but do not find [any].'

Interestingly, 1st and 2nd person objects do not elicit the definite conjugation:

- (5) János látott engem/téged /minket/titeket.
 John see-PAST.INDEF.3SG me /you_{SG}-ACC/us /you_{PL}-ACC
 'John saw me/you_{SG}/us/you_{PL}.'

Actually, the verb agrees with a 2nd person object, as well, if the subject is 1st person singular. Its suffix *-lak/lek* (comprising *-l-*, an allophone of the 2nd person indefinite agreement marker, and *-k*, the 1st person indefinite agreement marker) is not part of either the definite or the indefinite conjugation. If a verb

² Hungarian pronouns are not marked for gender, hence the verbal agreement suffix is not expected to encode gender features.

bearing a *-lak/lek* suffix is not accompanied by an overt 2nd person object, a null singular 2nd person pronominal is assumed (6a). The plural 2nd person object pronoun cannot be dropped (6b).

- (6)a. Látlak *pro* .
 see-2OBJ.1SG [you-ACC]
 'I see you.'
- b. Ne búj-ja-tok el! Látlak titeket/**pro*.
 not hide-IMP-2PL PRT see-2OBJ.1SG [you_{PL}-ACC]
 'Don't hide! I see you_{PL}.'

In É. Kiss (2005), the lack of object–verb agreement in case of a 3rd person subject and a 1st or 2nd person object, and in case of a 2nd person subject and a 1st person object is derived from the so-called Inverse Agreement Constraint, which blocks agreement if the object is more 'animate' than the subject.³ What is important from the present point of view is that the lack of verbal agreement with 2nd and 1st person objects also plays a role in the reconstruction of null pronominal objects: if a transitive verb is in the indefinite conjugation, and has no visible object, a null 1st or 2nd person singular object is assumed:

- (7)a. Felismer-sz *pro*_{subj} *pro*_{obj}?
 recognize-INDEF.2SG [you_{SG}] [me]
 'Do you recognize me?'
- b. Felismer-t-ek *pro*_{subj} *pro*_{obj} .
 recognize-PAST-INDEF.3PL [they] [me/you_{SG}]
 'They recognized me/you.'

Thus, as a combined effect of the definite conjugation and the Inverse Agreement Constraint, contextually salient singular pronominal objects (whether 1st, 2nd, or 3rd person) need not be spelled out in present-day Hungarian; they can be reconstructed from the verbal suffix.

The crucial element in the licensing of null pronominal objects is the definite conjugation. The standard view in Hungarian synchronic syntax is that the definite paradigm involves both an object agreement morpheme and a subject agreement morpheme, even if in 1st and 2nd person singular they are represented by a single portmanteau morpheme (cf. Rebrus 2000, Bartos 2000). Observe the

³ The Inverse Agreement Constraint is attested, among others, in the East Siberian Chukchi, Koryak, and Kamchadal (cf. Comrie 1980, and Bobaljik & Branigan 2006).

definite conjugation of the verb *ír* 'write'. The object agreement morpheme *-j(a)* is sandwiched between the verbal stem and the subject agreement suffix.

(8) <i>ír-om</i>	'[I] write [it]'	<i>ír-j-uk</i>	'[we] write [it]'
<i>ír-od</i>	'[you] write [it]'	<i>ír-já-tok</i>	'[you] write [it]'
<i>ír-ja-0</i>	'[(s)he] writes [it]'	<i>ír-já-k</i>	'[they] write [it]'

Historical linguists segment the suffixes of the definite paradigm in the same way. Object–verb agreement is present in several branches of the Uralic language family, among them the Ob-Ugric Khanty and Mansy, as well as Mordvin, Cheremiss, and various Samoyedic languages – hence it is believed to be Uralic heritage.⁴ Finno-Ugric/Uralic comparative linguist including Szerebrennyikov (1956), Hajdú (1966), Mikola (1966), Honti (1984, 1995, 1996, 2009), Rédei (1996), Csúcs (2001), and Havas (2004) have traced back the segments of the definite suffixes to various Proto-Uralic pronominal elements. Honti (1984, 341-346) has derived the *-jV-* segment of the definite paradigm from a Proto-Uralic **sV* 3rd person object pronoun through a series of independently motivated sound changes, i.e., the definite conjugation is likely to have arisen by the agglutination of an object pronoun (plus a subject pronoun) to the verbal stem.

