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On the synchrony and diachrony of grammaticalized result phrases in Hungarian*

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Abstract

The aim of this paper is to argue for an extended typology of Hungarian result phrases. Besides the canonical sublative-marked result phrases in Hungarian, there is also a subclass of translative-marked result phrases that can have two different functions even though their forms are syncretized. I argue that these two interpretations are made possible due to different underlying syntactic structures. On one interpretation these RPs can have a transparent resultative meaning, but they may also be interpreted as adverbial, intensifying elements. With my syntactic analysis, I aim to draw a parallel between the syntax of the two kinds of translative result phrases and the syntax of lexical and superlexical prefixes in Slavic languages as put forth by Svenonius (2004). Regarding the diachronic development of Hungarian superlexical RPs, I also show with historical and contemporary corpus data that some superlexical RPs show a higher level of grammaticalization than others, which is evidenced by their higher level of productivity.

Keywords: result phrases; lexical and superlexical prefixes; grammaticalization; Hungarian

1. Introduction

Resultative constructions have been of interest to linguists for decades both for their syntactic and semantic properties. Their grammatical behavior and (un)availability have been studied in various languages (see, e.g., Heinemäki 1988 for Finnish, Washio 1997 for Japanese, Mateu 2002 for Catalan, Kratzer 2005 for German, Beavers 2012 and Wechsler 2005 for English, Folli and Harley 2020 for Italian and English, Hopperdietzel 2022 for Mandarin

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Chinese and Samoan), including Hungarian (e.g., É. Kiss 2008, Hegedűs 2019, Kardos and Szávó 2024).

Consider the contrast between the canonical English examples in (1) and their Hungarian counterparts in (2).¹

- (1) a. *John hammered the metal flat.*
 b. *Kate broke the vase into pieces.*
- (2) a. *János lapos-ra kalapálta a vasat.*
 János flat-SUBL hammered the metal.ACC
 ‘János hammered the metal flat.’
 b. *Kati darabok-ra törte a vázát*
 Kati pieces-SUBL broke the vase.ACC
 ‘Kati broke the vase into pieces.’

Both in Hungarian and English, the interpretation of these sentences is that there was a causing activity which is described by the verbal predicates - *hammered the metal*, *broke the vase*, *kalapálta a vasat*, *törte a vázát*. This causing activity culminated in the object referent obtaining a new result state, as specified by the result phrases (RPs) – *flat*, *into pieces*, *laposra*, *darabokra*. A difference, however, between how the two languages form resultative constructions is that on the one hand, English RPs appear postverbally, and they can be APs (*flat* in (1a)) or PPs (*into pieces* in (1b)). In Hungarian, however, RPs appear preverbally in neutral sentences. They are standardly analyzed as prepositional phrases (Hegedűs 2019), and in the most canonical cases they are composed of an adjective such as *lapos* ‘flat’ and a case marker such as *-ra/-re* for the sublative case. There are no AP resultatives in Hungarian (Hegedűs 2019), similarly to Slavic languages (Gehrke 2008).

RPs in English are known to be inner aspectual markers in that they provide event descriptions with an inherent endpoint in their most canonical uses. In other words, result-encoding elements such as RPs generally give rise to a telic interpretation of an event description by providing it with a culmination point beyond which an event specified by a given event description cannot continue (but see also Goldberg and Jackendoff (2004) for atelic resultative constructions).

Hungarian RPs are also telicity-inducing elements in their canonical preverbal position (É. Kiss 2008). Additionally, Hungarian is a language that has verbal particles (VPart) that also serve the same aspectual function and as such, their role is to provide the verb phrases that they are contained in with a telic interpretation (Csirmaz 2008, É. Kiss 2008, Kardos 2016). In their absence, atelicity arises. The examples from (3) through (5) show the behavior

¹ The abbreviations used in this paper are the following: 1SG: 1st person singular, 2SG: 2nd person singular, ACC: accusative, ADE: adessive, APL: associative plural, ATTN: attenuative, CMLT: cumulative, CMPL: completive, COMPL: complementizer, DLMT: delimitative, DSTR: distributive, IMP: imperative, INE: inessive, INCP: inceptive, PART: participle, POSS: possessive, PRT: verbal particle, RPET: repetitive, SUBJ: subjunctive, SUBL: sublative, SUP: superessive, TRANS: transitive, TERM: terminative.

of such a particle, *le-*, of an RP *fehérre* ‘lit. onto white’, and also their interaction with each other.

