

The Rise of the Modifier Suffix *-i* with PPs



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Abstract The paper aims to give a diachronic overview of the changes that resulted in the currently wide distribution of the *-i* suffix found on prenominal PP modifiers, which has often been described as a derivational suffix but is rather a licensing head for modifiers of certain types. Data from Old Hungarian, Middle Hungarian and Early Modern Hungarian will outline the syntactic change in the use of *való* ‘orig. being’ and *-i*, along with the rise of a new participial copular form. The changes have led to *-i* becoming the general modifier head for prenominal PPs. The paper will further argue that the lack of *-i* with goal and directional PPs in present day Hungarian is due to syntactic reasons in some cases and to semantic ones in others.

Keywords Modifier • Participle • Suffix • Grammaticalization
Directional

1 Introduction

Hungarian has had prenominal PP modifiers throughout its written history, while the proportion of post-nominal PPs and adverbs (which also called postposed adverbial modifiers in descriptive grammars) has only slightly increased in the past few hundred years (Honti and Varga 2012). While adjectives can be used as prenominal modifiers without further ado, PPs and, to some extent, DPs are more restricted as modifiers—they need to be licensed, or as the descriptive literature calls it, “adjectivalized” to be suitable pre-head modifiers, (1).

- (1) a magas fák / az út mellett-i fák
the tall trees the road beside-MOD trees
‘the tall trees / the trees beside the road’

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The suffix *-i* is generally characterized as a derivational suffix that derives adjectives out of nouns productively and out of postpositions less productively. Another possibility is the use of *való* ‘orig. being’, the old participial form of the copula *van* ‘be’, which has been treated as a function word in its use as a licenser of prenominal PPs (Laczkó 1995).

Arguing against the traditional descriptive view, Kenesei (2014, 2015) claims that *-i* is not a derivational suffix but a modifier functional head, attached to a full phrase (which is the modifier). He cites various arguments supporting the claim that the resulting modifiers are not adjectives, that is, we are not dealing with a morphological derivation; for example, they cannot be modified by degree adverbs or intensifiers, and they are not gradable. Kenesei briefly discusses the status of pre-nominal PPs as modifiers, and argues that *-i* is productively used with them as well (that is to say, with non-suffixal postpositions), except that it cannot be attached to PPs expressing goal and direction, a puzzling fact.

The synchronic properties of *-i* and *való*, their distribution with derived nouns, especially, have been discussed in the generative literature (e.g. Szabolcsi and Laczkó 1992; Laczkó 1995 and later). It has been shown that there is an overlap in their current distribution and that *való* is used with dynamic events, while *-i* is semantically less restricted—can be used with stative and dynamic events as well; however, it is morphologically more restricted as it cannot be attached to case suffixes.

The aim of this paper is twofold. On the one hand, it aims to give a diachronic overview of the changes that resulted in the current distribution of *-i* (and, parallel to this, of *való* to some extent) with prenominal PP modifiers.^{1,2} In Sect. 2, data from Old, Middle and Early Modern Hungarian will be taken into account, and Sect. 3 will outline the syntactic and semantic changes that lead to the current properties of *-i* with PPs. On the other hand, I will argue that the lack of *-i* with goal and directional PPs is syntactic in some cases and semantic in others. Section 4 will discuss the synchronic properties related to goal and directional complements and adjuncts of nouns. Section 5 will briefly conclude the paper.

2 Diachronic Changes in the Distribution of *-i*

While the suffix *-i* is used productively with PPs and seems to be the most general licenser of prenominal PP modifiers now, historical data show that this has not always been the case. Diachronically, the distribution of *-i* and *való* ‘orig. being’

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²For the purposes of this paper, I will set aside the participial elements *történő* ‘happening’ or *szóló* ‘sounding’ that are also used with prenominal modifiers. Arguably, these are still verbal participles so while their distribution is of interest in the general structure of modification, they are not grammaticalized elements like *való*, making their syntactic properties more transparently verbal.

show an interesting change. In the oldest sources, *való* is the most common (and very frequent) element that we find with prenominal PPs and adverbs, (2). The use of *-i* seems limited to the “adjectivalization” of nominal modifiers of nouns, (3a), and to some adverbs, (3b).³