Uralists also share the view that the agglutination of the object pronoun to the verb made the presence of another object pronoun superfluous; that is, the definite conjugation and object pro-drop developed simultaneously; they represent two sides of the same coin – see, among others, Janhunen (1982, 35), Honti (1996), and Kulonen (1997, 63-71). This view, however, cannot be correct. In present-day Hungarian – similar to present-day Khanty and Mansy – the objective conjugation indeed often goes together with object pro-drop, but this was not the case in Old and Middle Hungarian.

3. The independence of object–V agreement and object pro-drop

In the first surviving Hungarian document, Funeral Sermon and Prayer, written (or copied) between 1192-95, we attest two full-fledged verbal paradigms in all tenses and moods, and the suffixes of the indefinite and definite conjugations are essentially the same as they are today. Observe the first sentence of the text: the main clause contains a 2nd person plural verb in the definite conjugation (agreeing with the clausal object), and the subordinate clause contains a 1st person plural verb in the indefinite conjugation:

⁴ Keresztes (1999), however, claims that the current morphological form of the Mordvin definite conjugation is an internal development.

- (9) *Latiatuc feleym zumtuchel mic vogmuc.*
 see-DEF.2PL friend-PL-1SG eye-2PL-with what are-1PL
 ‘Do you see, my friends, with your eyes what we are?’

The 50-clause text contains six 3rd person singular pronominal objects, but no obvious case of object pro-drop, i.e., the definite conjugation does not make overt pronominal objects superfluous. For example:

- (10) *Heon tilutoa wt ig fa gimilce tvl.*⁵
 only enjoin-PAST-DEF3.SG him one tree fruit-3SG-from
 ‘[He] only enjoined him from the fruit of one tree.’

Actually, the following construction raises the possibility of a null pronominal object:

- (11) *Hug es tiv latiatuc szumtuchel. isa es num igg*
 as also you see-DEF.2PL eye-2PL-with surely even not one
ember mulchotia ez vermut.
 man miss-POSSIB-DEF.3SG this pit-ACC
 ‘As also you can see with your eyes, not even one man can miss this pit.’

From a lexical-semantic perspective, the verb *latiatuc* ‘see’ is the main predicate, which selects an object clause. Clausal objects count as definite in Hungarian, and elicit the definite conjugation, as is attested in (11). Syntactically, however, the object clause is construed as the main clause in (11), therefore, the object of the verb *latiatuc* ‘see’ can be a null pronominal coindexed with the main clause.

The first clear case of a null object pronoun occurs in Mary’s Lament (1300):

- (12) *Walasth vylagum tul sydou fyodumtul pro*
 separate-INDEF.3SG world-1SG from Jew-NOM son-1SG-from [me]
 ‘The Jew separates [me] from my world, from my son’

Notice, however, that the null pronoun is the 1st person singular *engem* ‘me’, eliciting no object–verb agreement. In other words, the verb is in the indefinite conjugation, hence the null object cannot be identified with a morpheme agglutinated to the verb.

⁵ The following instance of a null object represents a case of VP-deletion of the type illustrated in (4a,b):

- (i) *Hadlaua choltat teremteve istentvl. ge feledeve*
 hear-PAST-DEF.3SG death-3SG-ACC creating God-from but forget-PAST-DEF.3SG
 ‘[He] heard his death from Creating God, but forgot [it].’
 (Funeral Sermon and Prayer (1192-95))

The first clear cases of object pro-drop licensed by the definite conjugation occur in Königsberg Fragment, a 1350 copy of an earlier text. As the antecedent of the pronouns is indefinite, the null objects cannot be due to VP-deletion.

