Possessive agreement turned into a derivational suffix

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1. Introduction

The prototypical case of grammaticalization is a process in the course of which a lexical word loses its descriptive content and becomes a grammatical marker. This paper discusses a more complex type of grammaticalization, in the course of which an agreement suffix marking the presence of a phonologically null pronominal possessor is reanalyzed as a derivational suffix marking specificity, whereby the pro cross-referenced by it is lost.

The phenomenon in question is known from various Uralic languages, where possessive agreement appears to have assumed a determiner-like function. It has recently been a much discussed question how the possessive and non-possessive uses of the agreement suffixes relate to each other (Nikolaeva 2003); whether Uralic definiteness-marking possessive agreement has been grammaticalized into a definite determiner (Gerland 2014), or it has preserved its original possessive function, merely the possessor–possessum relation is looser in Uralic than in the Indo-Europen languages, encompassing all kinds of associative relations (Fraurud 2001). The hypothesis has also been raised that in the Uralic languages, possessive agreement plays a role in organizing discourse, i.e., in linking participants into a topic chain (Janda 2015).

This paper helps to clarify these issues by reconstructing the grammaticalization of possessive agreement into a partitivity marker in Hungarian, the language with the longest documented history in the Uralic family. Hungarian has two possessive morphemes functioning as a partitivity marker: -ik, an obsolete allomorph of the 3rd person plural possessive suffix, and -(j)A, the productive 3rd person singular possessive suffix. As will be shown, they represent different stages of the pathway of grammaticalization that leads from a possessive morpheme denoting that its nominal base is the possessum of a pronominal possessor to the same morpheme denoting partitivity.

The paper is organized as follows: Section 2 is a brief survey of the literature discussing the non-possessive use of possessive agreement in the Uralic languages. Section 3 introduces the suffix -ik, a derivational suffix conveying partitivity and definiteness in Modern Hungarian. Section 4 argues that -ik functioned as a 3rd person plural possessive ending in Old Hungarian. Section 5 reconstructs the grammaticalization process that has resulted in the loss of its possessive function, while preserving its definite and partitive features. Section 6 shows that -(j)A, the 3rd person singular possessive agreement marker, is going through a similar grammaticalization process as its plural counterpart. Section 7 is a summary.

2. Previous approaches

The grammars of many Uralic languages mention the fact that possessive suffixes, whose primary function is to mark the person and number of a (typically covert) pronominal possessor on the possessum, can also have a non-possessive, determining role. Nikolaeva's (2003) survey distinguishes three types of non-possessive meanings:

i. Identifying—deictic function, with the 3rd person singular possessive suffix marking that the referent of the possessum is uniquely identifiable, i.e., visible or otherwise salient, in a given situation. For example:

(1)a. t'ukona **sira-da** wər-cawey. (Nenets, Nikolaeva 2014: 69) here snow-3SG dirt-PROP 'Here the snow is dirty.'

- b. Guždor vylyn **turyn-ez** čeber. (Udmurt, Nikolaeva 2003: ex. (6b)) field on grass-3SG beautiful 'The grass on the field is beautiful.'
- ii. Contrastive-partitive function, with the 3rd person plural possessive suffix marking that the referent of the possessum is a subset of a previously introduced set. The example in (2a) also illustrates a collateral function of possessive agreement: it nominalizes the adjective it combines with.
- (2)a. Wera-h te-xt°əta **ŋarka-doh** səwa. (Nenets, Nikolaeva 2014: 69) Vera-GEN reindeer-PL.ABL.3SG big-3PL good 'Among Vera's reindeer, the big one is good.'
 - b. t'uku° xasawa ŋəc'eke-xət° **ŋob-toh** səwa. (Nenets, Nikolaeva 2014: 70) this male child-PL(ABL) one-3PL good 'One of these boys is good.'
- iii. Associative function, expressing that the referent of the possessive morpheme (often the speaker or the addressee, referred to by a 1st or 2nd person singular suffix) is the reference point in the situation, e.g.:
- (3)a. **Tam hu:j-e:m** xal'sa joxt-əs? (Khanty, Nikolaeva 1999: 83) this man-1SG where come-PAST.3SG 'Where has this man come from?'
 - b. Mans-ənən ka:t a:mp. Wul a:mp pare:m-əs-li a:j **a:mp-əl**. walked two dog big dog bit small dog-3SG 'Two dogs were walking. The big dog bit the small one.' (Khanty, Nikolaeva 1999: 83)

The non-possessive use of possessive agreement is very frequent in the Uralic languages. Whereas in English the proportion of noun phrases with a possessive pronominal determiner is about 7%, in the Uralic Udmurt, 30% of subjects and 40% of objects bear possessive agreement (Fraurud 2001). Fraurud sees a close connection between the possessive and seemingly non-possessive functions of possessive agreement, arguing that possessive agreement in Uralic may also express anchoring to non-focussed or implicit referents, to contextual elements like time and place, to second and third order entities, and even merely to the linguistic or situational context.

