The grammaticalization of postpositions in Old Hungarian^{*}

Veronika Hegedűs Research Institute for Linguistics, Hungarian Academy of Sciences hegedus@nytud.hu

1. Introduction

This paper gives an analysis of the grammaticalization of a large group of Hungarian postpositions (Ps). More specifically, it provides an account of the variation found in the structure of Old Hungarian Pospositional Phrases (PPs) by claiming that the observed variation is due to the fact that the elements involved are not fully grammaticalized Ps in Old Hungarian (896-1526 AD) but are at an intermediate stage in the grammaticalization process of nouns becoming Ps. According to this proposal, some elements retained some of their nominal properties and thus can appear in constructions that are similar to possessive structures.

The change under consideration is a clear case of grammaticalization: (i) there is morphophonemic reduction (e.g. belen > ben 'in'; belől > ből 'out of'), (ii) the elements undergo semantic bleaching when their original nominal meaning is lost, and (iii) they undergo a categorial change from the lexical category of Ns to the (semi-)functional category of Ps.

The historical origins of Hungarian Ps can be traced back to several different sources, but the most productive grammaticalization pattern seems to be the one whereby possessive structures change into PPs, with the possessee becoming (part of) the postposition. Other sources are verbs and adverbial elements, but those are not involved in the variation discussed in this paper, so their grammaticalization patterns will not be dealt with here.

The paper is organized as follows. Section 2 will introduce the historical data. I will first provide some information on the class of postpositions and then I will turn to the variation in Old Hungarian. Section 3 will turn to the structure of PPs and will introduce the category of Axial Parts (as defined by Svenonius 2006) in the analysis of Old Hungarian, thus accounting for the remaining nominal properties of otherwise postpositional elements. The grammaticalization process of postpositions from nouns will be taken to go through an intermediate step when the elements are neither fully nominal nor fully postpositional, they are Axial Parts. Section 4 will conclude.

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2. The data: Old Hungarian postpositions

This section will introduce the relevant historical data. First, I will discuss the origins of postpositions and their status in Old Hungarian and then I will turn to the variation in Old Hungarian PPs, which will call for the introduction of an intermediate step between Noun and Postposition on the grammaticalization path of adpositions.

2.1 The class of postpositions

Hungarian has postpositions and case suffixes and while the two have been assigned to different categories by traditional grammars, recently it has often been argued that syntactically they belong to the same category, they are all Ps (cf. É. Kiss 1999, 2002; Asbury 2008).¹ Semantically, we can distinguish spatial and non-spatial Ps, but even some of the non-spatial ones go back to spatial primary meanings.

The historical origin of these Ps is that the elements used to be nouns and they developed in possessive constructions. Historical grammars reconstruct a possessive construction with the order where the (unmarked) possessor is followed by the possessee and the possessee is case marked for locative, lative or ablative case. These ancient case suffixes on the final element are the origin of the three-way partition: the ancient locative suffix is found on today's (stative) locative Ps, and the lative and the ablative suffixes are found on directional ones. Some of the postpositions have become suffixes: they are monosyllabic and they show vowel harmony with the noun they attach to.

2.1.1 Possessives and postpositions

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Most of the oldest spatial Ps are in the tripartite system mentioned above, where one is locative, one lative and one ablative. (1) illustrates the system in Modern Hungarian with examples for suffixal and postpositional elements as well.

(1) a.	a ház-ban //	a ház mögött
	the house-INE	the house behind.at
	'in the house' //	'behind the house'
b.	a ház-ba //	a ház mögé
	the house-ILL //	the house behind.to
	'into the house'//	'(to) behind the house'
c.	a ház-ból //	a ház mögül
	the house-ABL //	a house behind.from

'out of the house' // 'from behind the house'

The origins of these elements are taken to be unmarked possessive constructions like the ones in (2), which illustrate the ancient possessive nominal with locative endings. The unmarkedness means that neither the possessor nor the possessee show the possessive relation between the two, only their order is indicative (Zsilinszky 1991).