- (13) vleben tart chudaltus fiot.
 lap-3SG-in hold-INDEF.3SG wonderful son-ACC
 furiscte musia. etety ymletí
 bathe-DEF.3SG wash-DEF.3SG feed-DEF.3SG nurse-DEF.3SG
 ‘She holds a wonderful son on her lap. She bathes [him], washes [him],
 feeds [him], nurses [him]’

In the following sentence of Königsberg Fragment, the 3rd person object pronoun is inserted above the line, which may indicate the scribe’s uncertainty whether or not it could be omitted:

- (14) Tudyuc latíuc ^{evt} scuz lean nac
 know-DEF.1PL see- DEF.1PL her virgin maid for
 ‘We know, see her as a virgin maid.’

The first book-length Hungarian text, Jókai Codex, written around 1370 and copied in 1448, displays sporadic pro-drop. For example:

- (15) Es azert ewele kyuanuala zolnya: Azert nemy haladek
 and therefore he-with wish-PAST-3SG speak-INF as some delay
 leuen: legottan masoczor es harmaczwr hyua:
 being immediately 2nd-time and 3rd-time called-DEF.3SG
 ‘And therefore he wished to speak with him. As there was some delay,
 he called [him] for the second time and third time’

The impression that object pro-drop is rare in Jókai Codex is confirmed by statistical data derived from a dictionary processing the vocabulary of the codex, specifying the occurrences and the morphological structure of each word (Jakab 2002). The codex contains 98 occurrences of the overt singular object pronoun *őtet* (spelled as *ewtet*). The plural object pronoun *őket* (spelled as *ewket/ewkewt*) occurs 19 times - that is, there are about five times as many singular 3rd person object pronouns as plural ones. The number of singular dative 3rd person pronouns is only about 2,5 times as many (107) as the number of plural 3rd person dative pronouns (42). As for nominative pronouns, the singular 3rd person pronoun occurs 36 times, and the plural one occurs 9 times, i.e., in their

case the singular : plural proportion is 4 : 1.⁶ If singular 3rd person pronominal objects had been affected by extensive pro-drop, the singular–plural proportion would have been smaller than it is in the case of dative and nominative pronouns, whose singular and plural variants are affected by pro-drop identically (in the case of datives, neither singulars, nor plurals can be dropped, whereas in the case of nominative pronouns, both of them can).

The proportion of nominative and accusative pronouns is also relevant. Among the plural 3rd person pronouns, where only the nominative ones could be dropped, there are 9 nominative and 29 accusative pronouns, i.e., the nominative : accusative proportion is 9:29=0,31. Among the singular 3rd person pronouns, where pro-drop could, in principle, affect nominative and accusative pronouns alike, there are 36 nominative and 98 accusative pronouns, i.e., the singular : plural proportion is 36:98=0,367. If we expect the same proportion among singular pronouns as attested among plural ones, then we should assume 116 singular accusative pronouns, i.e., roughly 20% of the singular accusative pronouns must be phonologically null.

In the first surviving Hungarian translation of the Gospels, prepared between 1416-35, preserved in Munich Codex (1466), the number of overt 3rd person singular accusative pronouns is not much smaller than it is in Luther's German translation. In the latter, Matthew's Gospel contains 156 singular accusative pronouns (134 *ihn* and 22 singular accusative *sie*), whereas in the Hungarian translation their number is 137. The comparison of subsequent translations of Matthew's Gospel shows a slow but fairly gradual decrease of overt 3rd person singular accusative pronouns:⁷

(16) The number of overt 3SG object pronouns in subsequent translations of Matthew's Gospel

Munich Codex	(1416-35/1466): 137
Gábor Pesti: Novum Testamentum	(1536): 124
Gáspár Károli's translation	(1590): 108
György Káldi's Vulgata translation	(1626): 117
Gellért Békés & Patrik Dalos's translation	(1950): 19

The slow decrease of overt singular 3rd person accusative pronouns – and the slow increase of their null equivalents – in the 15th-17th centuries, i.e., in the

⁶ The pronoun *ő(k)* 'he(PL)' is mainly used to refer to [+human] referents; [-human] referents are usually referred to by the demonstrative *az* 'that'. Since *az* has several functions, its pronominal uses cannot be counted automatically; therefore I ignore them.