- (2) a. az vt mellet-ual-o nemy fakra
 the road beside-be-PTCP some tree.PL.SUB
 ‘onto some trees next to the road’ (Jókai Codex 138, 1372/1448)
- b. tauol-ual-o helyekben
 far- be-PTCP place.PL.INE
 ‘in far away places’ (Jókai Codex 114)
- (3) a. kiral-i koronat
 king-MOD crown.ACC
 ‘royal crown’ (Vienna Codex 62, mid. 15th c.)
- b. a’ holnap-i nap
 the tomorrow-MOD day
 ‘tomorrow(’s day)’ (Munich Codex 13ra, 1416/1466)

This section can only aim to provide a brief overview of the changes in distribution of various licenser heads in prenominal modification, nevertheless, the growing number of contexts in which *-i* is used should become clear. The changing distribution will lead to the claims about syntactic and semantic change in the next section. Data from Old Hungarian (896–1526), Middle Hungarian (1526–1772) and early Modern Hungarian (from 1772, the beginning of the period, up to the beginning of the 20th century) will be considered here in this order.⁴

³The abbreviations used in the glosses are the following: ABL—ablative, ACC—accusative, ALL—allative, DAT—dative, DEL—delative, ELA—elative, ILL—illative, INE—inessive, INS—instrumental, MOD—modifier, PL—plural, POSS—possessive, PTCP—participle, SUB—sublative, SUP—superessive.

⁴I am relying on corpus data from databases developed (and under development) at the Research Institute for Linguistics in Budapest: the Old Hungarian Corpus (Simon and Sass 2012), the Historical Corpus of Private texts for Middle Hungarian (Dömötör 2013), and the Hungarian Historical Corpus for Modern Hungarian. Only some of the texts are normalized for modern Hungarian spellings, so wherever it was not possible to simply search for the regular modern forms, I also searched for various spelling options in the digitized version with the original spelling. This makes it possible that I have not found all the relevant data or could not find some data due to its unpredictable spelling, which explains the lack of numerical evidence for the tendencies I am describing here and the fact that I treat them as tendencies and changes of relative frequency rather than categorical, abrupt changes in most cases. With the development of these databases, especially of the Old Hungarian one, one will be able to make more precise estimations with respect to the time of certain changes and the appearance or disappearance of certain constructions.

2.1 Old Hungarian

Licensing of prenominal adpositional and adverbial modifiers shows a very uniform and rather clear-cut picture in Old Hungarian from the early texts to the end of the period: *-i* is restricted to prenominal nouns and some adverbs, while we find *való* with all PP modifiers and with most adverbs as well. That is, *való* is the most general functional head that appears with all kinds of prenominal PPs in this period, be they predicates, complements or adjuncts, and it functions as the participial form of the copula as well—which is its original function.

2.1.1 NP + NP: *-i*

Originally, the suffix *-i* is claimed to have expressed ‘belonging to something’, and it was productive with nominal modifiers, which it made into a proper adjectivalized modifier, although it could also appear on suffixed nouns to some extent (Szegefű 1991, 1992). We find the suffix with nominals modifying other nominals in the old texts, (4), making it possible to use nouns as proper modifiers.

- (4) a. *munh-i uruzag-bele*
 heaven-MOD land-into
 ‘into heaven’s land’ (Funeral Sermon, c. 1195)
- b. *ewangelium-ÿ zegenseget*
 ewangelium-MOD poverty.ACC
 ‘evangelical poverty’ (Jókai Codex 8)
- c. *test-ÿ es lelk-ÿ erewsseget*
 body-MOD and soul-MOD strength.ACC
 ‘strength in body and soul’ (Jókai Codex 121)

The distribution of *-i* seems to be limited to such examples and to some more nominal adverbs, like *holnap* ‘tomorrow’ etc. With other prenominal modifiers we mostly find *való*, originally a participle.

2.1.2 The Use of *Való*

The adjectival participial form of the copula is *való* in Old Hungarian, made up of the copular root *val-* and the *-ó* participial ending. Prenominal predicative PPs appear with *való*, which we can easily be attributed to them being predicates in participial clauses, (5).

- (5) a. mend paradisum-ben uol-ov gimilcictul
 all Paradise-INE be-PTCP fruit.PL.ABL
 ‘from all fruits in Paradise’ (Funeral Sermon)
- b. föld alatt val-o vèrmekbèn
 earth under be-PTCP ditch.PL.INE
 ‘in holes in the ground’ (Vienna Codex 232)

The same could also be said of many of the adjunct PPs with *való*, (6); although it is not always easy to see how these PPs would be regular predicates.