Gerland (2014) formulated a similar view. As she put it, both possessive suffixes expressing agreement with a possessor and those expressing definiteness establish a relation; however, in the case of the non-possessive use, the suffix relates the possessum either to the discourse situation (with pragmatically unique referents) or to cultural knowledge (with semantically unique referents). Gerland regards the non-possessively used possessive suffix of the Uralic languages as a definite article – despite the fact that its use as a definiteness marker is optional. Her main argument is that the possessive suffix can appear in all contexts that are typical of definite articles.

Janda (2015) claims that both the possessive and the non-possessive, definiteness-marking uses of possessive agreement are manifestations of the same function, that of establishing a relation between two entities. The entity denoted by the possessive suffix is a uniquely identifiable reference point, usually the primary topic. Janda argues that the role of the possessive suffixes in a story is to link referents into a topic chain; the primary topic cross-referenced by the possessive suffix serves as an anchor for introducing new referents and reintroducing old ones.

- **3.** A 3rd person plural possessive suffix turned into a partitivity marker in Hungarian Studies of the definiteness-marking function of the Uralic possessive suffix mention Hungarian as an exception, where the possessive suffix has no definiteness-marking role. In fact, the associative function of 1st and 2nd person agreement identified by Nikolaeva (2003) is attested in Hungarian, too. For instance, the expression *ember-ünk* man-1PL 'our man' is often used in the sense 'the aforementioned man'. Here is an example of an associative 2nd person singular agreement suffix from a personal email:
- (4) **Az igé-i-d-ben** bonyolító tényező, hogy az *A* fej is komplex. the verb-PL-2SG-INESS complicating factor that the *A* head also complex 'It is a complicating factor in your verbs [in the verbs discussed by you] that the *A* head is also complex'

More importantly, Hungarian also has two definiteness-marking possessive agreement suffixes, -ik and -jA. The suffix -ik appears (optionally) on universal, interrogative and existential pronouns, among them minden-ik/mindegyik 'each', mely-ik 'which', bármely-ik 'any', akármely-ik 'any', valamelyik 'some', némelyik 'some', egy-ik 'one', más-ik 'other'. Whereas the -ik-less versions of these pronouns are indefinite, the -ik variants are definite, which is indicated by the fact that, when used as objects, the -ik-less pronouns elicit the indefinite conjugation, and the -ik versions elicit the definite conjugation. (A verb in the definite conjugation is supplied with the sequence or the fusion of an object agreement suffix and a subject agreement suffix. Object agreement is only elicited by a definite object – see Bartos (1997)). Compare:

- (5) a. Ismer-ek *minden* vendég-et. know-1SG every guest-ACC 'I know every guest.'
 - b. Ismer**-em** *mindenik/mindegyik* vendég-et. know-OBJ.1SG every guest-ACC 'I know each guest.'
- (6) a. a kép, *amely-et* lát-sz the picture which-ACC see-2SG 'the picture, which you see,'
 - b. az a kép, *amelyik-et* lát-**od** that the picture which-ACC see-OBJ.1SG 'the picture that you see'
- (7) a. Gyakorlásként kimond *valamely* angol szó-t. practice.for utter.3SG some English word-ACC 'As a practice, he utters some English word.'
 - b. Gyakorlásként kimond-**ja** *valamelyik* angol szót. practice.for utter-OBJ.1SG some English word- ACC 'As a practice, he utters some English word.'

In these cases, -ik appears to fulfil a definiteness-marking role similar to that of the non-possessively used possessive suffixes of the sister languages. More precisely, the -ik suffix adds the features [+partitive] and [+definite] to the universal or existential quantifier it merges

¹ For examples, see the Hungarian Historical Corpus http://www.nytud.hu/hhc.

with; it expresses that the individual denoted by the quantified expression represents a proper subset of a familiar set. Whereas a bare *mely*, for example, is a wh-pronoun mostly introducing an appositive relative clause or an exclamative (8), *melyik* is a partitive interrogative or relative pronoun, meaning 'which one of those under discussion' (9).

- (8) S **mely** remek osztály, **mely-et** itt most én képvisel-ek and what excellent class which-ACC here now I represent-1SG 'And what an excellent class this is, which I now represent here'

 (http://www.nytud.hu/cgi-bin/pat3h.cgi?zoom=284&session=5833220c39d1Mely)
 versus
- (9) Tudja, hogy mikor, **melyik** halfajtá-t a legjobb fogyasztani. knows that when which fish-kind-ACC the best consume.INF 'He knows which fish is the best to consume when.'

