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A Givónian perspective on the relation of verbal and non-verbal person suffixes in Hungarian

Abstract

Our point of departure is Givón's (2017) hypothesis that the sources of the affixes of pronominal agreement in person and number are the corresponding independent pronouns, and depending on whether the given type of agreement is diachronically young or old in a language, the etymological link to independent pronouns is highly transparent or rather tenuous. We claim, first, that the Nilo-Saharan Luo language serves as a better illustration of the 'diachronically young' type than Givón's (1976, 2017) own poster-child examples. Hungarian, however, belongs to the 'diachronically old' type. Nevertheless, the synchronic system of Hungarian can be claimed to preserve the distinguished role of the pronominal basis in a strange but surprisingly regular way. We also illustrate two promising directions of future research concerning the expansion of the basic, personal-pronoun related, agreement markers. Their widespread proliferation in the morphology of several categories in all Uralic languages is itself obviously worth systematic comparative descriptive research, in the background of which it promises high-level explanatory adequacy to apply the morphosyntactic theory of person-hierarchy sensitive languages, especially to the analysis of such puzzling expressions as, for instance, *engem* 'me' (literally, 'my-me').

Keywords: agreement in person/number, possessive constructions, Uralic languages, person-hierarchy sensitivity

1 Introduction

The following thesis, advanced by Givón's (2017: 69) and deemed universal in his work, forms our point of departure: the sources of clitic pronouns and pronominal agreement affixes are the corresponding independent pronouns (with these steps: demonstrative pronouns → stressed independent pronouns → unstressed clitic pronouns → obligatory verb agreement). When clitic anaphoric pronouns and/or pronominal agreement are diachronically young, their etymological link to independent pronouns and the immediate source of independent pronouns, demonstrative pronouns, is transparent; the clitic pronouns and the affixes of pronominal agreement are phonological reductions of the base forms. In languages with a diachronically

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old system of pronominal agreement, however, the correspondence between the current personal pronouns and the subject and/or object pronominal inflections on the verb is tenuous. “It cannot be ascribed to run-of-the-mill phonological changes,” as formulated by Givón (2017: 74), who does not provide a formalized definition of this intuition.²

This paper claims that the Nilo-Saharan Luo language serves as a better illustration of the “diachronically young” type than Givón’s (2017: 70–73) own poster-child examples, Section 2. Hungarian (and other Finno-Ugric languages), however, obviously belongs to the “diachronically old” type in Givón’s system in question (Section 3). Nevertheless, the synchronic system of Hungarian can be claimed to preserve the distinguished role of the pronominal basis in a strange but surprisingly regular way, as follows. If one thoroughly scrutinizes the synchronic data by appropriately segmenting the richly suffixed verb forms, it turns out that the suffixes showing similarity to the corresponding personal pronouns are those, and only those, which appear in both the definite paradigm and the indefinite paradigm of verb conjugation. It is via this specific synchronic property that the synchronic state preserves such an important component of diachronic development as the pronominal basis. Therefore, the pronominal basis can be “calculated” not only by means of diachronic (and comparative) tools but also with the aid of an exclusively synchronic procedure, as will be shown in Section 4.

Sections 5 illustrates two promising directions of future research concerning the expansion of the basic, personal-pronoun related, agreement markers. Their widespread proliferation in the morphology of several categories not only in Hungarian but in all Uralic languages is itself obviously worth systematic comparative descriptive research, in the background of which it promises high-level explanatory adequacy to apply the morphosyntactic theory of person-hierarchy sensitive languages, elaborated for Hungarian in Bárányi (2017).

Section 6 concludes the paper.

2 Diachronically old and young systems of pronominal agreement in Givón’s theory

Givón (2017: 70) claims that when clitic anaphoric pronouns and/or pronominal agreement are diachronically young, their etymological link to independent pronouns and the immediate source of independent pronouns, demonstrative pronouns, is transparent. In his 2017 book, he illustrates this early stage with two pronominal systems, one of the Uto-Aztecan language Ute, the other of the Bantu language Bemba. By a *transparent link* he means, among other things, that the differences between the affixes of pronominal agreement and the corresponding independent pronouns can be ascribed to straightforward run-of-the-mill phonological changes.

Table 1 presents how Givón (2017: 71) compares the Ute clitic anaphoric pronouns (of which ca. 70% already suffixed on the verb) with the two main series of personal pronouns, the independent subject pronouns and the independent object pronouns (a detailed discussion of the topic is available in Givón (2011, chapters 3, 7)):

² Although it is not the only possibility of how agreement systems can arise, we accept this hypothesis here and throughout the paper. The aim of the paper is not to test whether Givón’s approach considered is correct (compared to other approaches), but to apply it to other languages. Nor can we tell (based on independent factors) whether something is diachronically old or young.

category	independent subject	independent object	clitic
SPEAKER/HEARER:			
1s	ná- 'I'	ná-na-y	-n <u>u</u>
2s	'ám <u>u</u> 'you'	um <u>u</u> -y	-m <u>u</u>
1du/incl	tám <u>i</u> 'you & I'	tami	-ram <u>i</u>
1du/excl	táw <u>i</u> 's/he & I'	tawi	-raw <u>i</u>
1p/excl	ném <u>u</u> 'they & I'	num <u>u</u> -y	-num <u>u</u>
2p	mén <u>i</u> 'y'all'	muni	(-am <u>u</u>)
THIRD PERSON:			
3s/an/vis	má-a-s 's/he'	má-a-y	(-a)
3p/an/vis	má-m <u>u</u> 'they'	ma-m <u>u</u> -a-s	-----
3s/an/invis	'u-a-s 's/he'	'u-a-y	-'u
3p/an/invis	'u- m <u>u</u> -s 'they'	'u- m <u>u</u> -a-s	-'u- m <u>u</u> /'a-m <u>u</u>
3s/inan/vis	má-r <u>u</u> 'it/they'	ma-r <u>u</u>	-----
3s/inan/invis	'ú-r <u>u</u> 'it/they'	'u-ru	-ukh/-aqh

Table 1. The Ute clitic pronouns and the corresponding independent pronouns

Givón (2017: 71) summarizes the conclusion that, “with a number of minor exceptions, the clitic pronouns are transparent phonological reductions of the base forms of the corresponding independent pronouns.” He then considers the system of the demonstrative and pronominal systems of Bemba with its multiple Bantu noun-classes below (Givón 2017: 72):

Bemba demonstrative pronouns					
category	near speaker	near hearer	visible	remote/invisible	CV-noun
1 (sg)	u-yu	u-y-o	u-no	u-lya	mu-
2 (pl)	a-ba	a-b-o	ba-no	ba-lya	ba-
3 (sg)	u-u	u-o	u-no	u-lya	mu-
4 (pl)	i-i	i-y-o	i-no	i-lya	mi-
5 (sg)	i-li	i-ly-o	li-no	li-lya	li-
6 (pl)	a-ya	a-y-o	ya-no	ya-lya	ma-
7 (sg)	i-chi	i-chy-o	chi-no	chi-lya	chi-
8 (pl)	i-fi	i-fy-o	fi-no	fi-lya	fi-

Bemba personal pronouns			
category	independent pro.	subject clitic pro.	object. clitic pro.
SPEAKER/HEARER			
1s	i-n-e	n(i)-	-n(i)-
1p	i-fw-e	tu-	-tu-
2s	i-w-e	u-	-ku-
2p	i-mu-e	mu-	-mu-
THRD PERSON			
3s (cl. 1)	DEM	a-/u-	-mu-
3pl (cl. 2)	"	ba-	-ba-
cl. 3 (sg)	"	u-	-u-
cl. 4 (pl)	"	i-	-i-
cl. 5 (sg)	"	li-	-li-
cl. 6 (pl)	"	ya-	-ya-
cl. 7 (sg)	"	chi-	-chi-
cl. 8 (pl)	"	fi-	-fi-

Table 2. The system of Bemba noun prefixes, demonstrative pronouns, independent pronouns, and clitic anaphoric pronouns (1/2: human classes, 3/4, 5/6 and 7/8: inanimate classes; see Givón 1972, ch. 1)

Givón (2017: 73) summarizes the observations by pointing out that, with minor exceptions, the following generalizations can be made about the Bemba noun prefixes, demonstrative pronouns, independent pronouns, and clitic anaphoric pronouns: The CV- noun prefixes are the invariant elements in all demonstrative pronouns. The various demonstratives are still used as the independent 3-person pronouns. The invariant elements of the noun prefixes, thus of demonstratives and independent pronouns, serve as the basis for the clitic anaphoric pronouns.