⁷ The 16th century abounds in Hungarian Bible translations. Since they are very close in time, I have only compared the best-known translations. There are new Bible texts from the 20th century, as well, but Békés and Dalos's translation is the only one that is completely new; the rest are modernized versions of old translations.

late Old Hungarian and the Middle Hungarian periods, had apparently speeded up by the middle of the 20th century. So as to be able to estimate when the use of null singular object pronouns became general, I examined the proportion of overt singular and plural 3rd person object pronouns in Modern Hungarian texts from the Hungarian National Corpus <http://www.nytud.hu/hhc/>. The corpora examined include all the texts of the corpus dated from 1775-1800, 1875-1900, and 1975-2000. Eventually, I compared the proportion of overt singular and plural object pronouns in Jókai Codex, subsequent translations of Matthew's Gospel, and the corpora representing subsequent phases of Modern Hungarian. The changing proportion of overt singular and plural pronominal objects, i.e., the decrease of singulars, is shown first numerically (17), then graphically (Table 1).

(17) The proportion of overt plural and singular objects pronouns

	SINGULAR/PLURAL
Jókai Codex (1400):	98 / 19
Munich Codex (1450):	137 / 35
Gábor Pesti' Matthew (1536):	124 / 43
Károli's Matthew (1590):	108 / 48
Káldi's Matthew (1626):	117 / 41
corpus 1775-1800:	116/ 108
corpus 1875-1900:	1171/ 915
corpus 1975-2000:	1317/2621
Békés-Dalos's Matthew (1951):	19/ 49

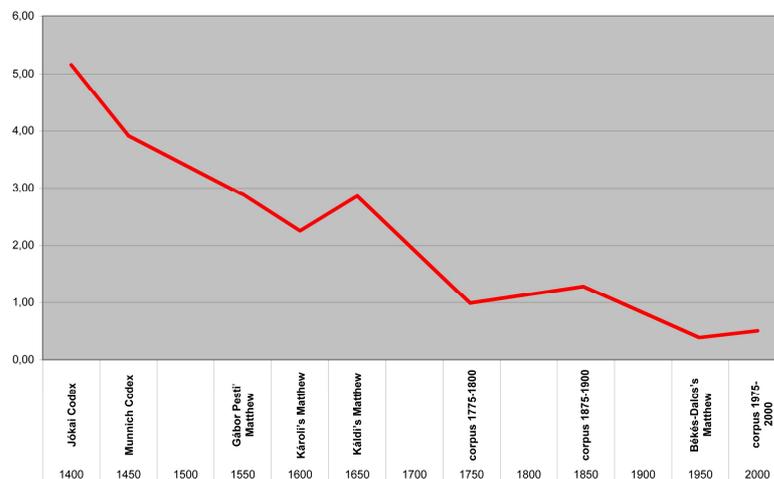


Table 1: The proportion of 3rd person plural/singular object pronouns

I conclude that the assumption according to which the definite conjugation in Hungarian has always served the purpose of licensing null pronominal objects cannot be right. Whereas the definite conjugation can with certainty be traced back to the period of the Ugric unity (before 500 BC), and it is likely to be a heritage from the Proto-Uralic period (before 3000 BC), null pronominal objects are not attested in Hungarian before 1300 AD, and their presence is sporadic throughout the Old Hungarian and the early Middle Hungarian periods. They seem to have become general only in the 20th century.

There is also a further obvious argument against the view that agreement morphemes agglutinated to the verb stand for overt pronouns, thereby making their spell-out unnecessary: as is well-known, not all languages displaying subject–verb agreement license subject pro-drop.

If the original function of the Hungarian definite conjugation was not the substitution of overt accusative pronominals, then the question arises what purpose it served.