 (http://www.nytud.hu/cgi-bin/pat3h.cgi?zoom=19&session=583323a33a1emelyik)

Since an -ik-marked universal pronoun always denotes the members of a set present in the domain of discourse (9a), it is not suitable for generic statements (9b):

- (10) a. A tanszékünkön **minden-ik** férfi szakállas. the department.1PL.at every man bearded 'Each man is bearded at our department.'
 - b. **Minden/*minden-ik** ember halandó. every man mortal 'Each man is mortal.'

A further function of the suffix -ik is to derive ordinals from fractionals (másod-ik 'second', harmad-ik 'third', negyed-ik 'fourth'). Ordinals, too, appear to have a covert partitive feature (the third one (harmad-ik) is one of the three thirds (harmad); the fourth one (negyed-ik) is one of the four fourths (negyed) of the given scale).

The suffix -ik can also appear on comparative and superlative adjectives. -ik nominalizes the adjective, and supplies it with the features [+partitive] and [+definite]. As a definite nominal, the -ik-marked adjective takes a definite article:

(11) A szebbik-et megtart-om, a csúnyábbik-at visszaad-om. the nicer-ACC keep-OBJ.1SG the uglier-ACC return-OBJ.1SG 'The nicer one, I keep, the uglier one, I return.'

The -ik suffix in (11) has the same function that is identified by Nikolaeva (2003) as the contrastive-partitive function of possessive agreement.

4. -ik in Old Hungarian

In Hungarian possessive constructions, it is the possessum that must be marked; in the presence of a pronominal possessor, it bears a suffix agreeing with the possessor in person and number. A pronominal possessor is silent (unless it is contrasted); it can be reconstructed from the agreement suffix of the possessum, i.e.:

(12) pro_i ház-am_i pro_i ház-unk_i house-1.SG house-1PL 'my house' 'our house'

pro_i ház-ad_i pro_i ház-ad_i house-2.SG house-2PL

'your house'

proi ház-ai
house-3.SG

'his/her house'

'your house'

proi ház-uki
house-3PL
'their house'

In present-day Hungarian, the productive 3rd person plural possessive suffix is -Uk (i.e., -uk/ik), and the assumption that -ik was also a 3rd person plural possessive allomorph, first raised by Simonyi (1895: 716), is not generally accepted (see Korompay 1992: 353). We have the following reason to assume that the -ik suffix appearing on Old Hungarian pronouns and numerals is a 3rd person plural suffix:

A comprehensive search of the Old Hungarian database (http://omagyarkorpusz.nytud.hu/) shows that in Old Hungarian documents, only the -ik-less versions of existential and universal pronouns occur as determiners or modifiers; all -ik-marked pronouns are heads. They are understood as heads of possessive constructions, where the possessor is a 3rd person plural pro coreferent with a plural lexical antecedent in a preceding sentence (marked by underlining in the examples below). Compare some examples of the syntactic contexts in which the -ik-less and ik-marked versions of universal, interrogative and existential pronouns occur:

(13) a. minden (determiner):

mert **minden** orzagok, tartomańok, varasok, videkek, varak nem elegek teneked because all countries provinces cities lands castles not enough you.DAT 'because **all** countries, provinces, cities, castles are not enough for you'

 $(Bod Codex (1500-1525) 4v)^3$

b. *minden-ik* (possessum):

Valanac kedig ot vèttetuen <u>hat ko vedrec</u> ... **mēdèn-ic** foglaluā kèt koblot were however there thrown six stone buckets each-3PL taking two vats. ACC 'Six stone buckets were thrown there ... **each of them** taking two vats'

(München Codex (1416/1466) 86ra)⁴

(14) a. mely (modifier):

mely paranczolatokott frater lleo ewrewmest meg tart-a which commandments.ACC Frater Leo happily 'which commandments Frater Leo kept happily' PRT keep-PAST.3SG 'which commandments Frater Leo kept happily'

(Jókai Codex (1370/1448) 41)

b. *melyik* (possessum):

Eg nėminėmo vsoras-nac valanac <u>kèt adosi</u> ... <u>mghaga</u> monna-ic-nac a some.kind.of usurer-DAT were two debtors-3SG say-PAST.3SG both-3PL-DAT **mel'l'-ic** zereti otet inkab

which-3PL loves him more

'Some usurer had two debtors... he asked both of them **which of them** loved him more' (München Codex (1416/1466) 62vb)

(15)a. valamely (modifier):

menden, valaki kerest kerènd harminc napiglan **valamel** istèn-tol everyone who request.ACC asks thirty days.for some god-from 'everyone who makes a request of **some** god for thirty days'

(Bécsi [Vienna] Codex (1416/1450) 145)

b. valamelyik (possessum):

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² Whereas Korompay (1992) gives a list of arguments against analyzing -*ik* as an allomorph of possessive agreement, Korompai (2011) is somewhat more permissive in this respect.

 $^{^{3}}$ v stands for verso, r stands for recto, a and b mark two columns on the same page.

⁴ The first date marks the time of the creation of the text; the second date marks the creation of the given copy.