Before demonstrating Givón's (2017) example of an old inflectional subject-agreement system, where the connection between clitic pronouns / agreement affixes and independent personal pronouns is much more tenuous and vague, we would like to present a subject/object agreement system whose relation to its basis of independent personal pronouns is even more transparent than Givón's above-presented examples of diachronically young agreement systems presented above.

This language, which can serve as the perfect illustration of some correspondence between independent personal pronouns and suffixes of personal agreement, is the Kenyan Luo language, which belongs to the family of Nilo-Saharan languages (on Luo or Dholuo, see, for instance, Stafford 1967, Omondi 1982, Okombo 1997). It illustrates this correspondence perfectly due to the maximally simple phonological relation between the current system of its personal pronouns, on the one hand, and the subject and object pronominal inflections on the verb and the possessive inflection on the noun, on the other. Indeed, it patterns with Hungarian in that both verbs and nouns show agreement with their closest dependents: with their subjects and objects, and with their possessors, respectively (see sections 3 and 4):

- (1) a. an / in / en / wan / un / gin
 ‘I / you_{Sg} / (s)he / we / you_{Pl} / they’
- b. gi·chwad·a / gi·chwad·i / gi·chwad·e / gi·chwado·wa / gi·chwado·u / gi·chwado·gi
 3Pl·hit·1Sg / 3Pl·hit·2Sg / 3Pl·hit·3Sg / 3Pl·hit·1Pl / 3Pl·hit·2Pl / 3Pl·hit·3Pl
 ‘they hit me / you_{Sg} / him/her / us / you_{Pl} / them’
- c. a·chwado·gi / i·chwado·gi / o·chwado·gi / wa·chwado·gi / u·chwado·gi / gi·chwado·gi
 1Sg·hit·3Pl / 2Sg·hit·3Pl / 3Sg·hit·3Pl / 1Pl·hit·3Pl / 2Pl·hit·3Pl / 3Pl·hit·3Pl
 ‘I / you_{Sg} / (s)he / we / you_{Pl} / they hit them’
- d. japoung·a / japoung·i / japoung·e / japoung·wa / japoungw·u / japoung·gi
 teacher·1Sg / teacher·2Sg / teacher·3Sg / teacher·1Pl / teacher·2Pl / teacher·3Pl
 ‘my / your_{Sg} / his or her / our / your_{Pl} / their teacher’

The maximally simple phonological rule is the deletion of the final consonant *-n* from the phonological forms of the personal pronouns, presented in (1a). Both the object agreement suffixes (*a/i/e/wa/u/gi* in (1b)) and the possessive agreement suffixes (also *a/i/e/wa/u/gi*, as shown in (1d)) are calculated in this simple way. Only the 3Sg subject agreement prefix *o-* is an exception; the other subject agreement prefixes can also be calculated from the personal pronouns by deleting the final consonant *-n* (1c).

Table 3 corroborates that the morphemes preceding the verb stem are not the personal pronouns themselves but agreement markers, since they are preceded by such further prefixes as those referring to mood and tense, and pronouns and agreement affixes can appear together, that is, they are not in complementary distribution.³ The focus constructions presented in (2) also demonstrate that, despite their similarity, there are independent personal pronouns, on the one hand, and there are affixes of pronominal agreement, on the other, and they can also occur together.

	Sg1	Sg2	Sg3	Pl1	Pl2	Pl3
Sg1	de-n-a·chwad-or-a	de-n-a·chwad-i	de-n-a·chwad-e	–	de-n-a·chwad-ou	de-n-a·chwad-ogi
Sg2	de-n-i·chwad-a	de-n-i·chwad-or-i	de-n-i·chwad-e	de-n-i·chwad-owa	–	de-n-i·chwad-ogi
Sg3	de-n-o·chwad-a	de-n-o·chwad-i	de-n-o·chwad-or-e de-n-o·chwad-e	de-n-o·chwad-owa	de-n-o·chwad-ou	de-n-o·chwad-ogi
Pl1	–	de-ne-wa·chwad-i	de-ne-wa·chwad-e	de-ne-wa·chwad-ore	de-ne-wa·chwad-ou	de-ne-wa·chwad-ogi
Pl2	de-ne-u·chwad-a	–	de-ne-u·chwad-e	de-ne-u·chwad-owa	de-ne-u·chwad-ore de-ne-u·chwad-or-u	de-ne-u·chwad-ogi
Pl3	de-ne-gi·chwad-a	de-ne-gi·chwad-i	de-ne-gi·chwad-e	de-ne-gi·chwad-owa	de-ne-gi·chwad-ou	de-ne-gi·chwad-ogi de-ne-gi·chwad-ore
The paradigm of the six personal pronouns in Luo (which coincides with the forms <i>be.1Sg</i> , <i>be.2Sg</i> , ..., <i>be.3Pl</i> of the copula): an, in, en, wan, un, gin						
	japoung-a	japoung-i	japoung-e	japoung-wa	japoungw-u	japoung-gi

Table 3. The agreement paradigm of a transitive verb in Past Conditional (*de-n·chwad·* ‘x would have hit y’ [*Cond·Past·hit·*]) and that of a noun (*japoung(w)·* ‘x’s teacher’ [*teacher·*]), compared to the paradigm of the six personal pronouns

³ This verb-internal affix order with the agreement markers closer to the verb stem than mood/tense markers is in conflict with the universal affix order according to Bybee’s (1985) Onion Theory, which Hungarian, for instance, satisfies with its mood and tense suffixes closer to the verb stem than agreement suffixes, as pointed out by Bartos (2000), based on Baker’s (1985) Mirror Principle.

- (2) a. An (ema) a·n japoung.
 I be_the_only_one Sg1.be teacher
 ‘I am the one who is a teacher.’
- b. ✓An a·chwad·i. / *An ema a·chwad·i.
 I Sg1·hit·Sg2 / I be_the_only_one Sg1·hit·Sg2
 ‘I am the only one who hit you.’
- c. *In a·chwad·i. / ✓In ema a·chwad·i.
 you_{sg} Sg1·hit·Sg2 / you_{sg} be_the_only_one Sg1·hit·Sg2
 ‘You are the only one whom I hit.’

The examples need some explanation. Luo also patterns with Hungarian in being a *pro-drop* language. That is why we use non-neutral contexts such as focus constructions to make personal pronouns appear. Here, too, however, there is a difference between Luo and Hungarian: object pronouns do not differ from subject pronouns. This is compensated as follows: there is a focus particle (*ema*), which is optional if nothing else but a subject belongs to the focused predicative construction (2a) but obligatorily marks the object focus in cases in which the focus construction rests upon a transitive verb. Thus, (2b) and (2c), respectively, prove that there is no way to consider the morpheme *a* to be an independent subject personal pronoun and the morpheme *i* an independent object personal pronoun.