- (6) a. Mosdatlan kéz-zèl ual-o kener etel
 unwashed hand-INS be-PTCP bread eating
 ‘eating bread with unwashed hand(s)’ (Munich Codex 22ra)
- b. Az zeretet-ből val-o harag
 the love-ELA be-PTCP anger
 ‘anger out of love’ (Székelyudvarhely Codex 98v, 1526-28)
- c. titk-on val-o taneythwanya
 secret-SUP be-PTCP disciple.POSS.3SG
 ‘his secret disciple’ (Winkler Codex 114r, 1506)

Already at this stage, PP complements of deverbal nouns also appear with *való*, (7), and these would be even more difficult to construe as regular predicates in copular clauses.

- (7) a. az-on val-o feltemben
 that-SUP be-PTCP fear.POSS.1SG.INE
 ‘in my fear of that’ (Jordánszky Codex 25, 1516–1519)
- b. ez vjlag-tol val-o el zakadas
 this world-ABL be-PTCP away tearing
 ‘separation from this world’ (Booklet 13r, 1521)
- c. az mv Ellensegynk-ön val-o bwzzw allasra
 the our enemy.POSS.1PL-SUP be-PTCP revenge standing.SUB
 ‘on taking revenge on our enemy’ (Székelyudvarhely Codex 27v)

I take these data to suggest that *való* is no longer simply a participle at this point in its history, but a general functional head that licenses pre-nominal modifiers even when they are not participial clauses. I will return to the structure of such modifiers in Sect. 3.

It is important to note that directional complements often appear without *való* as modifiers of deverbal nouns, as in (8), and there is a variation even with nouns like

falling or *going*, (9)—which often do not have *való* (or any other licenser) in Modern Hungarian in their event reading. In Modern Hungarian, sometimes we do find *való* with such deverbal nouns and I will briefly return to those data and their relation to the relative frequency of the same construction in Old Hungarian in Sect. 4.

- (8) a. viadal-ba mènès=nèlkül
 fight-ILL going=without
 ‘without going into a fight’ (Vienna Codex 24, 1416/1450)
- (9) a. ketség-ben val-o esesnek
 despair-INE be-PTCP falling.DAT
 ‘for falling into despair’ (Bod Codex 5r, early 16th c.)
- b. f̄yam-hoz ual-o menes̄met
 son.POSS.1SG-ALL be-PTCP going.POSS.1SG.ACC
 ‘my going to my son’ (Kazinczy Codex 6v, 1526-41)

In sum, we can say that there is a categorial distinction between nominal and PP modifiers, where only the former appear with *-i*, and all the PPs appear with *való*. This is the original state of Old Hungarian that begins to change by the end of the period.

2.2 Middle Hungarian

Nouns are still used with *-i* as modifiers in Middle Hungarian, however, the general use of *való* is starting to change from the beginning of the period, slowly giving way to a diversification in licenser heads.

There is a change that takes place at the end of the Old Hungarian period and continues to completion in Middle Hungarian, and it is the replacement of *való* with another copular root as the adjectival participle. Another copular root appears in the paradigm in the form *levő* (*lévő*), which is morphologically formed with the copular root *le(v)*— and the *-ő* participial ending (the high vowel counterpart of the *-ó* found in *való*). The appearance of *levő* reduces the number of contexts *való* appears in, as it is replaced in its original participial function.

Predicative PPs are overwhelmingly used with *levő* starting in Middle Hungarian, (10), although there is some variation throughout the period, (11). Whether the variation is dialectal or can be found within one dialect as well needs further investigation.

- (10) a. Az Gondolatok kerol leu-o uetkek
 the thought.PL around be-PTCP sin.PL
 ‘the sins (being) around thoughts’ (Thewrewk Codex, 1531)
- b. az ablakom-on lév-ő kis lyukon
 the window.POSS.1SG-SUP be-PTCP small hole.SUP
 ‘on the small hole (being) on my window’ (Witch trial 82, 1732)
- (11) az keze-ben valo ket edenybül
 the hand.POSS.3SG-INE be-PTCP two pot.ELA
 ‘from the two pots in her hand’ (Witch trial 58, 1709)

Complement and adjunct PPs are generally used with *való*, as illustrated in (12) and (13), respectively. This is true for PPs that involve suffixes and those that have the morphologically freer postpositions as well.