- (3) a. *Mari egy óráig / *egy óra alatt festette a falat.*
 Mari one hour.TERM / one hour under painted the wall.ACC
 ‘Mari spent one hour painting the wall.’
- b. *Mari egy óra alatt / *egy óráig le-festette a falat.*
 Mari one hour under / one hour.TERM PRT-painted the wall.ACC
 ‘Mari painted the wall in an hour’.
- c. *Mari egy óra alatt / *egy óráig fehér-re festette a falat.*
 Mari one hour under / one hour.TERM white-SUBL painted the wall.ACC
 ‘Mari painted the wall white in an hour.’

The examples in (3) show that in Hungarian, a telic reading is only available in the presence of a preverbal VPart (3b) or RP (3c). With no VPart or RP (3a), the only possible reading is an atelic one. This is evidenced by the Hungarian equivalent of the *in/for* test (Vendler 1957) – the terminative-marked *-ig* adverbial being the Hungarian *for*-adverbial, and the *alatt*-adverbial being the Hungarian *in*-adverbial.

It is possible both for VParts and RPs to appear postverbally (4), though this word order is associated, for example, with imperfective grammatical aspect (4a) or subject focus (4b) (Csirmaz 2008, É. Kiss 2008).

- (4) a. *Mari ment fel a lépcsőn, amikor meg-csörrent a telefon.*
 Mari went PRT the stairs.SUP when PRT-rang the phone.
 ‘Mari was painting the wall when the phone started ringing.’
- b. *MARI festette a falat fehér-re.*
 MARI painted the wall.ACC white-SUBL
 ‘It was Mari who painted the wall white.’

In (4a), the first clause is interpreted imperfectively with the particle *fel* in postverbal position, describing an event that was in progress when the event described by the second clause interrupted it. The event of the second clause is interpreted perfectly with the particle being preverbal. In (4b), the subject *Mari* is a focused element, which in spoken language would be indicated by phonological emphasis besides the postverbal position of the RP, as also signaled by the small capital letters.

Finally, in (5) when VParts and RPs co-occur with each other, at least three different word order variations are available.

- (5) a. *Mari le-festette a falat fehér-re.*
 Mari PRT-painted the wall.ACC white-SUBL
 ‘Mari painted the wall white.’
- b. *Mari le-festette fehér-re a falat.*
 Mari PRT-painted white-SUBL the wall.ACC
 ‘Mari painted the wall white.’

- c. *Mari fehér-re le-festette a falat.*
 Mari white-SUBL PRT-painted the wall.ACC
 ‘Mari painted the wall white.’

The particle can be in preverbal position while the RP is sentence-final (5a), the RP can be immediately postverbal, following the particle verb (5b), or the RP can precede the particle verb (5c). In this case, the particle ensures that the sentence can be interpreted telically, while the RP provides a further specification of the result state of the event.

Besides the more canonical resultative constructions demonstrated above, Hungarian also has a further subclass that usually features RPs that are case-marked nouns marked for translative case with the *-vá/-vé* suffix. What is also noteworthy regarding these RPs is that they often have two different interpretations. See (6) and (7).

- (6) a. *Kati por-rá zúzta a tojáshéjat.*
 Kati dust-TRANS crushed the eggshell.ACC
 ‘Kati crushed the eggshells to dust.’
 b. *A katonák rom-má bombázták a házakat.*
 the soldiers dust-TRANS bombed the houses.ACC
 ‘The soldiers bombed the houses to ruins.’
- (7) a. *Kati por-rá alázta Jánost.*
 Kati dust-TRANS humiliated János.ACC
 ‘Kati completely humiliated János.’
 b. *Obamáék rom-má díszítették a Fehér Házat.*
 Obama.APL ruin-TRANS decorated the White House.ACC
 ‘The Obamas decorated the White House from top to bottom.’