All in all, while the “minor exceptions” in the case of Ute and Bemba (Tables 1–2) concern around the half of the independent personal and demonstrative pronouns serving as the source of bound personal morphemes, the ratio of exceptions is 1:18 in the case of Luo (1); see also Table 3 above.

Let us now consider an “old, decayed, inflectional subject-agreement system” (Givón 2017: 73): the Hebrew perfective and irrealis paradigms. These can be compared to the current generation of demonstratives and independent subject pronouns:

Hebrew personal pronouns (with the verb *shvr 'break')			
		subject agreement	
category	independent pro.	perfective	irrealis
SPEAKER/HEARER			
1s	'a-ni	shavar-ti	'e-shbor
1p	'a-nakh-nu	shavar-nu	ni-shbor
2sm	'a-ta	shavar-ta	ti-shbor
2pm	'a-tem	shavar-tem	ti-shber-u
2sf	'a-t	shavar-t	ti-shber-i
2pf	'a-ten	shavar-ten	ti-shbor-na
THIRD PERSON			
3sm	h-u	shavar	yi-shbor
3sf	h-i	shavr-a	ti-shbor
3pm	h-em	shavr-u	yi-shber-u
3pf	h-en	-----	-----

Table 4. The current personal pronouns and the subject pronominal inflections on the verb in Hebrew

The current state of the Hebrew demonstratives and pronouns is summarized as follows by Givón (2017: 74): The correspondence between the current personal pronouns and the subject pronominal inflections on the verb is tenuous. It cannot be ascribed to run-of-the-mill phonological changes, whilst it no doubt harkens back to long-gone, older generations of independent pronouns and demonstratives. In the perfective paradigm, those older generations of pronouns cliticized as verb suffixes, and in the irrealis paradigm as prefixes.

3 A diachronically old system of pronominal agreement in Hungarian

Finno-Ugric languages pattern with Hebrew in requiring studious examination to point out that, for instance, the source of current 1-person and 2-person agreement markers are the ancestors of the corresponding personal pronouns, which are *én/te* in present-day Hungarian, *minä/sinä* in Finnish, *maj/taj* in Mari, and *mon/ton* in Udmurt (see Bereczki 2003; cf. Finnish *puhun* ‘I speak’, *puhut* ‘you_{Sg} speak’).⁴

Although it is more or less clear that the first person is associated with an [n]/[m]-like nasal consonant while the second person with a [t]/[d]-like stop consonant (realized as an [s] in present-day Finnish in certain contexts; a [T → s] transition is observable, e.g., *käte* → *käti* → *käsi* ‘hand’, cf. *käteen*) ‘on hand’), the differences between the current agreement markers and

⁴ Pusztay (2020: 209) provides an example in which the two characteristic consonants come together: *kunda-t-an* ‘I catch you_{Sg}’ in Erza Mordvin. Just like in Hungarian, the object-agreement marker precedes the subject-agreement marker (cf. *elkap-l-ak* ‘I catch you’); but in Hungarian, this particular form happens to contain such agreement markers the sources of which are *not* the corresponding personal pronouns (an explanation is available in the “avatar” based theory sketched in Section 5, based on Bárány’s (2017) “inverse” theory on Hungarian person suffixation).

the corresponding personal pronouns can scarcely be ascribed to simple phonological changes, at least in Hungarian. Moreover, the “more than one paradigm” of verb conjugation makes it likely that personal agreement suffixes should also be chosen from other sources than (ancient) personal pronouns.

<i>lop</i> ‘steal’ <i>bök</i> ‘poke’		PRESENT TENSE				PAST TENSE			
		INDEFINITE CONJ.		DEFINITE CONJ.		INDEFINITE CONJ.		DEFINITE CONJ.	
INDICATIVE MOOD	1SG	lopok	bökök	lopom	bököm	loptam	böktém	loptam	böktém
	2SG	lopsz	böksz	lopd	bököd	loptál	böktél	loptad	böktéd
	3SG	lop	bök	lopa	böki	lopt	bökt	lopta	bökte
	1PL	lopunk	bökünk	lopjuk	bökjük	loptunk	böktünk	loptuk	böktük
	2PL	loptok	böktök	loptatok	böktetek	loptatok	böktetek	loptatok	böktetek
	3PL	lopnak	böknek	lopják	bökiük	loptak	bökték	loptak	bökték
		CONDITIONAL MOOD (PRESENT TENSE)				CONJUNCTIVE MOOD (PRESENT TENSE)			
		INDEFINITE CONJ.		DEFINITE CONJ.		INDEFINITE CONJ.		DEFINITE CONJ.	
NON-INDIC. MOODS	1SG	lopnék	böknék	lopnám	bökném	lopjak	bökjek	lopjám	bökjém
	2SG	lopnál	böknél	lopnád	böknéd	lopjál	bökjél	lopjád	bökjéd
	3SG	lopná	bökné	lopná	bökné	lopjón	bökjön	lopjá	bökjé
	1PL	lopnánk	böknénk	lopnánk	böknénk	lopjunk	bökjünk	lopjuk	bökjük
	2PL	lopnátok	böknétek	lopnátok	böknétek	lopjatok	bökjetek	lopjátok	bökjétek
	3PL	lopnának	böknének	lopnájuk	böknékük	lopjának	bökjenek	lopjájuk	bökjékük

Table 5. Illustration of the pronominal agreement suffixes in Hungarian (with a typography the relevance of which will be shown in Section 4); black background: coinciding definite/indefinite forms⁵

All in all, the synchronic state of Hungarian (and other Finno-Ugric languages) shows the essential truth of the Givónian thesis concerning the distinguished role of the pronominal basis only via highly complex (and comparative) diachronic derivations. Nevertheless, the synchronic system *does* preserve the distinguished role of the pronominal basis; in a strange, but surprisingly regular way. If one considers the synchronic data by appropriately segmenting the richly suffixed verb forms, it turns out that the suffixes showing similarity to the corresponding personal pronouns are those, and only those, which appear in both the definite paradigm and the indefinite paradigm of verb conjugation. It is via this specific synchronic property that the synchronic state preserves such an important component of diachronic development as the pronominal basis. Therefore, the pronominal basis can be “calculated”—not only by means of diachronic (and comparative) tools but also with the aid of an exclusively synchronic procedure (based on the proper segmentation proposed in Table 5).

⁵ This is a theory-neutral presentation of the relevant data primarily with such theory-specific works in the background as Rebrus (2000), Bartos (2000) and currently Bárány (2017). Den Dikken (2006) also has an analysis of parts of this pattern; he also tries to make a connection between *-l* as a 2Sg subject suffix and its appearance in *-lak/-lek* (cf. *böklek* ‘I poke you’). On this, É. Kiss (2013) is also relevant, as is Rebrus (2005) paper.

4 The distinguished status of (the consonantal component of) the pronominal basis in the otherwise eclectic verbal system in the synchronic state of Hungarian

Let us turn to the observation that in Hungarian the [n]/[m] component (marked by **M** in Table 6 below) of the first-person (*én/mi* ‘I/we’) and the [t]/[d] component (**T**) of the second-person (*te/ti* ‘you_{Sg/Pl}’) personal pronouns appear in the corresponding verbal agreement markers (see Table 5), but (i) the connection cannot be described by referring to run-of-the-mill phonological differences, and (ii) several verbal agreement markers come from other sources (e.g. *-k*, *-l*, *-sz*). It is interesting, however, that at least the first-person and second-person agreement markers are exactly the personal-pronoun related ones in the case of the Hungarian non-verbal personal agreement systems, as illustrated by the last three columns in Table 6. Diachronic linguists (e.g., Hajdú 1989, subsection 4.33, Bereczki 2003: 88) account for this latter connection by claiming that in Hungarian the primary source of the suffix system of non-verbal personal agreement is immediately the personal-pronoun basis. As mentioned in Section 3, we would like to present a synchronic perspective (one whose definition requires no diachronic and/or comparative tools) which is also suitable for pointing out this distinguished status of the personal-pronoun related basis of personal agreement suffixes within the rich and fairly intricate entire system of Hungarian agreement suffixation.