- (12) a. Az hírek-rül való tudósítását
 the news-DEL be-PTCP reporting.POSS.3SG.ACC
 ‘his reporting about the news’ (Barkóczy letter 3., 1698)
- b. Boszorkanyok-kal való cimbiralásokatt
 witch.PL-INS be-PTCP chumming.POSS.3SG.ACC
 ‘their chumming up with witches’ (Witch trial 28., 1715)
- (13) a. kedvek zerintt walo walazzok
 liking according.to be-PTCP answer.POSS.3PL
 ‘(their) answer to their liking’ (Telegdy letter 101., 1590)
- b. ez-előtt valo üdőkben
 this-before be-PTCP time.PL.INE
 ‘at times before this’ (Witch trial 44., 1732)

It is with postpositions that can refer to time, like *előtt* ‘in front of, before’ that *-i* begins to slowly spread during this period and later, (14). We still find a lot of time denoting PPs with *való* (and some with *levő* as well), (15), but the first systematic uses of *-i* with postpositions belong to this group.

- (14) Az-előtt-i leveleidre
 that-before-MOD letter.POSSPL.SUB
 ‘to your previous letters’ (Károlyi letter 24, 1704)
- (15) Az el-mult Pünkösöd előtt való héten
 the away-passed Whitsun before.at be-PTCP week.SUP
 ‘on the week before last Whitsun’ (Witch trial 13, 1724)

This is probably not an accident but an expansion of the use of *-i* with various time denoting nouns and adverbs, like *tegnap-i* ‘yesterday’s’, *tavaly-i* ‘last year’s’, *mostan-i* ‘present’, etc. The first few examples in the corpus are with simple PPs, as (14) shows. Spatial postpositions, or rather postpositions in their spatial use, are not yet used with *-i* in Middle Hungarian (at least corpus searches do not result in any hits), that replacement is a change that takes place in early Modern Hungarian.

2.3 Early Modern Hungarian and Later

In Early Modern Hungarian, predicative PPs often appear with the adjectival participle *levő/levő*, (16)—that is, they are often clausal. A novelty is the use of the suffix *-i* with postpositional PPs as modifiers, as in (17). In this construction, *-i* spreads to spatial PPs so that its use widens again.

- (16) az keze alatt lév-ő gyűjtővel
 that hand under be-PTCP collector.INS
 ‘with the collector under his watch’ (Hungarian Historical Corpus: Registry, 1783)
- (17) a’ halhatatlanok föld alatt-i palotái
 the immortal.PL ground under-MOD castle.POSS.PL
 ‘the immortals’ castles under the ground’ (HHC: Bolyai 1817)

Complement PPs are productively used with *való*, (18), but *-i* begins to appear in this context as well, (19).⁵

- (18) a. az emberek-től való félelem
 the people-ABL be.PTCP fear
 ‘fear from people’ (HHC: Kovács 1775)
- b. ez az Isten ellen való zúgolódás
 this the God against be.PTCP grumbling
 ‘this grumbling against God’ (HHC: Őri Fülep, 1788)
- (19) sors ellen-i zúgolódás
 fate against-MOD grumbling
 ‘grumbling against / discontent with fate’ (HHC: Huszti 1923)

⁵According to Klemm (1928) and others, grammar writers even advocated for using *-i* with oblique suffixes in order to reduce the extensive use of *való*, which still had a wider distribution in the early 19th century. This resulted in lexicalized forms, like *nagy-ban-i* [big-INE-MOD] ‘wholesale’, a word that is still used today.

At this time, *-i* is also used with adjunct PPs that refer to space or time, (20), the earliest examples from the corpus are from the beginning of the 19th century.

- (20) a. a' szekér mellett-i gyalogolás
 the wagon beside-MOD walking
 'walking beside the wagon' (HHC: Dugonics 1820)}
 b. az éjféll előtt-i álom
 the midnight before-MOD dream
 'the dream before midnight' (HHC: Horváth [1809]1967)

It is during the Modern Hungarian period that we arrive to the present overlapping distribution between (i) *-i* and *levő* with predicative PPs and (ii) *-i* and *való* with adjunct and complement PPs. The old distinction between PPs vs NPs as modifiers is no longer a clear-cut distinction between different modifier categories, and *-i* seems to have taken over as the most generalized licenser.

3 The Rise of *-i*, the Decline of *Való*: Diversification in Licensing

The changes that have taken place in the distribution of prenominal modifier PPs are both syntactic and semantic, and they have resulted in a diverse system, where the licenser head is determined by syntactic, morphological and semantic factors.