(2) a. ház bele-n house inside-at 'at the inside of the house'
b. ház möge-tt house back-at 'at the back of the house'

The assumption in the historical grammars is that Proto-Hungarian had unmarked possessives, however, by the time of Old Hungarian and the first written texts, we only find data with an agreement marking on the possessee and optionally dative case on the possessor (Zsilinszky 1991). The examples in (3) show the two options, and as we can see in both cases, there is an agreement marker on the possessee and in (3b), the possessor bears dative case.

(3) a. Wimagguc [uromc isten kegilm-e-t] ez lelkiert pray.1PL lord.1PL god mercy-3SG-ACC this soul.for 'Let us pray for the our Lord God's mercy for this soul'

(FS)

b. De az hews vala [ysten-nek angal-a] but the hero was god-DAT angel-3SG
'But the hero was God's angel' (Jók 15)

Similarly to the possessive construction, where the possessor often appears in dative right next to the possesse, elements that are considered to be pospositions by this time can also bear an agreement marker and appear with a dative-marked complement. This is shown in (4).

(4) ysten-nek felewl-e god-DAT from-3SG 'from God' (Jók 29)

One important difference between agreeing Ps and possessive constructions is that when the complement of the P (that is, the equivalent of the possessor) is caseless, the postpositional element

has no agreement marker. The agreement marking is obligatory in possessive constructions not only with dative-marked but also with caseless possessors.

According to Zsilinszky (1991), the fact that PPs appear in possessive-like constructions in Old Hungarian is suggestive of their possessive origins; the ancient relationship between the two parts "lives on". The traditional historical grammars describe the change as the possessee becoming a more grammatical element as it loses its original meaning and the possessive relationship becomes oblique. It cannot be too oblique yet in Old Hungarian, so the agreement and dative marking are possible. This does not hold for all postpositional elements, however, those that are already suffixal, or on the way to becoming suffixes, do not take part in this variation.

2.1.2 Suffixes

There are postpositions which are becoming suffixes in the beginning of the written period of the language. One example is the old form *balól/belől* 'out of', which is becoming *-ból/-ből* 'out of (ablative case)' in Old Hungarian. As (5) shows, we find both the longer and the shorter form even in the same text, and both show vowel harmony.

- (5) a. keze-belewl hand-out.of
 'out of/from his hand' (Jók 60)
 b. paris-balol Paris-out.of
 - 'out of/from Paris' (Jók 28)
 - c. az lang-bol the fire-out.of' 'out of/from the fire' (Jók 43)

The other two items developing from the same noun (*bele* 'inside') are also on the way to becoming suffixes already in the oldest texts, but the illative form is still disyllabic and does not always harmonize with the stem, as (7) shows.

- (6) gimils-ben fruit-INE 'in fruit' (FS)
- (7) vilag-bele world-ILL 'into the world' (FS)

These elements and those that are similarly suffixal or close to suffixal (with some variation) do not appear with agreement markers and their complement is never in the dative case, so the variation discussed below does not extend to them. I will argue below that the items showing variation are not actually Ps yet, the suffixal elements, however, are already fully grammaticalized Ps.

2.2 Variation in Old Hungarian

In Old Hungarian, many postpositional elements exhibited a variation typical of possessive DPs. The Ps could appear with a dative marked complement and bearing an agreement-marker or in the 'regular' P construction, that is, with a caseless complement and without an agreement marker.

Let me illustrate the variation by first using examples from the same text, the Jókai-codex (after 1372/copy from 1448). This is the first text where we find a considerable number of Ps both with respect to types and tokens, so that we can observe the extent of the variation. Sebestyén (2002) cites the following data: the codex contains 21818 words; there are 39 different postpositions in 351 tokens.

The data in (8)-(10) show that the two forms were really present at the same time, and since it is not possible to find any rule as to the use of one form or the other, we can assume that they were in free variation. The 'regular' use of the P is exemplified in the (a) examples and the 'possessive'-like use of the P is shown in the (b) examples.