		CATEGORIES WHICH CAN BE SUPPLIED WITH PERSONAL AGREEMENT SUFFIXES						
		VERB		NOUN&±DET.	NOUN	INFINITIVE	POSTPOSITION	
COMBINATIONS OF PERSON&NUMBER	SG1	bántok	bántalak	bánt ^o m	pánt-M	pántom, fáim	lopNom	alám
	SG2	bántasz	bánt ^o t	pánt-T	pántod, fáid	lopNod	alád	
	SG3	bánt	bántj ^o	pánt-(A)	pántJa, fái	lopNia	alá(Ja)	
	PL1	bántunk	bántj ^u k	pánt-M-(k)	pántunk, fáink	lopNunk	alánk	
	PL2	bántotok	bántjátok	pánt-T-(k)	pántotok, fáitok	lopNotok	alátok	
	PL3	bántanak	bántják	pánt-(A)-(k)	az ő pántjuk, fáik Iliék pántJa ^o , fáik ^o	lopniuk	alá(Juk)	

Table 6. How to derive non-verbal types of person-agreement suffixation from the verbal person suffixation in Hungarian^{6 7}

It should also be explained “synchronically” why the six forms that the nominal personal-agreement paradigm consists of are so eclectic and mismatched compared to the global system of verbal agreement paradigms (Rebrus 2000: 769): as shown in Table 6, while the singular nominal forms essentially coincide with the corresponding verbal forms of the definite conjugation (*bántom/pántom*, *bántod/pántod*, *bántja/pántja*), the plural nominal forms tend to pattern with the corresponding indefinite suffixes – at least in the first two persons (*bántunk/pántunk*, *bántotok/pántotok*).⁸ What is the logic in this, with special regard to the formally

⁶ The illustration is based on the verb *bánt* ‘outrage’, the nouns *pánt* ‘band’ and *fa* ‘tree’, the infinitive *lopni* ‘to steal’, and the postposition *alá* ‘under’.

⁷ This is a theory-neutral presentation of the relevant data primarily with such theory-specific works in the background as Rebrus (2000), Bartos (2000) and currently Bárány (2017). Den Dikken (2006) also has an analysis of parts of this pattern; he also tries to make a connection between *-l* as a 2Sg subject suffix and its appearance in *-lak/-lek* (cf. *böklek* ‘I poke you’). On this, É. Kiss (2013) is also relevant, as is Rebrus’ 2005 paper.

⁸ We provide here Szabolcsi’s (1994:187) formulation of the phenomenon: “Possessive inflection is almost identical to verbal inflection, with the following twist: with singular possessors ... it corresponds to the definite object conjugation, and with plural possessors..., to the indefinite object conjugation [the author ignores the

similar pair *bántjuk* ‘we hurt a definite person or set of persons’ and *pántjuk* ‘their band’? Our synchronic method will account for even this latter anomaly while the diachronic thesis itself that all non-verbal personal agreement suffixes and a subset of the verbal ones have come from personal pronouns does not predict the given strange connection between the two personal agreement paradigms presented in Table 6.

Bárány (2017: 78) offers a similar solution to the problem of the relation between the single non-verbal agreement paradigm and the double verbal paradigm. The difference between his solution and ours is that his solution is based on a theory-specific system(atization) of (spelling-out) rules while we have restricted ourselves to the mere synchronic data in Table 5. We can say, for instance, based exclusively on the verbal data, that, for ‘our band’, *pánt(j)uk* is a potential form that is excluded, because the zero morpheme (cf. *pántju-Ø-k*) as a first-person agreement marker appears in the morphology of verbs only in definite forms. Based on this restriction, the zero morpheme as a *first-person agreement marker* can be called *biased towards definiteness* (while *-k*, for instance, can be called *biased towards indefiniteness as a first-person marker*). The **M**, however, is neutral wrt. definiteness, because the variant *loptam* ‘I stole’, for instance, can come with both a definite object and an indefinite one (see Alberti (2016) on the role of this coincidence in a special case of L1 acquisition). That is why *pántunk* is correctly predicted to serve as an acceptable form for ‘our band’; see Table 7. In third person, however, the zero morpheme is not biased towards in the verbal paradigm towards either definiteness or indefiniteness, because, as shown in Table 7 below again, *bánt-Ø* ‘hurts someone’ is an indefinite form while *bánt-j-á-Ø-k* ‘they hurt definite person(s)’ is a definite one.⁹ The variants *pántjuk* and *pántják*, thus, are acceptable potential forms for ‘their band’. Our method does not predict the precise non-verbal forms; but it predicts that the phonetic form for ‘their band’ will not contain *-n* as an agreement marker; despite that this consonant appears also as a third-person marker in the verbal paradigm: e.g., *loppjon* ‘has to steal something’. What excludes *-n* from serving as a non-verbal third-person marker is its bias towards indefiniteness in the verbal paradigm. It is also shown in Table 7 that, of altogether four second-person markers, only **T** is not biased, that is, neutral, towards either value of definiteness.

It should be emphasized that this definition of *bias* is the crucial idea that this paper intends to provide, together with the lack of bias, referred to as the *neutral status towards definiteness*. It is relevant that the definition exclusively depends on synchronic morphological data, which serve as a solid basis upon which precise calculations can be carried out to predict the connection between verbal and non-verbal agreement in Hungarian.¹⁰

special status of 3Pl]. The historical reason is not known, but the possessive paradigm is the more regular of the two” [NB: the author provides no argument for the latter statement].

⁹ The indefinite/definite minimal pairs *lop-ott-Ø/lop-t-a* ‘(s)he stole’ and *lop-n-a/lop-n-á-Ø* ‘(s)he would steal’ (Table 5), if it is assumed that **A** is a separate marker of definiteness (Table 7), provide the construal that the pair **Ø/A** of suffixes marks the third person singular subject in two opposite ways (associated with indefinite/definite objects in the former case while definite/indefinite objects in the latter one). This fact proves in our approach that both **Ø** and **A** are suffixes neutral (that is, not biased) wrt. definiteness as markers of 3Sg (Table 7; see also Table 6).

¹⁰ How did *biases* arise diachronically? What can they be thought to have emerged from? A short answer to these (related) questions, due to an anonymous reviewer of this paper, is that the synchronic definition of bias/ neutrality says (and is intended to say) *nothing* on this topic. Nevertheless, it is obviously not a diachronic accident that the neutral verbal agreement markers form the set of agreement markers for the non-verbal categories. A global discussion of this connection requires a generative syntactic train of thought and a typological consideration, provided in (i) and (ii). (i) “Hungarian is a language in which finite verbs can be