First of all, predicative PPs may appear in Modern Hungarian as predicates in a prenominal participial clause with *levő* as the copular head in it. Diachronically, *levő* became used as a suppletive form in the paradigm after the grammaticalization of *való* into a generally used functional head that appeared with almost all PP and adverbial modifiers of nouns. I assume that particular grammaticalization to have taken place by the Old Hungarian period since non-predicative complements PPs were used with *való* at that time already as was shown in Sect. 2.1.2. However, throughout the Old Hungarian period *való* was still used with predicative PPs as well, *levő* only began to take over in Middle Hungarian (Hegedűs 2016). Later, with the spread of *-i* to various temporal and spatial uses of PPs as modifiers, the option to have *-i* license prenominal predicative PPs also appeared, but that seems to have only happened by the beginning of the 19th century.

As far as the syntactic change is concerned, the grammaticalization and reanalysis of *való* into a general modifier head meant that there were two options to fill the head of the functional projection hosting pre-head modifiers of the relevant types, (21), (see Kenesei 2014 as well for this structure of *-i*).

- (21) [DP [ModP PP [Mod' [Mod *-i/való*] [NP N]]]]

I assume that the distribution of the two morphemes was first based on the syntactic category of the modifier: *való* was used with PPs and adverbs since it

grammaticalized in a context where it used to only appear as the copula with those predicates. In the Old Hungarian period *-i* was only used with nominal modifiers; this is the context from which it expanded, while *való* became more restricted.

The changes in their distribution later are mostly semantic in nature, although first the categorial divide had to disappear. The functional head *-i* began to spread to temporal modifiers, irrespective of their category. Adverbs and postpositions with temporal meaning started to have uses with *-i* as well, starting out mostly with those temporal adverbs that were nominal in nature, like *holnap* ‘tomorrow’. Once the suffix spread onto temporal PPs, it could also appear with predicative (stative) locative PPs and then later it came to be generalized to most contexts. At the same time *való* became the more restricted option with postpositions, although it is still widely used with suffixal PPs, a morphological environment that *-i* is banned from. With postpositions that are not case suffixes, *való* is only used with complements or adjuncts of dynamic event nominalizations.

Of course, this is just the basic outline of the morphosyntactic and semantic changes relevant to modification and to the structure of PP-modifiers. With the development of new digitized and parsed corpora, a step-by-step analysis (supported with numerical data) will be possible in the near future. The changes outlined here, however, give a general overview on the kind of grammaticalization processes that could overwrite a seemingly well-established and stable pattern that was observable in the Old Hungarian data.

These changes meant a basic change in the licensing of prenominal modifiers in the language.⁶ It also meant that pre-head modifiers are licensed in most contexts with an overt morpheme, depending on their category and their relation to the head noun. In some contexts, however, no such morpheme is required, which is the second puzzle to consider concerning PPs as modifiers.

4 A Synchronic Puzzle: The Lack of *-i* with Directional and Goal PPs

As Kenesei (2014, 2015) shows, *-i* suffixation is productive with PPs, there is, however, a seemingly curious absence of *-i* with PPs expressing goal or direction. Locative PPs and those expressing Source can easily be affixed.

⁶At the same time, post-head complements and adjuncts are claimed to have become slightly more frequent throughout the written period (Simonyi 1914; Honti and Varga 2012), although there is no exact numerical data to fully support that claim. This tendency is in accordance with the general change from a head-final language toward a more head-initial one, allowing for post-head complements and adjuncts in the NP as well.

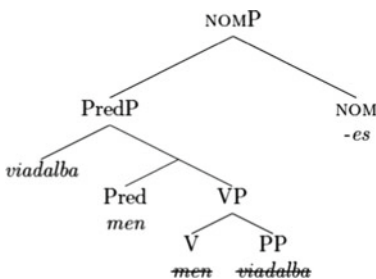
- (22) a. *a Pál elé-i futás
 the Paul before.to-MOD running
 ‘running (to) before Paul’
 b. *a réten át-i futás
 the field across-MOD running
 ‘running across the field’
 c. a Pál mögül-i futás
 the Paul behind.from-MOD running
 ‘running from behind Paul’ (cited from Kenesei 2014: 228; glosses mine)

I would like to argue that the lack of suffixation with these PPs may be due to two distinct reasons. On the one hand, directional/goal complements of deverbal nouns expressing complex events do not need an overt functional head (either *-i* or *való*) to be licensed prenominally for a syntactic reason. Although the presence of *való* has been a possibility throughout the written period of the language, it is not an obligatory solution. On the other hand, the fact that *-i* cannot be used with adjunct goal/direction PPs, may be due to their semantics since *-i* has for a long time been used with modifiers that are stative.