In (6), the RPs *porrá* ‘to dust’ and *rommá* ‘to ruin’ are interpreted in their literal sense, meaning that as a result of Kati’s crushing, the eggshells turned into dust and as a result of the soldiers’ bombing, the houses turned into ruins. In (7), however, the RPs are not interpreted in their literal sense, as also indicated by the translations, but as adverbial, intensifying elements. In other words, their function is to express that the results of the events denoted by the VPs were excessive.

My goal is to argue that these interpretations are a consequence of two different syntactic configurations associated with (6) and (7). They may look identical on the surface regarding their morphological composition, and they may occupy the same surface position, but as I show below, their grammatical behavior, besides their interpretational difference, seems to warrant a syntactic distinction. As I show based on various diagnostics, the grammatical behavior of the RPs in (6) parallels that of canonical, largely sublative-marked adjectival RPs from the previous literature, so I treat them on par with those. I take RPs of the kind that are featured in (7) to be grammaticalized elements, lacking the lexical content observable in the RPs in (6). In my syntactic analysis, I rely on the analysis of Hungarian verbal particles and result phrases as recently put forth by Kardos and Farkas (2022), inspired by Borer (2005), MacDonald (2008) and Travis (2010). They argue for a syntactic account of Hungarian inner aspect and posit an Aspect Phrase between *vP* and *VP*. The specifier of this *AspP* is the

position where VParts are base-generated and to which canonical RPs move from the complement of VP for feature checking purposes.

Additionally, with my analysis I aim to draw a parallel between the syntax of lexical and superlexical prefixes in Slavic languages as argued for in Svenonius (2004), and the RPs illustrated in (6) and (7), which – inspired by this terminology – I also call lexical and superlexical RPs. Lexical prefixes in Slavic languages are usually associated with a transparent resultative meaning and are assumed to be base-generated within VP, while superlexical prefixes are associated with additional meaning components such as excessive, distributive, attenuative or repetitive meanings, and are assumed to be base-generated above VP in an aspectual functional projection.

The structure of this paper is as follows: in Section 2 and 3 I present the relevant Slavic and Hungarian facts, respectively, that I rely on in my analysis. In Section 4 I provide the syntactic structures that I propose for the examples in (6) and (7) and provide support for my analysis by examining the distributional and interpretive properties of the RPs in the examples. Section 5 offers some insights into the diachronic development of Hungarian superlexical RPs, and finally Section 6 concludes.

2. Lexical and superlexical prefixes in Slavic languages

The lexical-superlexical dichotomy in the class of prefixes has been extensively argued for in the Slavic literature in works such as Schoorlemmer (1995), Babko-Malaya (1999), Romanova (2004), Svenonius (2004), Di Sciullo and Slabakova (2005), Pereltsvaig (2006), and Žaucer (2009), among others. In this section I discuss some of the data and the syntactic analysis of Svenonius (2004), which I rely on when drawing a parallel between the syntax of Slavic lexical and superlexical prefixes and Hungarian lexical and superlexical RPs.

Svenonius (2004) differentiates between lexical and superlexical prefixes in Slavic languages, relying on data such as the following:

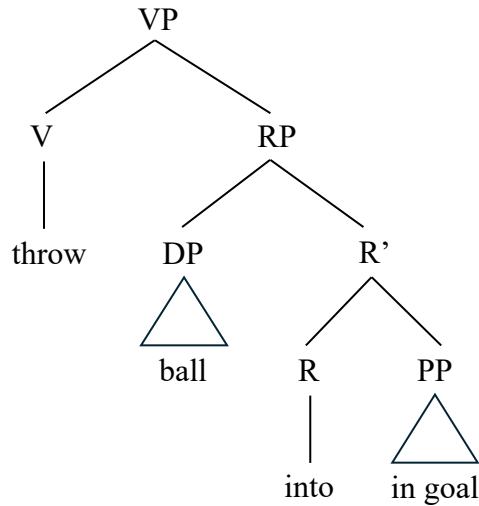
- (8) a. *Helder za-brosil mjač v vorota angličan.* (Russian)
 Helder into-threw the ball in goal English
 ‘Helder kicked the ball into the English goal.’
 b. *David sovsem za-brosil futbol.*
 David completely into-threw soccer
 ‘David completely gave up soccer.’
 c. *Ricardo nervon za-brosal mjač.*
 Ricardo nervously INCP-threw ball.
 ‘Ricardo began to nervously throw the ball.’
 (Svenonius 2004: 205-206)