Our approach rests on the special segmentation of suffixed forms of all Hungarian word categories on which personal agreement markers can appear presented in Table 7. From left to right, a morph should be chosen from each column to obtain a suffixation of a well-formed word with a personal agreement marker. In the terms of the discipline of formal grammars and automata (e.g., Partee et al. 1990: 464–471), this is a *regular description* of the given class of Hungarian words—essentially a type-3, regular, grammar in the Chomsky Hierarchy (Partee et al. 1990: 451–454); or more precisely, an upper estimate for the given class (sufficient for our present purposes), as several combinations provide no possible suffixation in present-day Hungarian. This overgeneration causes no problem for our approach because what we strive for is not the same as what sophisticated morphophonological descriptions of suffixation in Hungarian (e.g., Rebrus 2000, Törkenczy & Rebrus 2005) typically strive for. While they intend to capture the set of possible morph combinations in the most precise way (with distinguished attention to the explanation of cases of homonymy), our less ambitious aim is only to capture the connection between the verbal and non-verbal paradigms of person agreement. An appro-

characterized by a double agreement system, they can agree with subjects as well as objects (Bárányi 2017: 52). It is a basic assumption in generative linguistics that in English-type languages with a simple agreement system, the lack of a [+FINITE] feature is responsible for the lack of agreement in non-finite constructions; and this hypothesis can be extended to languages with non-simple (but double, triple) agreement systems in the way that the lack of a [+FINITE] feature will not delete the whole agreement system but only reduce it by one level. That is, in Hungarian, the double agreement system, typical of finite verbs, will be reduced to a simple agreement system, in which objects do not trigger agreement” (Farkas to appear, subsection 1.1.4.3, partly based on Kenesei (2000: 116–128)). (ii) Hungarian is held to be a highly agglutinative language, for which the minimal pair *loptok/lopjátok* ‘you_{pl} steal [something/a certain thing]’ in Table 5 serves as an excellent illustration: **T** and **-k** show the second person and the plural number of the subject, and the difference between the two variants, **-á-** (or **-já-**) refers to the definiteness of the object. In our bias-based approach, the presence of **T** in both variants implies that **T** is neutral wrt. definiteness. This case can obviously be generalized as follows: if Hungarian were an ultimately homogeneous agglutinative language, all person-suffixes would be neutral wrt. definiteness; and in this hypothetical version of Hungarian, the lack of a [+FINITE] feature, discussed in (i), would result in a reduced, simple, agreement system in which the suffix (or set of suffixes) expressing the definiteness of objects would not be present, obviously, and (♣) the set of neutral person-suffixes of the double agreement system would plausibly serve as the set of person-suffixes of the simple agreement system (since in simple agreement systems, illustrated in Table 8 in section 5, properties of a “second” grammatical function are not to be shown). Hungarian, however, is not an ultimately homogeneous agglutinative language, as exemplified by the minimal pair *lopok/lopom* ‘I steal [something/a certain thing]’ in Table 5, where the distinct definiteness values of the objects are not marked by a segmentable suffix but are indirectly expressed by the **-k/M** choice of the subject-related person-suffix. The double agreement system of Hungarian is thus eclectic from a typological point of view. Hence, the idealized hypothetical connection between the suffix set of the double agreement system and the smaller suffix set of the reduced [–FINITE] agreement system, sketched above, cannot be realized, because of the eclectic composition of the former suffix set. Due to the bias-based approach, however, within the eclectic suffix set, it is possible to differentiate suffixed biased towards one or the other definiteness value and suffixes neutral wrt. definiteness. It is obviously not an accident that the suffix set of the double agreement system of Hungarian had become and has remained such that the oldest suffixes retained their neutrality wrt. definiteness in the system, with the “new” suffixes enriching the system in a way that they provided the biased elements to make it possible to differentiate objects in areas where the ideal agglutinative solution had not been available. It has also held for the connection between the complete and reduced suffix sets that (♣♣) the set of neutral person-suffixes of the double agreement system serves as the set of person-suffixes of the simple agreement system, formulated above marked by (♣) as an obvious property of this connection in an ultimately homogeneous agglutinative language. We claim thus that, despite the penetration of non-agglutinative elements in the two suffix sets in question, a crucial property of their connection has been preserved in Hungarian, and exactly via the oldest suffixes, presumably derived from the personal pronouns.

appropriate upper estimate is sufficient but word segments showing the person of the subject should be taken apart from those responsible for the number of the subject – as well as from those responsible for different properties of the object, its person and, in the case of third-person objects, its definiteness. This segmentation can be carried out at the cost of admitting zero phonetic forms in certain positions. It should also be noted that “intermediary sounds” are considered in three positions: (i) before the position responsible for object properties, (ii) between this position and the one presenting the person of the subject, and (iii) between the positions responsible for the person and the number of the subject. These sounds are referred to as intermediary sounds as they do not (necessarily) coincide with what are called epenthetic vowels. Thus, we do not intend to argue for considering -U- and -j- to be epenthetic vowels; but they undoubtedly appear in certain places in a way that they cannot be claimed to present any property of the subject or the object.¹¹ What is crucial is that all possible person-agreement related suffixation can be created by means of the regular description proposed in Table 7; see the analyses associated with the table.

The notations in Table 7 require some further explanation. First of all, as in Hungarian several vowels participate in frontness harmony, capitalized letters (e.g. -U-) indicate a front vowel (*ü*) together with its back counterpart (*u*). The notation scheme **X** is used to refer to consonant groups. **M**={m,n,ŋ,...}, **T**={t,d}, and **J**⁺={j,ʃ,...}. Our present aims do not require a deeper phonological analysis. What is relevant is that (i) the (nasal) consonants of the personal pronouns *én* ‘I’ and *mi* ‘we’ are regarded as the *common* source of, for instance, the nasal consonants of the suffixes in the forms *lopom* ‘steal.1Sg_{def}’ and *lopunk* ‘steal.1Pl_{indef}’, and (ii) the coinciding consonant of the personal pronouns *te* ‘you_{sg}’ and *ti* ‘you_{pl}’ is regarded as the source of the (voiced and voiceless) alveolar stops in the suffixes in the forms *lopod* ‘steal.2Sg_{def}’ and *loptok* ‘steal.2Pl_{indef}’. A detailed elaboration of **J**⁺ is irrelevant for our purposes; there basic values are variants of -j (e.g. *lőj*, *lopj* ‘you_{sg} should shoot/steal’) but it can also form long consonants with the final consonant of the verb stem in various ways (e.g. *szít* ‘incite’ → *szí[ccs]*, *üt* ‘hit’ → *üss*). What is eminently relevant, however, is that the connection between the consonants united as **M** and between those united as **T** can be regarded as synchronic, given that they are experienced to be interchangeable by native speakers (e.g., *szénpor* ‘coal dust’ is known to be rather pronounced as *szémpor*, and *átgurít* ‘roll through’ as *ádgurít*).¹²

¹¹ It is exactly the minimal pair *bántjuk* ‘we hurt a definite person or set of persons’ versus *pántjuk* ‘their band’ that clearly falsifies that -U- would exclusively be associated with the first person.

¹² To avoid misunderstanding, we do *not* claim that *m* and *n* in Hungarian stand in a complementary distribution (and the context of **M** selects one of them). The pair of *kém* ‘spy’ and *kén* ‘sulphur’ is a minimal pair that proves that they are not allophones. Nor do we claim that *t* and *d* stand in a complementary distribution (and the context of **T** selects one of them). The pair of *hat* ‘six’ and *had* ‘army’ is a minimal pair that excludes them being allophones.

Table 7. Four functional and three intermediary-sound positions in Hungarian suffixation (of word categories illustrated in Tables 5 and 6)

A slight but important detail of our approach is that the zero morpheme appears in all the three marked columns in Table 7: in the first person, only definite verb forms can contain it, in the second person, only indefinite ones, whilst it is in the third person that both types of verb forms wrt. definiteness can contain it (see also Table 5 and the examples in Table 7). That is the

explanation that our approach offers for the fact that a form like *pántjuk* ‘their band’ is inevitably a third-person nominal form, in contrast to the similar first-person verbal form *bántjuk* ‘we hurt the definite person’ where definiteness is associated with the zero morph. The first-person nominal form must contain the personal-pronoun related nasal consonant, resulting in the form *pántunk* ‘our band’ with its velar nasal consonant (see Table 6). It also obtains importance in our approach that there are two definiteness-neutral third-person morphs (Table 7): as for the variant -A, it appears in the nominal form *pántja* ‘his/her/its band’, presented in Table 6 (and, e.g., *üstje* ‘his/her cauldron’).