The lack of *-i* (or another licenser) with directional complements of deverbal nouns can be explained if we assume that (at least some of) these complements already precede the head before it undergoes nominalization. The intuition is old (Klemm 1928 already posits this for some historical data) and so is the possibility for this order without *való* from Old Hungarian, such as the one repeated from earlier in (23). The structure of such nominals involves movement of the directional PP to a preverbal position, which I take to be the same as the one hosting verb modifiers in Modern Hungarian (and in earlier stages too, to some extent; Hegedűs 2015; see É. Kiss 2006 on PredP), and then nominalizing the whole phrase. The deverbal noun in these cases is the nominalization of a complex event, one that has an endpoint.

- (23) viadal-ba ménès
 fight-ILL going
 ‘going into a fight’ (Vienna Codex 24)

(24)



Since directional complements of motion verbs are generally preverbal in neutral cases, we can derive the lack of *-i* (or *való*) from this movement. Since the PP is not

modifying a noun structurally, it does not need to be licensed as it would have to be in the nominal extended structure. It is also an option, however, to first nominalize the verb and then add the goal PP later in the derivation. In this latter case, *való* is hypothesized to be present, since the PP modifies a nominal category, but the structural difference corresponds to a semantic one with respect to the obligatoriness of the goal/directional PP and therefore the goal-orientedness of the nominalization.

Interestingly, Old Hungarian seems to have had quite some variation when it came to the presence of *való* with directional/goal complements of nouns derived from motion verbs, e.g. (8)–(9). This, however, correlates nicely with the fact that the position of the verb modifier was less generalized, and only particles seem to have been consistently preverbal in neutral sentences in Old Hungarian (Hegedűs 2015). With the generalization of this movement of goal/directional complements, the lack of a licenser in the nominal counterparts is also expected.

The explanation above applies to complement PPs of motion verbs, but with adjuncts, the situation is different since there is no syntactic reason to have the PP preverbally before nominalization takes place, as adjuncts are not often verb modifiers in the language. Source Ps are generally adjuncts, therefore we expect the presence of a licensing head, and *-i* and *való* are both options with postpositions, (22c) and (25), while only *való* is possible with suffixal PPs, (26).

- (25) a ház mögül való futás
 the house behind.from be.PTCP running
 ‘running from behind the house’
- (26) a. *a ház-ból-i futás
 the house-ELA-MOD running
 b. a ház-ból való futás
 the house-ELA be.PTCP running
 ‘running out of the house’

Directional or goal adjuncts are not better than directional complements with respect to the possibility of *-i* suffixation; the examples in (27) are still ungrammatical. Unless we want to argue for all directional PPs to move to PredP, regardless of whether they are adjuncts or complements, we cannot attribute this ungrammaticality to the same syntactic reasons we used with complements. The same proposal would not work completely, as (27b) does not have an alternative without any licenser head, (28b). In fact the only option to save that example is to have the directional PP postnominally, (28c).

- (27) a. *a tenger fölé-i repülés
 the sea above.to-MOD flying
 ‘flying (to) above the sea’
 b. *a folyó alá-i alagút
 the river under.to-MOD tunnel
 ‘tunnel (to) under the river’

- (28) a. a tenger fölé repülés
 the sea above.to flying
 ‘flying (to) above the sea’
 b. *a folyó alá alagút
 the river under.to tunnel
 c. alagút a folyó alá
 tunnel the river under.to
 ‘tunnel under the river’

Since it would be strange to claim that the ungrammaticality of these forms follows from some morphological constraint, I believe it is rather due to a semantic mismatch between goal or direction PPs and *-i*. This also leaves us with an unexplained case at first sight, however: the case of *keresztül* ‘across, through, via’. This is a directional postposition but it can be suffixed with *-i*, (29).⁷

- (29) a. a rét-en keresztül-i gyaloglás
 the field-SUP across-MOD walking
 ‘walking across the field’ (cited from Kenesei 2015: 78)
 b. a garázkapu-n keresztül-i betörés
 the garage.gate-SUP across-MOD in.breaking
 ‘breaking in through the garage gate/door’