(8) a.	keues bezed vtan little talk after 'after some talk' (Jók 122)	
b.	ez bezedek-nec vtan-a	
	this talks-DAT after-3SG	
	'after these talks' (Jók 25)	
(9) a.	az baratok-nak aztal-a elewt	
	the monks-DAT table-3SG in.front.of	
	'in front of the monks' table' (Jók 84)	
b.	baratok-nak elewtt-e	
	monks-DAT in.front.of-3SG	
	'in front of monks' (Jók 84)	
(10) a.	Sokak felet	
	many above	
	'above many' (Jók 114)	
b.	menden-nek felett-e	
	everythin-DAT above-38G	
	'above everything' (Jók 79)	

Sebestyén (2002) counts the number of occurrences of the different postpositions, and we can observe that only Ps with a possessive origin alternate. Most of the frequent Ps are locative in meaning (directional ones are on average less frequent in this text), except for *után* 'after', which is the second most frequent one with 40 occurrences. They participate in the alternation to varying degree, but roughly 19% of the Ps are in the "possessive-like" structure.

While the Jókai-codex is useful because it is the oldest one, we can observe that the variation is present in other texts from this period as well. Zsilinszky (1992) gives a list of 50 Ps from late Old Hungarian and their occurrences, where we see the same variation based on several texts.

(11) a. een zyvem-nek alatt-a

I heart-DAT under-3SG 'under my heart' (Fest 396)

- b. Jordan vyzee-nek elvol-e
 Jordan water-DAT over-3SG
 'over the river Jordan' (Jord 176)
- c. Abel-nek helyett-e Able-DAT place.in-3SG 'instead of Abel' (Jord IIIa
- d. a nep-nek közepett-e the people-DAT middle.at-3SG 'in the middle of the crowd' (Bécsi 21)
- e. viadal-nak miatt-a fight-DAT because.of-3SG 'because of the fight' (Bécsi 19)

Since these Ps developed from nouns in possessive constructions, the variation has often been simply put down to a case of analogy in the Hungarian literature (Benkő 1980; Zsilinszky 1991). They claim that as the "doubly"-marked possessive construction is very frequent in these old texts (arguably for stylistic reasons) there is an analogical push to use it in PPs as well.² However, if these elements are Ps, that is, if they are already grammaticalized elements rid of their nominal properties, then the fact that they can have a dative-marked complement and can agree with that complement is not accounted for. Postpositions in Modern Hungarian do not participate in such variation, so either the properties of Ps have changed diachronically or these elements are not Ps. The fact that non-nominal Ps and suffixal Ps do not alternate seems to suggest the latter. The analogical push can only apply in Old Hungarian because the elements still have nominal features.

Hypothetically, one could also say that there are two lexical Ps that look very similar: one takes a caseless complement and the other a dative-marked complement, and the second one has an agreement marking. However, this would duplicate things in the lexicon unnecessarily and would require us to assume two different grammaticalization times for the two items. The original Ps developed in constructions where the possessor N was not in dative case and they were not agreeing with it. Similarly their complements have no case-markers and they do not bear agreement morphemes in Modern Hungarian either, so we would have to assume that the second group of these hypothetical lexical entries developed later but disappeared relatively quickly. This seems to create more problems than it solves.

Another possibility is that this could be a case of degrammaticalization. Under such a hypothesis, the seemingly previously grammaticalized P elements become nouns again, they have nominal properties. This does not seem likely, however, since they do not show any other nominal properties, they cannot be pluralized, the do not have determiners or modifiers. Degrammaticalization is a theoretically problematic process, anyway, and the data does not support such an analysis, so it is not a path we will take either.

One more thing we can say about this kind of variation is that it is not present in Modern Hungarian. While there are some cases where it is possible to have the P agree with a dative marked complement, in all those cases, it is obligatorily extracted from the PP (cf. É. Kiss 2002). The examples in (12) are impossible as constituents, and (13) is only grammatical if the agreement-marked P does not form a phrase with its complement (on the surface).

- (12) a. *a ház-nak mellett-e the house-dat beside-3sg 'beside the house'
 - b. *az autó-nak után-a the car-dat after-3sg 'after the car'

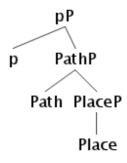
I will argue in the next section that instead of the above listed explanations, an analysis that attributes a special, intermediate status to the Old Hungarian P-like elements on the grammaticalization path is viable.