Es ezekett mend az fraterok ezkeppen tartyakuala zerelembelewl hogy ha the fraters this.way were.keeping love.from and these.ACC all that if valamel-vk valamÿkoron mas-yk-nak mondotta uolna bozzosagnac bezedett some-3PL sometime other-3PL-DAT said annovance.DAT word.ACC had 'And all the fraters keep these for love that if some of them had told the other words of annoyance, ... (Jókai Codex (1370/1448) 94)

In Old Hungarian, ordinal numerals are still non-distinct from fractionals. Ordinals occurring in modifier position are -*ik*-less; the -*ik*-marked variants are heads of possessive constructions. That is, the -*ik*-marked and -*ik*-less variants of ordinals show the same distribution as the -*ik*-less and -*ik*-marked variants of pronouns:

(16)a. -ik-less ordinal (modifier):

valanac az èlo zèkèrbèn vèrès louac zèkèrbèn fèkètè louac a mas the first cart.in were red horses the second cart.in black horses harmad zèkèrbèn fèier louac a **negèd** zèkèrbèn külomb zino louac the third white horses the fourth cart.in different colored horses cart.in 'There were red horses in the **first** cart, black horses in the **second** cart, white horses in the third cart, horses of different colours in the fourth cart'

(Vienna Codex (1416/1450) 301)

b. ordinal with -ik (possessum):

Valanac kedig mu nalonc <u>hèten at'afiac</u> & az èlo fèlesegèt veuen meghala were however we-at seven brothers & the first wife.ACC having.taken died ... haga o fèleseget o at't'afianac Azon keppèn a **mas-ic** a **harmad-ic**... left his wife.ACC his brother.DAT that way the second-3PL the third-3PL 'There were in our midst seven brethren, and having taken a wife the first died and left his wife to his relative. So did **the second one of them**, **the third one of them** ...'

(Münchich Codex (1416/1466) 28ra)

The -ik versions of pronouns and numerals are much rarer than their -ik-less counterparts; e.g., the Old Hungarian corpus contains 1151 occurrences of minden 'every' and only 7 occurrences of mindenik; 359 occurrences of mely 'which' and only 8 occurrences of melyik; 54 occurrences of valamely 'some' and only 4 occurrences of valamelyik; 103 occurrences of másod 'second' and only 3 occurrences of második, etc. The lower frequency of the -ik versions is expected if the -ik-versions are, indeed, heads of possessive constructions, occurring in contexts of the following type:

$(17) \dots DP_i \dots [pro_i \text{ minden-i}k_i]$ their each 'each of them'

The assumption that -ik was an allomorph of the 3rd person plural possessive suffix in Old Hungarian has been questioned because the common Old Hungarian 3rd person plural possessive allomorphs appearing on lexical nouns were -ok and -ek (see Korompay 1991, Hegedűs 2014). At the same time, the very first occurrence of the 3rd person plural possessive agreement suffix from 1192 is -ik (see (18), and there appear to be also later occurrences of -ik in possessive constructions with a lexical head (19) - although we cannot be completely sure of the quality of the vowel denoted by \ddot{y} .

- (18) mend w szentíí es unuttei **cuz-ic-un** (FSP 1192) all he saints.3SG and ancesters.3SG space-3PL-SUPERESS 'on the sides of all his saints and ancesters' (Funeral Sermon and Prayer (1192))
- (19) the poganoknak wag rethenet-ÿk

the pagans.DAT be.2SG dread-3PL 'You are the dread of pagans.' (Gyöngyösi Codex (early 16th century) 1v)

The example below suggests that *menden-yk* and *menden-ek* were free variants, both meaning 'each of them':

(20) De mert meglen keuessen valanak az barátok menden-yk-yt kewlewn the brethren each-3PL-ACC separately but because still few were boczattyauala Castellomokba... Mykoron meg tertenekuolna az alamyznaual was.sending towns.to when back returned the alms.with Menden-ek mutattyauala bodog ferencznek was.showing blessed Francis.DAT each-3PL 'But because still there were few brothers, he was sending each of them separately to towns... When they had returned with the alms, each of them was showing it to Blessed Francis' (Jókai Codex (1370/1448) 83)

Whereas the facts surveyed above show that in Old Hungarian possessive constructions, the overwhelming majority of pronominal heads bear an -ik suffix, it is also a fact that the great majority of lexical heads bear -ok/ek. The reason for this apparent contradiction must be that a fission took place among these allomorphs before or around the beginning of the documented phase of the Old Hungarian period. The -ok/ek versions (which have developed into the present -uk/ik) came to be restricted to the context of nominal stems, whereas the -ik version was used elsewhere, in the context of pronominal, numeral and adjectival stems.

Actually, the fact that the *-ok/ek* variants remained the productive 3rd person plural possessive agreement suffixes, and the *-ik* variant was reanalyzed as a derivational morpheme marking partitivity and definiteness was not accidental, as Péter Rebrus pointed out (p. c.). In Hungarian, it is the inflectional morphemes that invariably have back and front vowel allomorphs and invariably participate in vowel harmony.