We see the same prefix, *za-*, in all three of the examples in (8), though it contributes a different kind of meaning in each case. In the first two examples we see lexical uses of this prefix. In (8a), *za-* contributes a transparently resultative meaning, denoting the directed path of the throwing. In (8b) it takes on a more idiomatic meaning together with the same verb, meaning *give up*. Finally, in (8c) we see a superlexical use of *za-*, still with the same verb, the prefix and verb together meaning *begin to throw*. Besides the meaning differences, we can also tell the lexical and superlexical uses apart by considering the verb conjugation (*brosil*

vs. *brosal*). Lexical prefixes usually combine with verbs conjugated in the perfective paradigm (*brosil*), while superlexical prefixes combine with verbs bearing imperfective conjugation (*brosal*).

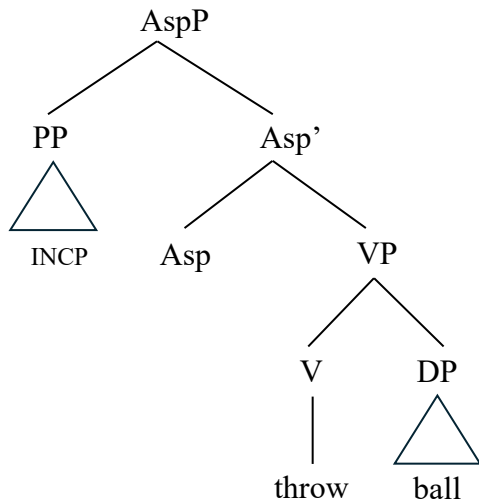
Svenonius proposes his syntactic analysis of lexical (9a) and superlexical (9b) Slavic prefixes relying on a syntactic decomposition inspired by works such as Ramchand and Svenonius (2002).

(9) a. The syntax of lexical prefixes



Svenonius (2004: 206, (2a))

b. The syntax of superlexical prefixes



Svenonius (2004: 206, (2b))

Lexical prefixes like *za-* in (8a) are argued to be base-generated in the head of a resultative small clause, as shown in (9a), that establishes a subject-predicate relation between the DP

ball and the PP *in goal*. Superlexical prefixes like *za-* in (8c) are argued to be base-generated in the aspectual projection AspP above VP. This is shown in (9b), where the inceptive PP occupies the specifier of AspP.

These syntactic structures show similarities with the structures proposed by Kardos and Farkas (2022) for Hungarian RPs and VParts, respectively. One difference, however, is that they do not assume that VPs in Hungarian take a resultative small clause. Instead, they assume that there is a Result Phrase in the complement of VP, which is a PP containing a case-marked adjective or noun, the case marker being the head of the phrase. Additionally, Kardos and Farkas also assume an AspP above VP, and it is the specifier of this AspP that contains telicity-inducing elements such as VParts and RPs – the former are base-generated there, while the latter occupy that position after movement.

3. The syntax of inner aspectual markers in Hungarian

Traditionally, Hungarian verbal particles have been associated with grammatical aspect (É. Kiss 2002, Alberti 2004, Kiefer 2006), but in later work, starting with works such as É. Kiss (2008) and Csirmaz (2008), verbal particles are considered to be markers of lexical and not grammatical aspect.

É. Kiss (2008) offers a small clause analysis of these elements, placing them in the specifier of a PredP above VP. A crucial assumption in her work, however, is that particles are predicative elements in the syntax and that telicity is a semantic, not a syntactic matter. More specifically, she assumes telicity to be a purely compositional property of verbal predicates.

More recently, however, Kardos and Farkas (2022) have proposed a functional projection analysis of Hungarian inner aspectual markers, assuming an AspP between *vP* and VP, and by extension also considering inner aspect to be a syntactic phenomenon in Hungarian. Kardos and Farkas build on works such as Borer (2005), MacDonald (2008), and Travis (2010). In these works, the authors also assume an aspectual functional projection, which provides a syntactic position for both overt and covert aspectual markers in the languages that they cite data from.