5 Non-verbal types of agreement in person and number in Hungarian

Despite the diachronically old status of Hungarian in the Givónian framework (Section 3) and its highly eclectic agreement system consisting of agreement suffixes of various sources (Section 4), the subset of personal-pronoun related agreement suffixes, referred to as **M** and **T** in Figure 7 above, still plays a distinguished role even in the synchronic state of Hungarian. As shown in Table 8 below, not only possessed nouns are formed by means of these old Uralic elements but also various further parts of speech. This section provides a sketchy introduction to this topic, which we regard as a promising direction of future research in the minimalist syntactic framework elaborated by Bárány (2017) for Hungarian primarily based on the approach by Béjar & Rezac (2009).

X \ Y _Z	1		2		3		examples, see (3–6)
	Sg	Pl	Sg	Pl	Sg	Pl	
N _{Sg}	∅· M	∅ _(U) M _k	∅· T	∅· T _k	^J ·∅	^J ·∅ _{Uk}	pad-unk (3a)
N _{old-Sg}	∅· •M	∅ _(U) •M _k	∅· •T	∅· •T _k	[•] ∅	[•] ∅ _{Uk}	tüz-ed (3e)
N _{Pl}	^{JA} [i] M	^{JA} [i] M _k	^{JA} [i] T	^{JA} [i] T _k	^{JA} [i]∅	^{JA} [i]∅ _k	dob-ja[i]tok (4a,d)
N _{old-Pl}	^A [i] M	^A [i] M _k	^A [i] T	^A [i] T _k	^A [i]∅	^A [i]∅ _k	tüz-eitek
Inf	∅· M	∅ _U M _k	∅· T	∅· T _k	[•] ∅	[•] ∅ _{Uk}	adn-unk (5a)
Case	∅· •M	∅ _U •M _k	∅· •T	∅· •T _k	^J ·∅	^J ·∅ _{Uk}	vel-e, nek-i (6a); cf. (4e)
Postpos.	∅· •M	∅ _(U) •M _k	∅· •T	∅· •T _k	^J ·∅	^J ·∅ _{Uk}	alatt-a, alá-ja (6b); cf. (4e)
Wh _{choice}		∅ _U M _k		∅· T _k		[•] ∅ _{Uk}	melyik-ünk (6c)
Poss _{Sg}	∅ M	∅ M _k	∅ T	∅ T _k			mié-nk (6d)
Poss _{Pl}	∅[i] M	∅[i] M _k	∅[i] T	∅[i] T _k			mie-[i]nk (6d); cf. (4d)
Refl	∅· •M	∅ _U •M _k	∅· •T	∅· •T _k	[•] ∅	[•] ∅ _{Uk}	mag-a
Acc	· M [(·t)]	M _k [(·t)]	· T [(·t)]	T _k [(·t)]			tég-ed([et])
Acc _{benn}		_U M _k [(·t)]		· T _k [(·t)]			benn-ünk[et]

Table 8. Non-verbal types of agreement in person and number in Hungarian

The symbols in Table 8 are explained in the comments on the examples in (3–6) below. The fundamental assumption is that the complex non-verbal suffixes (^XY_Z) in Table 8 pattern with the verbal ones presented in Table 7 in Section 4 in consisting of, obligatorily, a person feature (**Y**) that corresponds to the person feature of the subject in the verbal paradigm, and, optionally,

a number feature (z), the counterpart of the number feature of the subject in the verbal paradigm, and another person feature (^x), which can be construed as corresponding to the person feature of the object in the verbal paradigm. The phonetic forms occurring in the non-verbal paradigm can be construed as coming from the sets of their counterparts in the verbal paradigm, and just like in that, zero forms play an important role and there typically appear epenthetic/linking vowels.

- (3) a. pad / ∅·**M**: padom / ∅_(U)**M**_k: padunk
 ‘desk’ / ‘my desk’ / ‘our desk’
 b. zúr / ∅·**T**: zúröd / ∅·**T**_k: zúrötök
 ‘mess’ / ‘your_{Sg} mess’ / your_{Pl} mess’
 c. sín / ∅·**T**: sínéd / ∅·**T**_k: sínetek
 ‘rail’ / ‘your_{Sg} rail’ / your_{Pl} rail’
 d. zúr / ^J∅: zúrje / ^J∅_{Uk}: zúrjük
 ‘mess’ / ‘his/her mess’ / their mess’
 e. tűz / ∅·**T**: tüzed / ∅·**T**_k: tüzetek
 ‘fire’ / ‘your_{Sg} fire’ / your_{Pl} fire’
 f. vér / ∅·**T**: vére / ∅·**T**_k: vérük
 ‘blood’ / ‘his/her blood’ / ‘their blood’
 g. vár / ∅·**T**: vára / ∅·**T**_k: várak
 ‘castle’ / ‘his/her castle’ / their castle’

Various types of alternation play some role in the paradigm discussed. The smaller dot, illustrated systematically in (3a-c) and (5a-c), refers to a triple alternation according to frontness and roundness (*o*/[*ö*/*e*]). The bigger dot (indicates the relevant data in a way that it) has two explicit variants, according to frontness (*a*/*e*), illustrated in (3d-f)/(3g), and a zero third variant before vowels like *U* (with this alternation: *u*/*ü*), see (3d,f,g) (5a,c) (6a), and after vowels like *i*. The latter case is illustrated in (6a) by *neki*; the explanation of which requires the information that *J* can be realized in three ways: as *j* (see (3d), (4a-b), and *alája* in (6b)), as a zero morpheme (see *vele* and *alatta* in (6a-b)), and as the vowel *i* (see *neki_J∅_A* in (6a)).

The series of examples in (3) above illustrate the singular forms of possessed nouns, including the demonstration in (3e-g) of (a subtype of) an old type of possessed forms (see Farkas & Alberti (2016) and the rich literature given therein). The plural forms of possessed nouns are illustrated in (4a) below. As shown in (4a-b), we propose an analysis according to which the plural marker *-i* is inserted in the triplet ^{JA}**T**_k, which systematically corresponds to the “full-fledged” verbal [2Pl subject, definite third-person object] verbal triplet ^J·**T**_k (the given triplets are full-fledged in the sense that neither component is zero). The connection between transitive verbs and possessed nouns, transparently reflected morphologically in the minimal pair in question, as well as in the minimal pair of the homonyms of *dobja* in (4a-b), is that possessed forms of nouns pattern with transitive verbs in expressing a relation between two participants. A throwing event describes some relation between a thrower and a throwee while the reference to a possessed drum in (4c-d) expresses a relation between persons and musical instruments. As also illustrated below (by using them as predicates), personal pronouns (4d), as well as suffixed cases and postpositions (4e) also express relations. We analyze all categories in Table 8 with an *X* component in the corresponding morphological formulae (with the general scheme ^x**Y**_z) as relational, including the cases where ^x=∅; only the two accusative types of personal pronouns in the last two rows in Table 8 are analyzed as (basically) non-relational.

The reflexive pronoun is qualified as basically relational as regards the use shown in (4f).

- (4) a. *dob* / ^{J•}Ø: *dobja* / ^{JA}[i]**T**_k: *dobjaitok*
 ‘drum’ / ‘his/her drum’ / ‘your_{Pl} drums’
 b. *dob* / ^{J•}Ø: *dobja* / ^{J••}**T**_k: *dobjátok*
 ‘throw’ / ‘s/he throws that’ / ‘you_{Pl} throw that’
 c. *Ez a hangszer a Mari dobja.*
 this the musical_instrument the Mari drum·3Sg
 ‘This musical instrument is Mari’s drum.’
 d. *Azok a [ti dobjaitok] / tieitek.*
 that·Pl the you_{Pl} drum·Poss·Pl·2Pl / you_{Pl}·Poss·Pl·2Pl
 ‘Those are [your_{Pl} drums] / yours_{Pl}.’
 e. *Mari velem / alattam volt.*
 Mari with·1Sg / under·1Sg was
 ‘Mari was [with me] / [next to me].’
 f. *Magunk vagyunk.*
 Self·1Pl be ·1Pl
 ‘We are alone.’