5. The possessive agreement \rightarrow derivational suffix reanalysis

Whereas in the Old Hungarian period, -*ik* is undoubtedly an allomorph of 3rd person plural possessive agreement, in the Middle Hungarian period we have more and more evidence of its being reanalyzed as a derivational suffix marking partitivity. A symptom of its reanalysis as a derivational suffix is the appearance of -*ik*-marked elements in modifier and determiner positions, where they cannot be interpreted as heads of possessive constructions any more.

The reanalysis must first have taken place in the case of numerals and comparative adjectives. The first documented occurrences of -*ik* marked ordinals and -*ik*-marked comparative adjectives in modifier position are from around 1500:

- (21) *harmad-yk psalmus* (Festetics Codex (1494): 299) third psalmus
- (22) harmadic vala Jacob patriarchanac az **kissebic fia** Joseph third was Jacob patriarch.DAT the smaller son Joseph 'the third one was Joseph, Jacob patriarch's **younger son'** (Guary Codex (1495): 32)

We attest the first -ik-marked pronouns (*mindenik*, *melyik*, *némelyik*, *valamelyik* etc.) in determiner position in 17th-18th century texts (Középmagyar magánéleti korpusz [Middle Hungarian vernacular corpus] http://tmk.nytud.hu/):

(23) a. mindenik tehenek az ü feiere tette a kezeit

each cow.DAT the it head.3SG.on put the hands.3SG.ACC 'he put his hands on the head of **each cow**' (Witch trial 163 (1631))

b. micsoda állatot latott a Tanú az Gelei pinczébenn; és mellyik what animal-ACC saw the witness the Gelei cellar.in and which esztendőbenn

year.in

'what animal the witness saw in Gelei's cellar, and in which year'

(Witch trial 59. (1712))

A further symptom of the reanalysis of -ik as a derivational suffix is the appearance of -ik-marked pronouns bearing an additional productive possessive suffix. Again, we attest the first sporadic occurrences in 17th -18th century texts. These involve a lexical possessor, in which case the possessum bears a default -a/e possessive suffix:

(24) a. kondor ferench hozta bor-nak egyk-e
Kondor Ferenc brought.3SG wine-DAT one-3SG
'one of the wines brought by Ferenc Kondor'

(1616, cited by Korompay (1992: 353))

b. Vagyon a' poknak egy pár kezetskején kívül nyóltz lába, is the spider.DAT a pair hand.3SG.SUBL besides eight foot.3SG **melly-nek mindenik-e** hasonló a' rák-lábhoz which-DAT each-3SG similar the crab-foot.ALLAT 'The spider has, in addition to a pair of hands, eight feet, **each of which** is similar to the crab's foot.' 1775.

(http://www.nytud.hu/cgi-bin/pat3h.cgi?zoom=2&session=5855a89a03b0mindenike)

In the historical databases, the first documented occurrence of *mindenikük/mindegyikük* with the productive 3rd person plural possessive agreement suffix following its obsolete allomorph is from 1840:

legnagyobb mesterek gyakorlattukkal (25) ... magok a' leghiresebb és themselves the most.famous and greatest practice.3PL.with masters bebizonyították, midőn **mindegyik-ük** ... tulajdon styljét teremté proved when each-3PL his.own style-ACC created 'the most famous and greatest masters themselves proved it with their practive when each of them created his own style' (http://www.nytud.hu/cgi-bin/pat3h.cgi?zoom=1&session=5855ae2a03f5mindegyiku2k)

The grammaticalization process resulting in the reanalysis of *-ik* as a derivational suffix marking partitivity must have proceeded through the following stages:

- (26) The grammaticalization path of -ik
- (i) Proto-H: -ok/ek/ik are allomorphs of 3PL possessive agreement
- (ii) Late Proto-H/Early Old H:
 Fission of -ok/ek/ik: noun+ok/ek: pro_i ház-ok_i '(the) house of them' pronoun/numeral/adjective+ik: pro_i minden-ik_i 'everyone of them'
- (iii) Reanalysis of -ik as a derivational suffix marking partitivity, loss of the pro possessor Consequences: determiner/attributive use: mindenik lány 'each girl' taking possessive agreement anew: pro_i mindenik-ük_i 'each of them'
- 6. The 3rd person singular possessive suffix turned into a partitivity marker

The 3rd person singular -ja/-je suffix of the possessive paradigm cited under (12) can also function as a marker of partitivity; it combines with adjectives, and turns them into partitive nominalizations. The resulting noun phrase always involves a definite article:

- (27) a. **A zöld-jé-t** befőzöm, **az érett-jé-ből** lekvárt csinál-ok. the green-3SG-ACC preserve-OBJ.1SG the ripe-3SG-from jam.ACC make-1SG 'The green ones, I preserve, from the ripe ones, I make jam.'
 - b. **A nagy-ja** még hátra van. the big-3SG yet behind is '**The major part** is yet to be done.'
 - c. A kövér-jé-t nem szeretem. the fat-3SG-ACC not like-OBJ.1SG 'The fat part, I don't like.'