Kardos and Farkas argue that in Hungarian telicity arises as a non-cancelable entailment tied to the aspectual functional projection in the sentence. Telicizing VParts and RPs exert their telicizing function in this projection. On the other hand, Kardos and Farkas agree with Borer (2005) in that when event descriptions are interpreted atelically there is no need to assume an aspectual projection in the structure of the sentence. In other words, they associate more complex interpretations with more complex syntactic structures. As it was already illustrated above in example (3), in the presence of a VPart or RP in preverbal position, the only interpretation that is available is a telic one, while when neither of these elements is present in the sentence, the interpretation is strictly atelic.

In Hungarian telicity may also arise as a cancelable implicature in the absence of VParts and RPs in the case of a particular predicate class featuring creation/consumption verbs.

- (10) a. *János öt perc alatt/ öt percig evett egy almát.*
 János five minute under/ five minute.TERM ate an
 apple.ACC
 ‘János ate an apple in five minutes / for five minutes.’
- b. *János öt perc alatt / *öt percig meg-evett egy almát.*
 János five minute under / five minute.TERM PRT-ate an
 apple.ACC
 ‘János ate an apple in five minutes.’

With the consumption verb *eszik* ‘eat,’ (10a) is compatible both with the *for*-adverbial and the *in*-adverbial, meaning that the sentence can be interpreted both telically and atelically. In (10b), however, in the presence of the particle *meg*-, the only possible interpretation is a telic one.

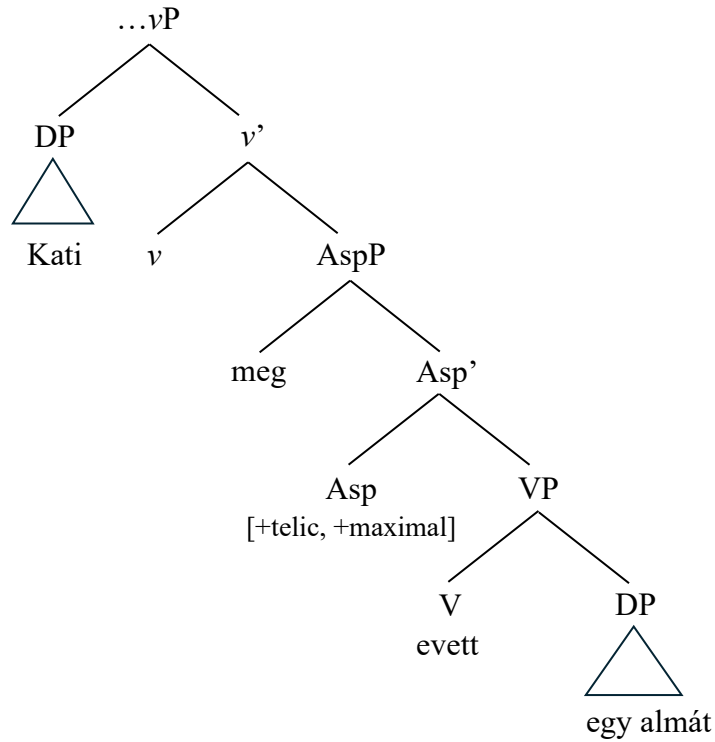
Furthermore, as it is illustrated in (11), we can also show with creation/consumption verbs that the presence of aspectual elements such as a VPart gives rise to a *maximal event* interpretation (Filip and Rothstein 2006, Filip 2008). In the examples below this means that the entirety of the apple has been consumed.

- (11) a. *János meg-evett egy almát, #de még maradt belőle.*
 János PRT-ate an apple.ACC but still remained from.it
 ‘János ate an apple #but part of the apple remained.’
- b. *János evett egy almát, de még maradt belőle.*
 János ate an apple.ACC but still remained from.it
 ‘János ate (at) an apple but part of the apple remained.’