4. The function of object–verb agreement in Proto-Hungarian

General linguistic considerations formulated in Givón (1975), facts of the sister languages of Hungarian (Marcantoni 1985 and Nikolaeva 1999, 2001), as well as certain Old and Modern Hungarian phenomena suggest that the function of object–verb agreement in Proto-Hungarian (and also in Proto-Ugric) must have been the encoding of the topic function of the object (cf. É. Kiss 2011).

According to Givón (1975), object–verb agreement – similarly to subject–verb agreement – represents grammaticalized topic–verb agreement, i.e., both subject agreement morphemes and object agreement morphemes derive from topic doubling pronouns. His claim is based on Creol and child language data, as well as on various Bantu languages, where object–verb agreement is clearly dependent on the topicality of the object. In some Bantu languages, the topicality requirement has been reinterpreted as a definiteness requirement, i.e., they display definite-object–verb agreement. Further evidence for Givón’s claim is provided by the crosslinguistic generalization that object–verb agreement is constrained by the same implicational hierarchy that constrains topic selection (i.e., if in a language [-human] constituents can be topicalized/agree with the verb, [+human] constituents also can; if [-definite] constituents can be topicalized/agree with the verb, [+definite] constituents also can, etc.).

Marcantoni (1985) adopted Givón’s theory in order to account for the evolution of object–verb agreement in Proto-Ugric, the ancestor of Hungarian, Khanty (Ostyak) and Mansy (Vogul), and in Proto-Hungarian. Proto-Ugric and early Proto-Hungarian are likely to have been SOV languages with the subject functioning as topic, and the object functioning as focus – as is the case in present-day Khanty and Mansy. According to Marcantoni, V-object agreement was used in OSV sentences to mark the fact that the topic function is associated

with the object (instead of the subject). She argues for a three-stage development. At stage 1, preserved in various Mansy dialects, topicalized objects are marked by a nominal suffix, which is reinterpreted in some dialects as the marker of definite objects (cf. Collinder 1960). At stage 2, differential object marking is generalized to all objects, and the topic function of the object is encoded by V-object agreement. This is the stage preserved in some Khanty dialects (although grammatical descriptions tend to misinterpret it, claiming that verbal agreement with definite objects in Khanty is optional (cf., e.g., Steinitz 1950:75). At stage 3, represented by Hungarian since the beginning of its documented history, topical object–verb agreement is reinterpreted as definite object–verb agreement, and topic function is encoded by topic movement. Actually, Old Hungarian still preserves sporadic relics of the previous stage, as well, i.e., occasionally we find examples where a topicalized indefinite accusative relative pronoun elicits the definite conjugation (18a),⁸ and a non-topic definite object elicits the indefinite conjugation (18b).

(18)a. Saul keral kít isten meg vetí az engedetlensegert
 Saul king whom God PRT detest-DEF.3SG the disobedience-3SG-for
 ‘King Saul, whom God detests for his disobedience’
 (Guary Codex (before 1495), p.19)

b. Hirdettünk te czudaidat
 announce-PAST-INDEF.1PL you wonder-PL-2SG-ACC
 ‘we announced your wonders’
 (Apor Codex (written after 1416, copied around 1500), p. 67)

Nikolaeva’s (1999, 2001) new results on Khanty basically confirm, and partly overwrite Marcantonio’s theory. Khanty word order (which is likely to have preserved the Proto-Ugric order – cf. É. Kiss (2011)) is always SOV, and the subject also has the topic function. The agent can assume focus role only if the sentence is passivized. Khanty object–verb agreement, indeed, marks the topicality of the object; but it marks its secondary topic role, given that the subject functions as the primary topic. Compare the following set of examples, cited from Nikolaeva (1999):

(19)a. ma tām kālaŋ we:l-s-əm
 I this reindeer kill-PAST-1SG
 ‘I killed this reindeer.’