These possessive-marked adjectives are understood as heads of possessive constructions containing an implicit possessor. The possessor can be reconstructed from the situation or from the context. (27a-c) are likely to be assigned interpretations similar to those in (28a-c):

- (28) [A [gyümölcsök] zöld-jé-t] befőz-öm, the fruits green-3SG-ACC preserve-OBJ.1SG [a [gyümölcsök] érett-jé-ből] lekvárt csinálok. the fruits ripe-3SG-from jam.ACC make.1SG 'The green ones of the fruits, I preserve, from the ripe ones of the fruits, I make jam.'
 - b. [A [munka] nagy-ja] még hátra van. the work big-3SG still behind is 'The major part of the work is yet to be done.'
 - c. [A [hús] kövér-jé-t] nem szeret-em. the meat fat-3SG-ACC not like-OBJ.1SG 'The fat (part) of the meat, I don't like.'

In the case of (28a), the possessor is likely to be physically present in the situation; in the case of (28b), it is just vaguely identifiable, whereas in the case of (28c), the implicit possessor belonging to the *-je*-marked adjective is conventionally fixed; it is practically part of its lexical meaning. *Fehér-je* 'white-3SG', i.e., 'egg-white', and *sárgá-ja* 'yellow-3SG', i.e., egg-yolk' are also nominalized adjectives of this type.⁵

The nominalizing role of the suffix is a consequence – or, after its reanalysis as a derivational suffix, a relic – of its original possessive agreement function. A possessive agreement suffix can only merge with a N head, hence its presence on an adjectival stem presupposes a nominal projection above the adjective.

Naturally, the question arises what is the status of the implicit possessor of -jA-marked adjectives; whether it is present in syntax. If the -jA-marked nominalized adjectives in (29a,b) contained a pro possessor, we would expect a singular agreement suffix on the adjective in

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⁵ I do not discuss 3SG possessive endings lexicalized as part of their nominal stem. In many cases, e.g., *ves-e* 'kidney', *ep-e* 'bile', *zúz-a* 'gizzard', *or-ja* 'spare-rib', *tar-ja* 'spare-rib, *mar-ja* 'withers', the original possessive suffix role of the last vowel is only clear for linguists. In some N+*jA* and Adverb+*jA* combinations, e.g., *ele-je* 'beginning', *szín-e* 'right side', *vég-e* 'end', *fonák-ja* 'wrong side', *hátul-ja* 'back', *al-ja* 'bottom', *visszá-ja* 'reverse side', *utol-ja* 'last part', the possessive origin of the suffix may be clear for the native intuition, nevertheless, it is a practically obligatory concomitant of the stem.

(29a), and a plural agreement suffix in (29b); however, the possessive ending appearing on the adjective in this construction is always singular:

- (29) a. Túl nagy adag, meghagy-om **a jav-á-t.** too big portion, leave-OBJ.1SG the good-3SG-ACC 'It is too big a portion, I spare **the better part of it**.'
 - b. A dolgozatok jól sikerültek. **A jav-á-t** /*jav-uk-at the term-papers well succeeded the good-3SG-ACC/good-3PL-ACC bead-juk egy konferenciára. submit-OBJ.1PL a conference.to 'The term papers succeeded well. We submit the better part of them to a conference.'

The possessor could, in principle, be an ellipted lexical noun phrase. Lexical possessors, whether singular or plural, always trigger a default -ja/je suffix on their possessum, ⁶ e.g.:

(30) a gyerek ap-ja a gyerekek ap-ja cf. *a gyerekek ap-juk the child father-3SG the children father-3SG the children father-3PL 'the children's father' 'the children's father'

Ellipted nominals are not pro's; they inherit the properties of their antecedents, and they can also occur in contexts where pro's are forbidden. E.g., a plural object pronoun cannot be dropped in Hungarian (31a,b), but it can be freely ellipted in parallel constructions (32):

(31) a. Megismert-ük őt/pro. b. Megismert-ük őket/*pro. recognized-OBJ.1PL him recognized-OBJ.1PL them 'We recognized him.'

But:

(32) Megismert-étek a fiúkat? Megismert-ük ec recognized-OBJ.2PL the boys-ACC recognized-OBJ.1PL 'Did you recognize the boys? We recognized them.'

However, ellipted objects are only licensed in parallel constructions; the antecedent of the ellipted nominal cannot be given situationally. For example, in a situation where the speaker is pointing at three boys approaching, and is wondering if his partner can recognize them, he cannot ask (33a); the plural pronoun must be spelled out as in (33b).