In (11a), with a VPart in the sentence, it is infelicitous to cancel the attainment of the result state of the apple being completely consumed, while the same cannot be said about (11b). In this case, since the attainment of a result state is only an implicature without a VPart in the sentence, it does not lead to infelicity if we cancel the attainment of a changed final state. In the remainder of this paper my focus is only on non-creation/consumption predicates in Hungarian.

Based on data such as the ones cited above, Kardos and Farkas (2022) propose the following structure for VParts such as *meg* in Hungarian (12). They assume that the particle is base-generated in the specifier of AspP and it is in this specifier-head relation that it checks the [+telic] and [+maximal] features of the Asp head.

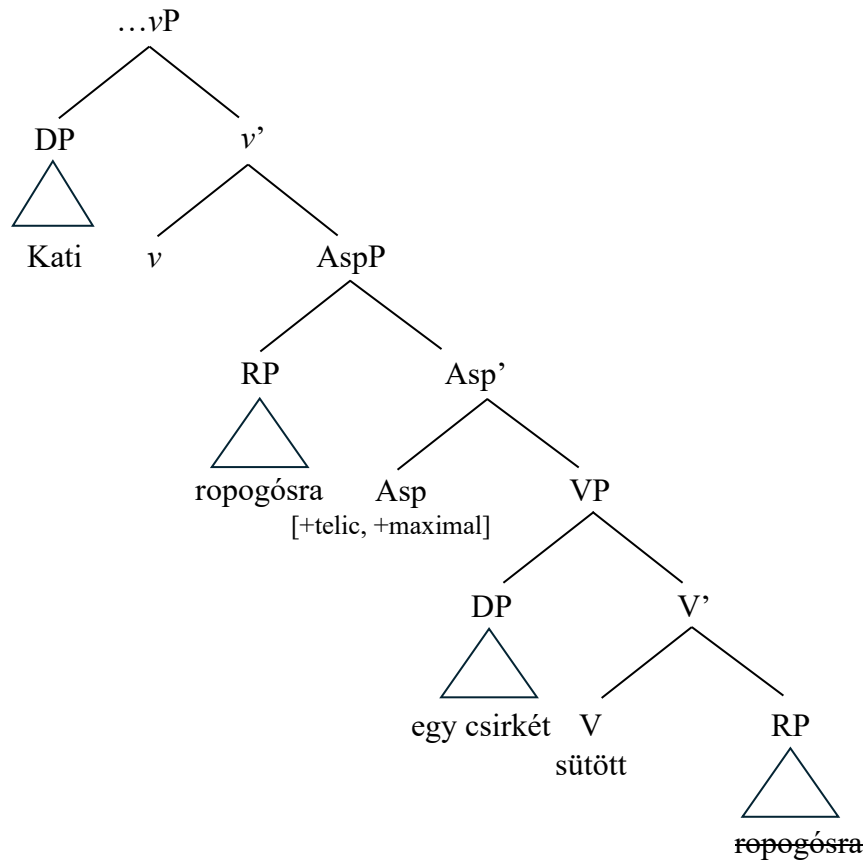
(12) The syntax of VParts in Hungarian



(Kardos and Farkas 2022: 822)

Furthermore, regarding the analysis of resultative constructions, Kardos and Farkas assume that RPs are base-generated in the complement of VP, and from this position they move to a preverbal position, to [Spec, AspP] in the absence of a VPart to check the [+telic] and [+maximal] features of the Asp head. These assumptions are shown in (13).