3. Axial Parts

3.1 The structure of PPs

The structure of PPs can be rather complex. We need to minimally distinguish between locative and directional Ps in the structure (cf. Koopman 2000; Den Dikken 2003; Svenonius 2004). Van Riemsdijk (1990) also proposed that we need an extra projection to host the "more functional" elements. This extra layer will not be relevant for us in this paper, since the grammaticalization discussed here results in Place and Path heads.



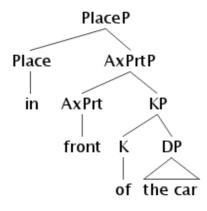


Svenonius (2006) argues that there is an additional projection in the extended PP hosting a group of categorially ambiguous elements that exhibit both nominal and adpositional properties. He names the projection Axial Part since the elements that occur there mostly refer to regions or "axial" parts of objects. Svenonius (2006) also shows that we find such Axial Parts in various different languages. Their syntactic properties classify them partly with nouns and partly with Ps, and their syntactic projection is inbetween those two as well. His example is English highlights the difference between the properties of *front* in the two sentences in (15). In the first example it is an Axial Part, while (15b) is a regular possessive phrase with *front* as a noun.

(15) a. There was a kangaroo in front of the car. (AxPart)b. There was a kangaroo in the front of the car. (N)

The structure Svenonius (2006) renders to PPs involving an AxialPart is the one in (16).

(16)



According to Svenonius (2006), English AxialParts cannot be pluralized, modified, replaced by a pro-form or moved away, while Nouns can. AxialPart elements, however, have some nominal features, but these features can be different in various languages. Another fact is that AxialParts can be prepositional (e.g. Persian, Tzeltal) or postpositional (e.g. Korean), with different nominal features.

These observations are relevant here, because the semantic class of elements Svenonius (2006) argues to be AxialParts is exactly the one involved in the observed variation in Old Hungarian. It was "axial" nouns that started to turn into postpositions in Proto-Hungarian, and it is these nouns that seem to have maintained some nominal properties in the early written period as well. The original meaning of sme of these elements were 'back', 'breast', 'bottom', 'top' and similar orientational meanings.

Similarly to English, Hungarian AxialParts cannot be pluralized, modified, replaced or extracted either, but they can bear a nominal agreement marker. This is the property that allows them to appear in constructions similar to simple possessive phrases.

Asbury (2008) argues for the presence of AxPrtP in Modern Hungarian PPs (although the postpositions are never in AxPrt in her analysis), partially based on their nominal origin. My analysis claims that AxPrtP is present in Old Hungarian PPs, this is how their marginally nominal nature is accounted for. However, since these elements are Ps in Modern Hungarian, AxPrtP is not necessarily active in Modern Hungarian PPs, or at least not in the sense as it was in Old Hungarian.

3.2 N > AxialPart > P

My claim is that we are dealing with a grammaticalization process in Old Hungarian which is in a transitional state. In Old Hungarian, some of the "postpositions" are actually not yet Ps, they are

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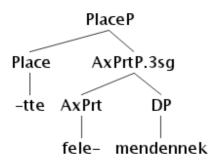
AxialParts, that is, they belong to an in-between category between nouns and Ps.

AxialParts in Old Hungarian do not have determiners, they cannot be modified, and they have no plural form. The only nominal feature they seem to have is a person feature, which allows them to agree with their dative marked complement. They do not agree in number with their complement.³

(17) barat-ok-nak elewtt-e monk-PL-DAT in.front.of-3SG'in front of monks' (Jók 84)

Historically the first step of the grammaticalization process is then N > AxialPart. The Old Hungarian elements that take part in variation are AxialParts. In these cases the locative/lative/ablative case suffix is the P head. (18) gives the structure of (17) as an illustration.⁴

(18)



By this stage, the elements have lost their nominal reference, they do not refer to body parts or orientations by themselves any more. Together with the suffixal P, they have a locative or directional meaning.

In the second step, the morphological border between the case suffix (that is, the P element) and the AxialPart element becomes oblique, and the whole unit gets reanalyzed as the P head. The grammaticalization thus proceeds from case-marked possessive nouns to case-marked AxParts to Ps. Those elements that are (becoming) suffixal in Old Hungarian do not take part in the variation, they are already Ps (generated in the Place/Path head). Later, most of the items showing variation in the early written texts get reanalyzed as P heads as well. In Modern Hungarian, the item *felett* 'above' (from the previous examples) is base generated in P. It has no nominal features.