Infinitives are exemplified in (5), which are optionally person-suffixed in Hungarian, in a possessive-like way (É. Kiss 2001).

- (5) a. *adn(i)* / Ø·**M**: *adnom* / Ø_U**M**_k: *adnunk*
 ‘to give’ / ‘for me to give’ / ‘for us to give’
 b. *égn(i)* / Ø·**T**: *égned* / Ø·**T**_k: *égnetek*
 ‘to burn’ / ‘for you_{Sg} to burn’ / ‘for you_{Pl} to burn’
 c. *űzn(i)* / •Ø: *űznie* / •Ø_{Uk}: *űzniük* / Ø·**T**: *űznöd*
 ‘to chase’ / ‘for him/her to chase’ / ‘for them to chase’ / ‘for you_{Sg} to chase’

In the series of examples below, suffixed cases (6a), postpositions (6b), choice *wh*-words (obviously used only in plural forms) (6c), possessive pronouns (6d), and reflexive pronouns (6e) are illustrated (see also (4d-f) above); the relevant questions concerning their phonetic realization have already been discussed, except for those concerning possessive pronouns (6d). Their relative stems can be mentioned regarded as following the [pronoun+é-] pattern but with minor or major phonetic modification, resulting in such forms as *enyé-*, *tié-/tie-*, *mié-/mie-*, *tié-/tie-* (cf. *én* ‘I’, *te* ‘you_{Sg}’, *mi* ‘we’, *ti* ‘you_{Pl}’); and no “self-agreement” is marked in the third-person forms (e.g., **övéje* ‘his/hers’, the correct form is *övé*, which is claimed to have the structure *ö(v)-é-Ø* with a zero person-suffix, see Hegedűs (2013: 51)).

- (6) a. [*fűvel / fűnek*] / [Ø·**M**: (én)velem / (én)nekem] / [^{J•}Ø: (ő)vele / (ő)neki]
 [‘with/to grass’] / [‘with/for me’] / [‘with/for him/her’]
 b. [*alatt / alá*] / [Ø·**M**: (én)alattam / (én)alám] / [^{J•}Ø: (ő)alatta / (ő)alája]
 [‘under / to_under’] / [‘under / to_under me’] / [‘under / to_under him/her’]
 c. *melyik dob* / Ø_U**M**_k: *melyikünk* / •Ø_{Uk}: *melyikük*
 ‘which drum’ / ‘which of us’ / ‘which of them’

- d. Marié / $\emptyset$ M_k: miénk / $\emptyset$ [i]M_k: mieink
 ‘Mary’s’ / ‘one which is ours’ / ‘ones which are ours’
 e. $\emptyset$ _UM_k: magunk / $\emptyset$ _{UK}: maguk (cf. *mag* ‘seed’)
 ‘ourselves’ / ‘themselves’

The first- and second-person accusative personal pronouns, in contrast to the third-person ones (7b), also contain agreement markers (7a), but do not follow the pattern of suffixed cases, shown in (6a): [pronoun (omissible) + case + person (+number)]. In the singular forms, it is the *-t* of the accusative case that is omissible, or rather, preferably omitted, and in all the four variants in question, the pronominal stem is directly adjacent to the agreement suffix (7a).

- (7) a. Marit / $\cdot$ M[$\cdot$ t]: engem(et) / $\cdot$ T[$\cdot$ t]: téged(et) / M_k[$\cdot$ t]: minket / T_k[$\cdot$ t]: titeket
 ‘Mari_{Acc}’ / me / ‘your_{Sg-Acc}’ / ‘us’ / ‘your_{Pl-Acc}’
 b. $\emptyset$ [$\cdot$ t]: őt / $\cdot$ $\emptyset$: $\cdot$ öt(j)e / $\cdot$ $\emptyset$: $\cdot$ őjét
 ‘s/he_{Acc}’ / intended meaning: ‘s/he_{Acc}’
 c. $\emptyset$ _UM_k[$\cdot$ t]: (*mi)bennünket; cf. *zűrben* / $\emptyset$ _UM_k: (mi)bennünk
 ‘us’ / ‘in mess’ / ‘in us’

The point of departure for our analyses coincides with that of Den Dikken (2005: 14): “The possessive morphology on the pronominal stem ... has the same person and number features as the pronoun itself. This led Simonyi (1907) to conclude that *engem* is really ‘mein ich’ (i.e., ‘my I/me’). I followed this line in Den Dikken (2004[1999]: 466–468). But it makes little intuitive sense to literally analyse *engem* as ‘my me’.”

We claim that it is worth resting an analysis of *engem* and the other three accusative personal pronouns in (7a) upon their common semantic content [x’s x] (e.g. ‘my me’ for 1Sg).¹³ An analysis like this can be elaborated in Bányi’s (2017) approach, based on the Minimalist agreement theory of Béjar & Rezac (2009), according to which Hungarian is a person-hierarchy sensitive (PHS) language, with the simple hierarchy 1>2>3, at least in the singular number (cf. É. Kiss 2013: 8). The person-hierarchy sensitivity is illustrated in (8):

- (8) a. Én [foglak téged] / [fogom Robit] / [fogok valakit].
 I hold-2_{Obj}-1Sg you_{Sg}-2Sg / hold-Def_{Obj}-1Sg Robi-Acc / hold-1Sg someone-Acc
 ‘I am holding you_{Sg} / Robi / someone.’
 b. Te [fogod Robit] / [fogsz valakit / engem].
 you_{Sg} hold-Def_{Obj}-2Sg Robi-Acc / hold-1Sg someone-Acc / I-1Sg
 ‘You_{Sg} are holding Robi / someone / me.’
 c. Mari [fogja Robit] / [fog valakit / engem / téged].
 Mari hold-Def_{Obj}-3Sg Robi-Acc / hold-3Sg someone-Acc / I-1Sg / you_{Sg}-2Sg
 ‘Mari is holding Robi / someone / me / you_{Sg}.’

¹³ The component *-g-* in *engem* ‘me’ and *téged* ‘you_{Sg-Acc}’ between the stem, which is a personal pronoun, and the person-suffix lacks from the plural accusative pronouns *minket* ‘us’ and *titeket* ‘you_{Pl-Acc}’. What is common among the four pronouns is thus the semantic factor of self-possession ([x’s x]). Den Dikken (2005) analyzes *-g-* as a potential remnant of the noun *mag* ‘seed’, which is also part of the phonetic forms of reflexive pronouns, illustrated in (6e). This assumption is in no conflict with ours: ‘my me’ and ‘my seed’, in the case of *engem*, can practically be regarded as similar formulations of self-possession, see the comments on the *bennünket* ‘us’ subtype of accusative pronouns, illustrated in (8d).

- d. Mari fog **bennünket / benneteket**].
 Mari hold-3Sg **gut-1Pl-Acc / gut-2Pl-Acc**
 ‘Mari is holding **us / you_{PL}**.’

As shown above, verbs in Hungarian agree with not only subjects (8a-c) but also objects; object agreement, however, is partial: while the suffixation on the verb with a 1Sg subject can differentiate among three types of object—the second person, a “proximate” third person and a “remote” third person¹⁴—first- or second-person objects come with the same suffixation on the verb as “remote” (practically, indefinite) third persons if the subject is not higher on the person hierarchy in question. Bárány (2017: 52) attributes this asymmetry to the blocking of object agreement in the latter contexts, referred to as inverse contexts (marked with the accusative pronouns in bold letters in (8b-c)). He practically argues that Hungarian is a PHS language with the property that transitive verbs show agreement with the object only in direct contexts (see the variants defined by the non-bold pronouns in (8a-c)). There is, however, no object agreement if (i) the given verb selects no object, (ii) the object is indefinite, or (iii) the context is inverse wrt. the person hierarchy.