One might find a morphological reason for this: the original morphological composition of *keresztül* is of *kereszt* ‘cross’ and *-l*, which is a manner adverbial suffix and not a spatial one, the spatial meaning coming from the meaning of the noun.⁸ But the complex adverbial element has grammaticalized into a positional head, thus, we would expect it to behave like other postpositions syntactically, irrespective of its origin. Interestingly, this is a postposition that can denote a route (or duration when it refers to time), and route denoting postpositions can be different from goal denoting ones as they do not express the result of an event, they refer to the process (they are not verb modifiers, either). *Keresztül* does have a goal denoting particle use, and in that use, the particle precedes the nominalization without a licenser, since particles do not need one, as in (30). In (30) we are dealing

⁷I would like to thank an anonymous reviewer of this paper for providing the example in (29b) and for pointing out that *keresztül* ‘across, through’ may need an explanation different from the other goal PPs.

⁸I thank the editors of the volume for this comment and for raising the possible parallel with English *across*.

with a goal-oriented event, where the person ended up on the other side of the field, reaching an end-point. This end-point is not implied in the examples in (29), the PPs denote routes, and this semantic difference is relevant in the distinction whether *-i* is allowed with a PP or not.

- (30) keresztül-gyaloglás a rét-en
 across-walking the field-SUP
 ‘walking across the field/crossing the field’

This suggests that the compatibility of *keresztül* ‘across’ with the suffix *-i* in examples like (29) might actually also be due to semantic reasons, which may, in turn, correspond to structural differences in modification. How exactly this difference is represented syntactically and what are the semantic restrictions on the use of each of the possible licensing heads remains to be explored in detail.

5 Conclusions

This paper set out to cover two issues regarding the distribution of the suffix *-i* with prenominal PP modifiers. One issue was the change in its distribution throughout the written period of Hungarian, whereby it has become the most general licenser head for PPs and adverbs used prenominaly. I showed that Old Hungarian had very limited use for *-i*—only its original and still primary (Kenesei 2014) use as a modifier functional head for NP + NP (N + N) constructions, in all other contexts we initially found *való*, the adjectival participle of the copula. Data from Old, Middle and Early Modern Hungarian were considered in outlining the syntactic and semantic changes that lead to the current properties of *-i* with PPs. I proposed that the reanalysis of *való* into a functional head was slowly followed by changes in its originally wide distribution, with a new copular form used as the head of participial clauses with predicative PPs and *-i* used in a growing number of contexts, starting with temporal PPs and expanding on to almost all types of postpositional modifiers.

After the discussion of the diachronic changes, I also considered the lack of *-i* with goal and directional modifier PPs in Modern Hungarian and argued that the lack of *-i* with goal and direction PPs is syntactic in some cases and semantic in others. The syntactic restriction is related to a generalized movement of goal and directional complements into the verb modifier position, which can take place before nominalization happens, resulting in the lack of *-i* in such cases.

References

- Dömötör, Adrienne. 2013. Az ó- és középmagyar kori magánéleti nyelvhasználat morfológiailag elemzett adatbázisa [Morphologically analysed corpus of Old and Middle Hungarian texts, representative of informal language use]. In *Tér, idő és kultúra metszéspontjai a magyar*