(33) a. Megismer-ed pro_{subj} pro_{obj}? b. Megismer-ed őket? recognize-OBJ.2SG recognize-OBJ.2SG them 'Do you recognize him/*them?' 'Do you recognize them?'

Hence I conclude that -*ja/je*-marked adjectives cannot have an ellipted lexical possessor. If their possessor is present in syntactic structure, it must be a pro. The possessive morpheme on the adjective is invariant with respect to number because it is a default agreement suffix.

Default agreement also appeared elsewhere in Hungarian grammar. Early Old Hungarian abounded in non-finite subordinate constructions, which tended to have subjects of their own eliciting agreement on the non-finite verb – see (34a). These constructions have evolved either into finite subordination, or into canonical non-finite subordination involving a non-

⁶ According to the standard generative view (Bartos 2000: 684, Rebrus 2000: 773), the possessive agreement suffixes are, in fact, morpheme complexes involving an allomorph of a -*jA* possessedness suffix and an agreement suffix. In 3SG, the agreement suffix is zero. Agreement is only elicited by pronominal possessors. In the case of a lexical possessor, the agreement suffix is absent; the possessum only bears the -*jA* possessedness morpheme irrespective of whether the lexical possessor is singular or plural.

finite verb with a PRO subject and no agreement (34c). As shown by Dékány (2012), an intermediate stage in this process was the appearance of default, i.e., 3rd person singular, agreement on the non-finite verb with no regard to the person and number of its subject (34b).

(34) a. ne akariatoc fel-**n-etec**not want.IMP.2PL fear-INF-2PL
'don't want to be afraid' (München Codex (1416/1466) 42ra)

b. Ne akaryatok **feel-ny-e**not want.IMP.2PL fear-INF-3SG

'do not want to be afraid' (Jordánszky Codex (1516) 55)

c. Ne akaryatok ty **ffel-ny** not want.IMP.2PL you fear-INF

'do not want to be afraid' (Jordánszky Codex (1516) 450)

(cited from Bacskai-Atkari & Dékány (2014: 175-176).

Another possibility is that the -ja/je appearing on adjectives has fully grammaticalized into a derivational suffix; it has developed into a nominalizer conveying partitivity, which evokes the presence of a superset only on the notional level. These two possibilities may very well represent two subsequent stages of a grammaticalization path, which some adjectives, e.g. kövérje 'fat-of-meat', fehérje 'egg-white', sárgája 'egg-yolk', have passed all along, whereas others are in the process of completing. This grammaticalization path includes the following stages:

(35) The grammaticalization path of -jA

(i) 3SG agreement: a pro_i nagy-ja_i

the big-POSS.3SG 'its major part'

(ii) Default agreement: a pro_i nagy-ja_i

the big-POSS 'its/their major part'

(iii) [+partitive, +definite] nominalizer: a nagy-ja

the big-NOM 'the major part'

By the end of the grammaticalization path, the nominalized adjective loses its grammatically represented pro possessor, but maintains the partitivity and the definiteness of the original possessive construction.⁷ The carrier of these features is the *-jA* morpheme, which behaves as a derivational suffix at stage (iii). The partitivity of *-jA* marks the presence of a notionally given superset, which is enough to block the addition of a syntactic possessor denoted by (another) possessive agreement suffix:

(36) *A hús **kövér-jé-jét** odaad-om a kutyának.⁸ the meat fat-NOM-3SG give-OBJ.1SG the dog.DAT 'I give the fat part of the meat to the dog.'

⁷ Not even lexicalized adjective+*jA* complexes allow an indefinite determiner. *Fehérje* 'egg-white' and *sárgája* 'egg-yolk' cannot be used as indefinites on their own; *tojás* 'egg', their lexical possessor, must also be spelled out, e.g.: *öt tojásfehérje* 'five egg-yolks'.

⁸ The addition of a new possessive morpheme is only possible if the possessive suffix has become part of the stem, and the native intuition does not recognize it as a derivational suffix any more. This is what happened in the case of the Hungarian word for *protein*, which is also *fehérje*. Cf.

⁽i) A keratin a szaruanyagok fehérjé-je. the keratin the horn.materials protein-3SG 'Keratin is the protein of horn.'

In some cases, the output of the grammaticalization process in (35) has also undergone idiomatization. Thus 'in groups of two/three ...' is expressed by a construction involving a numeral supplied with an adjectivalizing suffix, a nominalizing -jA, and instrumental case:

(37) Hárm-as-á-val mentünk be. three-ADJ-3SG-with went.1PL in 'We went in in threes.'

An -ik-less ordinal supplied with -jA and sublative case means 'for the 2nd, 3rd, etc. time':

(38) Harm-ad-já-ra mentünk be. three-ORD-3SG-SUBL went.1PL in 'We went in for the third time.'