⁸ A relative phrase can be preceded by a topic, hence it is claimed to be preposed into Spec,TopP (instead of Spec,CP) by Kenesei (1994),

- b. *ma tām kǎlaŋ we:l-sə-Ø-e:m*
 I this reindeer kill-PAST-SG-1SG
 'I killed this reindeer.'
- c. *ma tām kǎlaŋ we:l-sə-l-am*
 I this reindeer kill-PAST-PL-1SG
 'I killed these reindeer.'
- d. *ma tām kǎlaŋ we:l-sə-ŋil-am*
 I this reindeer kill-PAST-DU-1SG
 'I killed these (two) reindeer.' (Nikolaeva 1999, ex. 1)

The primary topic is the subject *ma* 'I' in each of these sentences. The object is also the same definite expression in each case, but in (19a) it does not, in (19b-d) it does elicit verbal agreement. The non-agreeing object in (19a) is a contextually new information focus; the agreeing object in (19b-d), on the other hand, is a contextually given familiarity topic. Non-agreeing and agreeing objects are also shown to differ syntactically; agreeing objects share certain syntactic properties of subjects (they control reflexivization, and coreference in the embedded clause, and they can trigger quantifier float and topicalization of the possessor). Non-agreeing objects are syntactically inert: they do not participate in any of these processes.

The sentence structure and agreement pattern of Old Hungarian is likely to have been similar to that preserved in present-day Khanty. In É. Kiss (2011) I have argued that comparative evidence, involving Khanty and Mansy data and the most archaic constructions of Old Hungarian, suggests that the Proto-Hungarian sentence was also SOV, where object–verb agreement marked the secondary topic role of the object. This hypothesis is confirmed, among others, by the fossilized Inverse Agreement Constraint, blocking agreement with 1st and 2nd person objects if the subject is 3rd person, and with 1st person objects if the subject is 2nd person (cf. É. Kiss 2005). The Inverse Agreement Constraint is a totally unmotivated, ad hoc phenomenon as a morphological restriction. Its motivation becomes transparent if it is interpreted as a grammaticalized constraint restricting topic selection in a strictly SOV sentence. What it blocks is that the secondary topic (the object) be more 'animate', more involved in the given event than the primary topic (i.e., the subject). An object more 'animate' than the primary topic can only be construed as a focus. That is, the Inverse Agreement Constraint is the grammaticalization of an inverse topicalization constraint.

5. From Old Hungarian to Modern Hungarian

If the hypothesis put forth in section 3 is tenable, and the Hungarian definite paradigm evolved from topic-doubling pronominal objects agglutinated to the verb, then object–verb agreement never involved the vacating of the object

position, hence the sparsity of null pronominal objects in Old Hungarian is not surprising. What needs to be explained is why object pro-drop started spreading in the Middle Hungarian period, and why the dropping of singular 3rd person pronominal objects had become general by the middle of the 20th century.

Apparently, exaptation, i.e., a shift in the function of object–verb agreement, took place, and what is more, it took place repeatedly. It occurred first in the late Proto-Hungarian period, after Proto-Hungarian had ceased to be an SOV language, and the Hungarian sentence had developed a functional left periphery different from the thematic domain. With the appearance of a topic movement rule, which could target subjects, objects, and oblique complements alike, the original function of object–verb agreement, marking the topicality of the object, became redundant. Object–verb agreement did not disappear but assumed a new role: the marking of the definiteness of the object. At that time, Hungarian had already given up the Uralic way of marking definiteness via possessive agreement suffixes, but the system of marking definiteness by articles had not developed yet. The fact that definiteness marking was more urgent in the case of objects than in the case of subjects must be due to the fact that the definiteness feature of the internal argument also affects aspectual interpretation.

By the late 16th century, however, Hungarian had evolved both a definite and an indefinite article. Whereas the translation of the Lord's Prayer in Munich Codex from the first half of the 15th century contains no definite article yet, its translation in the Károli Bible from 1590 has six definite articles (and three more in the last sentence added from the Greek text). The emergence of the definite article rendered the definite conjugation redundant again; and it has again found a new function: licensing singular null pronominal objects. This is its primary function in Modern Hungarian. Now singular pronominal objects are only pronounced if they are associated with focus stress and/or contrastive intonation, or if they host a clitic.