- nyelvben*, ed. Emese Fazakas, Dezső Juhász, Csilla T. Szabó and Erika Terbe Budapest–Kolozsvár: Nemzetközi Magyarásgtudományi Társaság—ELTE Magyar Nyelvtörténeti, Szociolingvisztikai, Dialektológiai Tanszék.
- É. Kiss, Katalin (ed.) 2006. *Event Structure and the Left Periphery. Studies on Hungarian*. Dordrecht: Springer.
- Hegedűs, Veronika. 2015. A predikátummozgatás megszilárdulása: Az ige-igekötő szórend és igemódosítók az ómagyarban [How predicate movement became the rule: Verb-particle order and verbal modifiers in Old Hungarian]. *Általános Nyelvészeti Tanulmányok* 27: 179–200.
- Hegedűs, Veronika. 2016. Changing copulas and the case of Hungarian prenominal PPs. In *18th diachronic generative syntax conference*. 29 June–1 July 2016, Ghent University.
- Honti, László, and Mária H. Varga. 2012. A hátravetett határozó kialakulásáról [On the development of postposed modifiers]. *Folia Uralica Debreceniensia* 19: 45–57.
- Kenesei, István. 2014. On a multifunctional derivational affix. *Word Structure* 7: 214–239.
- Kenesei, István. 2015. A főnévi módosító és az *i*-módosító: két új kategória bemutatása. *Nyelvtudományi Közlemények* 111: 65–85.
- Klemm, Antal. 1928. *Magyar történeti mondattan*. Budapest: Magyar Tudományos Akadémia.
- Laczkó, Tibor. 1995. On the status of *való* in adjectivalized constituents in noun phrases. In *Approaches to Hungarian* 5, ed. Kenesei István, 125–152. JATE: Szeged.
- Simon, Eszter and Bálint Sass. 2012. Nyelvtechnológia és kulturális örökség, avagy korpuszpépítés ómagyar kódexekből. *Általános Nyelvészeti Tanulmányok*, vol. XXIV, 243–264.
- Simonyi, Zsigmond. 1914. A jelzők mondattana. Nyelvtörténeti tanulmány [The syntax of modifiers. A diachronic study]. Budapest: MTA.
- Szabolcsi, Anna and Tibor Laczkó. 1992. A főnévi csoport szerkezete [The Structure of the Noun Phrase]. In *Strukturális magyar nyelvtan 1. Mondattan*, ed. Ferenc Kiefer, Budapest: Akadémiai Kiadó, 179–298.
- Szefű Mária. 1991. A névszóképzés [Deriving nominals] In *A magyar nyelv történeti nyelvtana I. A korai ómagyar kor és előzményei*, ed. Loránd Benkő, Budapest: Akadémiai Kiadó, 188–258.
- Szefű Mária. 1992. A névszóképzés [Deriving nominals] In *A magyar nyelv történeti nyelvtana III/1. A kései ómagyar kor. Morfematika*, ed. Loránd Benkő, Budapest: Akadémiai Kiadó, 268–320.

Primary Sources

- Bod Codex Beginning of the 16th century. Pusztai István (ed.), *Bod-kódex*. (Facsimile, transcription of the original record, with introduction and notes) Budapest: Magyar Nyelvtudományi Társaság, 1987.
- Booklet (= Booklet on the Dignity of the Apostles) 1521. Pusztai István (ed.), *Könyvecse a szent apostoloknak méltóságokról*. (Facsimile, transcription of the original record, with introduction and notes) Budapest: Magyar Nyelvtudományi Társaság, 1985.
- Funeral Sermon and Prayer Around 1195. *Halotti beszéd és könyörgés*. In: Benkő Loránd: *Az Árpád-kor magyar nyelvű szövegemlékei*. Budapest: Akadémiai Kiadó, 1980. 47–49. A more recent reading: Abaffy Erzsébet: Korai kis szövegemlékeink újabb olvasata. *Magyar Nyelv* 86 (1990) 124–127.
- Jókai Codex After 1372/ around 1448. P. Balázs, János (ed.), *Jókai-kódex*. (Transcription of the original record, the corresponding Latin text, with introduction and notes) Budapest: Akadémiai Kiadó, 1981.
- Jordánszky Codex 1516–1519. Toldy, Ferenc and György Volf (eds.), *A Jordánszky kódex bibliafordítása*. Buda, 1888.
- Kazinczy Codex 1526–1541. Kovács Zsuzsa (ed.), *Kazinczy-kódex*. Budapest: Magyar Nyelvtudományi Társaság, 2003.
- Munich Codex 1466. Nyíri, Antal (ed.), *Müncheni kódex*. (Critical edition with the corresponding Latin text) Budapest: Akadémiai Kiadó, 1971.

- Székelyudvarhely Codex 1526–1528. N. Abaffy, Csilla (ed.), *Székelyudvarhelyi kódex*. (Facsimile, transcription of the original record, with introduction and notes) Budapest: Magyar Nyelvtudományi Társaság, 1993.
- Thewrewk Codex 1531. Balázs, Judit and Gabriella Uhl (eds.), *Thewrewk-kódex*. (Facsimile, transcription of the original record, with introduction and notes) Budapest: MTA Nyelvtudományi Intézet, 1995.
- Vienna Codex After 1416/ around 1450. Mészöly Gedeon (ed.), *Bécsi kódex*. Budapest: MTA, 1916.
- Winkler Codex 1506. Pusztai, István (ed.), *Winkler-kódex*. (Facsimile, transcription of the original record, with introduction and notes) Budapest: Akadémiai Kiadó, 1988.