It can be observed that, in inverse contexts, exactly the strange pronouns shown in (7a) will appear. This resembles the alternative way of PHS-ity discussed by Bárány (2017: 108), which is illustrated by Kashmiri, in which inverse contexts are indicated on the morphology of objects, and not on the morphology of verbs. We thus argue that Hungarian happens to be doubly PHS (i.e., inverse contexts are indicated on the morphology of both objects and verbs),¹⁵ and the puzzling self-possessed objects in (7a) do not trigger object agreement because, despite their reference to conversational participants (1- or 2-person objects), they function in the grammar

¹⁴ Bárány (2017: 38) argues for an approach based on the assumption that “there are in fact four categories of ‘person’: first, second, and third, which are specified for ϕ -features, and a fourth one which lacks person features altogether (but can be specified for number).” In his 2017 book, the author provides the relevant literature on ‘fourth’, ‘proximate’, and ‘obviative’ person types in (the American-Indian) Algonquian and other languages.

¹⁵ An anonymous reviewer of the paper has raised the question of what causes Hungarian to be doubly PHS. An answer should be started with the general wisdom that the accusative *-t* had emerged by the period of Proto-Uralic (Hegedűs 2013: 62–65). The ancient language obviously inevitably required a PHS morphology in an even earlier period with no accusative marking (but perhaps with a free or increasingly free word order) to differentiate unmarked subjects and objects. Regular accusative case marking, PHS irregularities on objects, PHS irregularities on conjugation, and word-order and intonation based options are four strategies for this differentiation, the simultaneous emergence of which in a language is not excluded at all as it only threatens with redundancy in the worst case. Present-day Hungarian can be characterized by a highly free word order and a wide ranging pro-drop, which (and particularly the differentiation of subjects and objects) the double verbal agreement agreement system can be claimed to make possible. The facts that this system and certain accusative pronouns have preserved their PHS character can serve as an explanation for the fact that in several cases objects still need no regular accusative case marking. The sentences in (i-ii), for instance, can be associated with the readings provided below despite the “opposite” word orders and the lack of the regular accusative *-t*:

- | | |
|--|---|
| (i) A fiam üdvözölte valaki.
the son.1Sg greet.Past.3Sg.DefObj someone
‘Someone greeted my son.’ | (ii) Üdvözölt a fiam.
greet.Past.3Sg the son.1Sg
‘My son greeted me.’ |
|--|---|

All in all, nothing “causes” Hungarian to be doubly, or even singly, PHS; but the preservation of these presumably ancient strategies of differentiating subjects and objects help Hungarians in quickly acquiring the meanings of sentences even with unusual word orders and phonetically non-realized noun phrases.

as “remote”/“demoted” participants, that is, indefinite third-person objects which can be construed as “lack[ing] person features” (Bárány 2017: 38). They serve in the conversation as low-prestige “avatars” of the highest-prestige interlocutors, the use of which means that all contexts referred to as inverse contexts in (8b-c) are factually direct contexts with subjects and objects meeting the person hierarchy. ‘My me’ referentially coincides with me but my Agent-/Experiencer-like ego is conceptualized differently from the poor “body” said to be influenced by other Agents in the stories under discussion. The two special plural accusative forms exemplified in (7c) and (8d) corroborate this *avatar* approach since their common stem *benn-* is derived from *bél* ‘gut’. The interlocutors and their associates can thus be referred to, in inverse contexts, as their low-prestige “guts”.

We conclude the section by illustrating another direction of future research concerning the expansion of the basic, personal-pronoun based, agreement markers.

personal pronoun	toleš ‘come’	pört ‘house’	voktene ‘next to’	Acc pro.
1Sg məj	tol am	pört em	vokten em	məj -m
2Sg təj	tol at	pört et	vokten et	təjəm
3Sg tudo	toleš	pörtšö	voktenže	tudəm
1Pl me	tol əna	pört na	vokten na	memnam
2Pl te	tol əda	pört da	vokten da	tendam
3Pl nunə	tolət	pörtəšt	voktenəšt	nunəm

Table 9. Personal pronouns, and verbal and non-verbal types of agreement in person and number in Field Mari

As shown by the bold letters, **M** and **T** also appear in the morphology of several categories in Uralic languages “far” from Hungarian, and the “self-agreeing” 1- and 2-person accusative personal pronouns can serve as a basis for an *avatar* approach.

personal pronoun	liktiñi ‘come’	korka ‘house’	vežin ‘next to’	Acc pro.
1Sg mon	liktiśko	korkaje	vež am	mone
2Sg ton	liktiśkod	korkaj ed	vež ad	tone
3Sg so	likte	korkajez	vežaz	soje
1Pl mi	liktiśkom i	korka mi	vež ami	mi’emiz
2Pl ti	liktiśkod i	korka di	vež adi	ti’ediz
3Pl soos	likto	korkazi	vežazi	soosiz

Table 10. Personal pronouns, and verbal and non-verbal types of agreement in person and number in Udmurt

6 Conclusions

Givón (2017: 69) argues that the sources of the affixes of pronominal agreement in person and number are the corresponding independent pronouns, and depending on whether the given type of agreement is diachronically young or old in a language, the etymological link to independent pronouns is highly transparent or, to the contrary, scarcely transparent but rather tenuous. The present paper claims that the Nilo-Saharan Luo language serves as a better illustration of the ‘diachronically young’ type than Givón’s (1976, 2017) own poster-child examples (Section 2). Hungarian (and other Uralic languages), however, rather belongs to the ‘diachronically old’

type in Givón's system in question. Nevertheless, the synchronic system of Hungarian can be claimed to preserve the distinguished role of the pronominal basis in a strange, but surprisingly regular way. We have overviewed the synchronic data by appropriately segmenting the richly suffixed verb forms, as presented in Tables 5–7, and it has turned out that, of the intricate set of agreement suffixes, the personal-pronoun related suffixes are “doubly distinguished”. On the one hand, they, and only they, appear in non-verbal personal agreement. On the other hand, but in obvious correlation with this fact, they form a special subset of personal agreement suffixes: they are the ones neutral with respect to definiteness. Thus, despite its diachronically old status in the Givónian system and its quite eclectic agreement system consisting of agreement suffixes of different sources, the subset of personal-pronoun related agreement suffixes still plays a distinguished role even in the synchronic state of Hungarian.

All in all, Givón's (2017:69) thesis concerning the *exclusive* pronominal source of agreement markers, sketched in Sections 1–2, cannot be retained in this strict form, but a weaker version, in which the *distinguished* role of the pronominal basis is declared, can be retained in the light of the Hungarian data and the approach to their analysis proposed in Sections 3–4.

Sections 5 illustrates two promising directions of future research concerning the expansion of the basic, personal-pronoun related, agreement markers. Their widespread proliferation in the morphology of several categories not only in Hungarian but in all Uralic languages is itself obviously worth systematic comparative descriptive research, in the background of which it promises high-level explanatory adequacy to apply the morphosyntactic theory of person-hierarchy sensitive languages (e.g., Béjar & Rezac 2009), elaborated for Hungarian in Bárány (2017), especially to the analysis of such seemingly highly redundant expressions as, for instance, the “self-agreeing” accusative personal pronouns *engem* ‘my-me’ = ‘me’ and the locative form *bennünket* ‘in-us-Acc’ = ‘us’.

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