(19) a ház felett the house above 'above the house'

(20)



This is a grammaticalization process which results in a lexical item losing its nominal properties and becoming a (semi-) functional element. There is morphophonological reduction (when becoming suffixal, Ps are monosyllabic), semantic bleaching (the nominal reference is lost) and category change (N > AxPrt > P) involved in the process. The change is similar to other syntactic changes where lexical heads are reanalyzed and become functional heads generated under a functional node (cf. Roberts and Rousssou 2003).

For Proto-Hungarian, historical linguists suggest we should reconstruct a possessive structure under PP, where the P elements are the ancient locative, lative and ablative suffixes. In Old Hungarian, we find structures like (18). Later, AxPrt will move into Place, since Place is a suffix and gets reanalyzed there as part of the Place or Path head as in (20).

Those structures that have the AxPrtP can have agreement marking since AxialPart has a person feature, the 3rd person agreement percolates up onto P. The AxialPart head is already a grammaticalized element, it is not a Noun. Those Ps that are becoming suffixal at this point are already Ps, generated in the Place or Path head, hence, they do not take part in the variation. Similarly, in Modern Hungarian, the already grammaticalized P elements do not appear in possessive-like structures.

This analysis takes into account both the nominal nature and the lack thereof of Old Hungarian alternating postpositions. The fact that the analogical push of the very frequent "doubly"marked possessive constructions can apply to them at all is due to the fact that they still have some nominal properties. On the other hand, the fact that their slightly nominal nature is present throughout the Old Hungarian period might be explained by strong presence of the alternation in these formal written texts, where the agreement-marked forms keep the remnants of their nominal origins conserved.

4. Conclusions

The analysis proposed in this paper shows that the structure and changes of the Hungarian PP fit in with the analyses proposed for other languages and that the grammaticalization of P elements is parallel to that of other functional material in languages.

The variation in the Old Hungarian data between agreement-marked and regular postpositional elements can be explained by assuming a semi-postpositional head in the structure as an intermediate step in the grammaticalization from N to P. I argued that this intermediate step in the grammaticalization process is when the elements are AxialPart heads, a category that has been proposed to exist in various languages hosting exactly the kind of elements that are becoming Ps in the beginning of the written period of Hungarian.

We can also say that the change takes place at different times with different items. Some of the postpositional elements are already on the way to becoming suffixal in the first texts from the 13th century, which I take to indicate that they are Ps. Other elements, which take part in the illustrated variation, seem to have some nominal features for much longer even after the end of the Old Hungarian period.

Old Hungarian sources

Bécsi = Bécsi-codex (15th c.) Published as: Bécsi Codex, (Betűhű átirat és latin megfelelő), MÉSZÖLY Gedeon, Budapest, (Új Nyelvemléktár, 1.), 1916. Fest = Festetics-codex (1492-1494) Published as: Festetics-kódex, 1494 előtt. A nyelvemlék hasonmása és betűhű átirata bevezetéssel és jegyzetekkel. Közzéteszi, a bevezetést és a jegyzeteket írta: N. ABAFFY Csilla, Budapest, Argumentum, Magyar Nyelvtudományi Társaság, 1996. (Régi Magyar Kódexek 20.)

FS = Funeral Speech (around 1195)

Jók = Jókai-codex (after 1372/copy from 1448) Published as: Jókai-kódex. XIV–XV. század. A nyelvemlék betűhű olvasata és latin megfelelője, bevezetéssel és jegyzetekkel ellátva közzéteszi: P. BALÁZS János, Budapest, Akadémiai, 1981. (Codices Hungarici 8.)

Jord = Jordánszky-codex (1516/1519) Published as: A Jordánszky-kódex bibliafordítása, sajtó alá rendezte és kinyomatta: TOLDY Ferenc, az eredetivel összevetette, a Csemez-

töredék szövegével kiegészítette és előszóval ellátta: VOLF György, Buda, 1888. (Régi magyar nyelvemlékek 5.)