6. Summary

This paper has argued against the generally accepted view that assumes a direct correlation between object–verb agreement and object pro-drop in Hungarian. The direct correlation is refuted, first of all, by statistical data. Object–verb agreement has been present in Hungarian since the first written documents; in fact, it can be traced back to Proto-Ugric and presumably even to Proto-Uralic. Object pro-drop, nevertheless, was a sporadic phenomenon in Old Hungarian; it started spreading in Middle Hungarian, and it has become general only in the 20th century. Recent results concerning the evolution of object–verb agreement also argue against its direct relation to object pro-drop. Object-agreement morphemes evolved from topic-doubling pronouns, and originally encoded the topicality of the object in an SOV sentence. The present function of object–verb agreement is due to iterated exaptation. When the evolution of topic movement

rendered its topic-marking function redundant, it was reanalyzed as a marker of the definiteness of the object, and when the evolution of a system of articles rendered its definiteness marking role redundant, it assumed the function of licensing object pro-drop.

References

- Bartos, Huba. 2000. Az inflexió jelenségek szintaktikai háttere. In *Strukturális magyar nyelvtan II. Morfológia*, ed. Ferenc Kiefer, 653-761. Budapest: Akadémiai Kiadó.
- Bobaljik, Jonathan and P. Branigan. 2006. Eccentric agreement and multiple Case-checking. In *Ergativity: Emerging Issues*, ed. A. Johns, D. Massam and J. Ndayiragije, 44-77. Dordrecht: Kluwer.
- Collinder, Björn. 1960. *Comparative Grammar of the Uralic Languages*. Stockholm: Almqvist.
- Comrie, Bernard. 1980. Inverse verb forms in Siberia: Evidence from Chukchee, Koryak and Kamchadal. *Folia Linguistica* 1: 61-74.
- Csúcs, Sándor. 2001. Die Konjugation im Umpermischen. In *Congressus Nonus Internationalis Fenno-Ugristarum 4*, 190-198. Tartu: University of Tartu.
- É. Kiss, Katalin. 2005. The inverse agreement constraint in Hungarian – a relic of a Uralic–Siberian Sprachbund? In *Organizing Grammar. Linguistic Studies in Honor of Henk van Riemsdijk*, ed. H. Broekhuis et al., 108-116. Berlin: Mouton de Gruyter.
- É. Kiss, Katalin. 2011. Differential object–verb agreement is (fossilized) topic–verb agreement. Ms. Budapest: Research Institute for Linguistics of the Hungarian Academy of Sciences.
- Givón, Talmy. 1976. Topic, pronoun, and grammatical agreement. In *Subject and Topic*, ed. Charles Li and Sandra Thompson, 149-188. New York: Academic Press.
- Hajdú, Péter. 1966. *Bevezetés az uráli nyelvtudományba*. Budapest: Tankönyvkiadó.
- Havas, Ferenc. 2004. Objective Conjugation and Medialisation. *Acta Linguistica Hungarica* 51: 95–141.
- Honti, László. 1984. *Chrestomatia Ostiacica*. Budapest: Tankönyvkiadó.
- Honti, László. 1995. Zur Morphotaktik und Morphosyntax der uralischen /finnisch-ugrischen Grundsprache. In *Congressus Octavus Internationalis Fennougristarum Pars I*, ed. Heikki Leskinen, 53-82. Jyväskylä: Moderatores.
- Honti László 1996. Az uráli nyelvek tárgyas ragozású igealakjainak történeti előzményeiről. *Urálistikai Tanulmányok* 7: 127–132. Budapest: ELTE.
- Honti, László. 2009. Tűnődések tárgyas igeragozásunk kialakulásáról. *Nyelvtudományi Közlemények* 106: 132-146.
- Jakab, László. 2002. *A Jókai-kódex mint nyelvi emlék szótárszerű feldolgozásban*. Debrecen: Debrecen University.