7. Conclusion

This paper has analyzed the grammaticalization path of two Hungarian possessive agreement suffixes developing into markers of partitivity in order to understand the motivation of similar processes having taken place in the Uralic languages. It has been argued that this grammaticalization process is triggered in Uralic by the possibility of a pro possessor eliciting person and number agreement on the possessum. It is the silent pro that opens up the way to reanalyzing possessive agreement as a derivational suffix which conveys partitivity without denoting a possessor in syntax, expressing merely that the referent is a proper subset of a situationally or contextually given set. The different Uralic languages may differ in how "strictly" they interpret this subset relation; whether they require a contextually or deictically identifiable superset, or they can also assume a subset relation between a referent and the larger situation that it is part of.

The two Hungarian suffixes examined in this paper represent two stages of this gramaticalization path. -*jA*-marked nominalized adjectives are still analyzed as heads of definite noun phrases; merely their pro possessor has disappeared, as shown by the invariance of the suffix with respect to number. Despite the derivational suffix status of -*jA*, a -*jA*-marked adjective cannot take a further possessive suffix, which suggests that the suffix still evokes a possessor on the notional level, which blocks the appearance of a further possessor in syntax. The -*ik* suffix, on the contrary, has completely lost its relation to possessive agreement, hence -*ik*-marked elements can be supplied with a productive possessive suffix, and can also function as modifiers or determiners.

References:

Bartos, Huba. 1997. On "subjective" and "objective" agreement in Hungarian. *Acta Linguistica Hungarica* 44: 363–384.

Bartos, Huba. 2000. Az inflexiós jelenségek szintaktikai háttere [The syntactic brackground of inflection phenomena]. In: Kiefer, Ferenc (ed.) *Strukturális magyar nyelvtan 3. Morfológia*, 653–762. Budapest: Akadémiai Kiadó.

Bacskai-Atkari, Julia & Éva Dékány. 2014. From non-finite to finite subordination. The history of embedded clauses. In: Katalin É. Kiss (ed.) *The Evolution of Functional Left Peripheries in Hungarian Syntax*, 148-222. Oxford: Oxford University Press.

Dékány, Éva. 2012. *Nem jöttem hínia az igazakat*: Az ómagyar anti-egyezetett főnévi igenevekről [On Hungarian anti-agreeing infinitives]. *Nyelvtudományi Közlemények* 108: 219-252.

Fraurud, Kari. 2001. Possessive with extensive use: A source of definite articles? In: I. Baron et al. (eds.) *Dimensions of Possession*, 243–267. Amsterdam: John Benjamins.

- Gerland, Doris. 2014. Definitely not possessed? Possessives with non-possessive function. In: Thomas Gamerschlag, Doris Gerland, Rainer Osswald & Wiebke Petersen (eds.) *Frames and Concept Types. Applications in Language and Philosophy*. Dordrecht: Springer.
- Hegedűs, Attila. 2014. Alaktörténeti problémák [Problems of diachronic morphology]. *Magyar Nyelv* 110: 196–202.
- Janda, Gwen Eva. 2015. Northern Mansi possessive suffixes in non-possessive function. *ESUKA JEFUL* 2015, 6–2: 243–258.
- Korompay, Klára 1991. A névszóragozás [Nominal inflection]. In: Benkő Loránd (ed.) *A magyar nyelv történeti nyelvtana* I: 284–318. Budapest: Akadémiai Kiadó.
- Korompay Klára 1992. A névszójelezés [Nominal suffixes]. In: Benkő Loránd (ed.) *A magyar nyelv történeti nyelvtana* II/1: 321–354. Budapest: Akadémiai Kiadó.
- Korompay Klára 2011. Két nézőpont találkozása: magyartanítás más anyanyelvűeknek... és a magyar nyelvtörténet [Confronting two points of view: teaching Hungarian to foreigners and Hungarian language history]. In: Edith Kádár & Sándor N. Szilágyi (eds.) *Szinkronikus nyelvleírás és diakrónia*, 148–162. Kolozsvár: Erdélyi Múzeum-Egyesület.
- Nikolaeva, Irina 2003. Possessive affixes in the pragmatic structuring of the utterance: evidence from Uralic. In: Pirkko Suihkonen & Bernard Comrie (eds.) *International symposium on deictic systems and quantification in languages spoken in Europe and North and Central Asia. Collection of papers*, 130–145. Izhevsk and Leipzig: Udmurt State University and Max Planck Institute for Evolutionary Anthropology.
- Nikolaeva, Irina. 2014. A Grammar of Tundra Nenets. Berlin: Mouton de Gruyter.
- Rebrus Péter. 2000. Morfofonológiai jelenségek. In: Kiefer, Ferenc (ed.) *Strukturális magyar nyelvtan 3. Morfológia*, 763-948. Budapest: Akadémiai Kiadó.
- Simonyi Zsigmond 1895. *Tüzetes magyar nyelvtan*. Budapest: Magyar Tudományos Akadémia.