References

Asbury, Anna (2008) *The Morphosyntax of Case and Adpositions*. PhD dissertation. Utrecht: LOT

Asbury, Anna, Berit Gehrke, and Veronika Hegedűs (2007) One size fits all: Prefixes, particles, adpositions and cases as members of the category P. In: Cem Keskin ed. *UiL OTS Yearbook 2006*. 1-17.

Benkő Loránd (1980) *Az Árpád-kor magyar nyelvű szövegemlékei*. [Hungarian texts from the Árpád-era]. Budapest: Akadémiai Kiadó.

Den Dikken, Marcel (1999) On the structural representation of possession and agreement: the case of (anti-)agreement in Hungarian possessed nominal phrases. In: Kenesei, István ed. Crossing Boundaries. Amsterdam: John Benjamins, 137-178. Den Dikken, Marcel (2003) *On the syntax of locative and directional adpositional phrases*. Manuscript. CUNY.

É. Kiss, Katalin. 1999. Mi tartozik a névutók osztályába? [What belongs to the category of postpositions?]. *Magyar nyelvjárások* 37:167-172.

É. Kiss, Katalin (2002) *The syntax of Hungarian*. Cambridge: Cambridge University Press.

Koopman, Hilda (2000) Prepositions, postpositions, circumpositions, and particles. The structure of Dutch PPs. In: The Syntax of Specifiers and Heads. Collected Essays of Hilda J. Koopman. London/New York: Routledge, 204-260. Riemsdijk, Henk van (1990) Functional prepositions, In Harm Pinkster - Inge Genee eds. Unity in Diversity: Papers Presented to Simon C. Dik on his 50th birthday. Dordrecht: Foris, 229-241. Roberts, Ian G. and Anna Roussou (2003) Syntactic Change. A Minimalist Approach to Grammaticalization. Cambridge: Cambridge University Press. Svenonius, Peter (2004) Spatial prepositions in English. Manuscript. University of Tromsø: http://ling.auf.net/lingBuzz/000001. Svenonius, Peter (2006) The Emergence of Axial Parts. Nordlyd: TromsøWorking Papers in Linguistics 33/1 (Special issue on Adpositions, ed. by Peter Svenonius and Marina Pantcheva),

CASTL, Tromsø, 49-77.

Sebestyén Árpád (2002) *A névutók állománya és rendszere a Jókai-kódexben (1372u.)* [The stock and system of postpositions in the Jókai-codex (after 1372)] Debrecen.

Zsilinszky, Éva (1991) A névutók [Postpositions] In Benkő Loránd ed. *A magyar nyelv történeti nyelvtana I. A korai ómagyar kor és előzményei.* [Historical grammar of Hungarian I. Early Old Hungarian and its ancestors] Budapest: Akadémiai Kiadó, 442-460.

Zsilinszky, Éva (1992) A névutók [Postpositions] In Benkő Loránd ed. *A magyar nyelv történeti nyelvtana II/1. A kései ómagyar kor. Morfematika*. [Historical grammar of Hungarian II/1. Late Old Hungarian. Morphemics.] Budapest: Akadémiai Kiadó, 696-715.

¹ There are two classes of postpositions: many of them take caseless (or, arguably, nominative marked) complements, while some have complements that bear an oblique case. É. Kiss (1999, 2002) argues that oblique case suffixes and postpositions with caseless complements belong to the same category, while the other postpositions are adverbs. Asbury (2008) and Asbury *et al* (2007) claim that they all belong to the category of P.

² "Doubly"-marked refers to the fact that the possessive relation is marked both on the possessor and on the possessee. The general consensus in the historical literature is that the genre of the old texts requires as much explicitness as possible, that is why grammatical relations are explicitly marked whenever possible (Benkő 1980; Zsilinszky 1991).

³ The lack of number agreement is not surprising if we take into account that lexical possessors and possesses do not agree in number in Modern Hungarian either, contrary to pronominal possessors (cf. Den Dikken 1999, É. Kiss 2002). Old Hungarian seems to differ to some extent from Modern Hungarian in this respect but the description of the exact structure of Old Hungarian possessive structures awaits future research.

⁴ The structures I assume for Hungarian are head-initial as well, despite the fact that the P item ends up as a postposition. The surface order can be derived by movement or morphological merger.