- Janhunen Janhunen, Juha 1982: On the structure of Proto-Uralic. *Finnisch-Ugrische Forschungen* 44: 23–42.
- Kenesei, István. 1994. Subordinate Clauses. In *The syntactic structure of Hungarian. Syntax and semantics* 27, ed. Ferenc Kiefer and Katalin É Kiss, 275-354. New York: Academic Press.
- Keresztes, László. 1999. *Development of Mordvin Definite Conjugation*. Suomalais-Ugrilaisen Seuran Toimituksia 233. Helsinki: Suomalais-Ugrilainen Seura.
- Kulonen, Ulla-Maija. 1989. *The Passive in Ob-Ugrian*. Helsinki: Finno-Ugrian Society.
- Marcantonio, Angela. 1985. On the definite vs. indefinite conjugation in Hungarian: A typological and diachronic analysis. *Acta Linguistica Hungarica* 35: 267-298.
- Mikola, Tibor. 1966. A tárgyrag és a tárgyas ragozás kérdéséhez. *Magyar Nyelv* 62: 441-461.
- Nikolaeva, Irina. 1999. Object agreement, grammatical relations, and information structure. *Studies in Language* 23: 331-376.
- Nikolaeva, Irina. 2001. Secondary topic as a relation in information structure. *Linguistics* 39: 1-49.
- Rebrus, Péter (2000), Morfológiai jelenségek. In *Strukturális magyar nyelvtan II. Morfológia*, ed. Ferenc Kiefer, 763-949. Budapest: Akadémiai Kiadó.
- Rédei, Károly. 1962. Tárgyas igeragozásunk. *Magyar Nyelv* 58: 421-435.
- Szerebrennyikov, B. A. 1956. A finnugor nyelvek történetének néhány kérdése. *Nyelvtudományi Közlemények* 58: 187-200.
- Steinitz, Wolfgang. 1950. *Ostjakische Grammatik und Chrestomatie mit Wörterverzeichnis*. Leipzig: O. Harrassowitz.

Sources of examples:

- Halotti Beszéd [Funeral Sermon and Prayer]. 1192-95. In *Magyar nyelvemlékek* [Old Hungarian linguistic documents], ed József Molnár and Györgyi Simon, 27. Budapest: Tankönyvkiadó, 1977.
- Ómagyar Mária Siralom [Old Hungarian Mary's Lament]. 1300. In *Magyar nyelvemlékek* [Old Hungarian linguistic documents], ed József Molnár and Györgyi Simon, 43. Budapest: Tankönyvkiadó, 1977.
- Königsberg Fragment. circa 1350. In *Magyar nyelvemlékek* [Old Hungarian linguistic documents], ed József Molnár and Györgyi Simon, 51. Budapest: Tankönyvkiadó, 1977.
- Jókai-kódex*. 1370/1448. ed. János P. Balázs. Budapest: Akadémiai Kiadó, 1981.
- Bécsi codex* [Vienna Codex]. 1416-1435/1450. ed. Gedeon Mészöly. Budapest: Magyar Tudományos Akadémia, 1916.

- Müncheni kódex* [Munich Codex]. 1416-35/1466. ed. Antal Nyíri. Budapest: Akadémiai Kiadó, 1971.
- Apor kódex*. 1416-35/1500. ed. Szabó Dénes. Codices Hungarici II. Kolozsvár: Erdélyi Tudományos Intézet, 1942.
- Guary-kódex*. Before 1495. ed. Szabó Dénes. Codices Hungarici III. Budapest: Magyar Tudományos Akadémia, 1944.
- Pesti, Gábor: *Novum Testamentum sei quattuor euangeliorum volumina lingua Hungarica donata*. 1536. ed. Szilády Áron. Budapest: Magyar Tudományos Akadémia, 1896.
- Szent Biblia*, translated by Gáspár Károli. 1590. Facsimile: Budapest: Magyar Helikon, 1981.
- Szent Biblia*, translated by György Káldi. 1626. Budapest: Faximilex, 2002.
- Újszövetség*, translated by Békés Gellért and Dalos Patrik. 1951. Budapest: Bencés Kiadó, Sz. Jeromos Bibliatársulat, 1991.