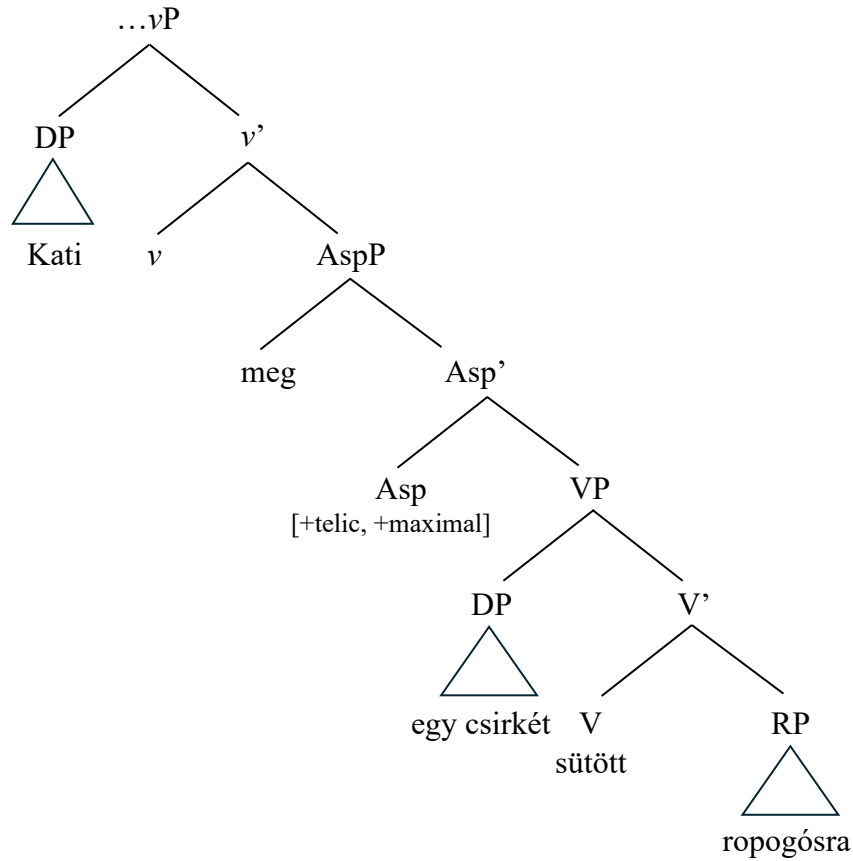
(13) The syntax of RPs in Hungarian



(Kardos and Farkas 2022: 828)

By assuming different base-generation positions for VParts and RPs, the analysis of Kardos and Farkas also allows for the co-occurrence of these two aspectual markers in one of the word order variants as illustrated in (5a) above. Specifically, in the presence of a VPart in [Spec, AspP], an RP may still appear in the sentence if it remains in its base-generation position in [Comp, VP] (14).

(14) The co-occurrence of VParts and RPs in Hungarian



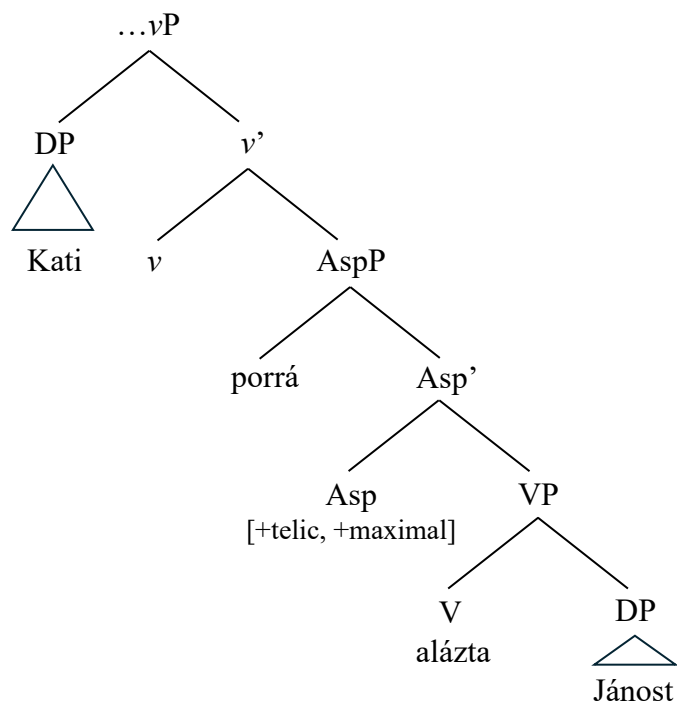
(Kardos and Farkas 2022: 829)

Kardos and Farkas ultimately assume that telicity is a syntactic matter directly linked to an aspectual projection in the Hungarian sentence between vP and VP . In this sense, they disagree with É. Kiss (2008) who assumes telicity to be a purely semantic matter. In the following section, I turn to my analysis and the diagnostics that I base my claims on.

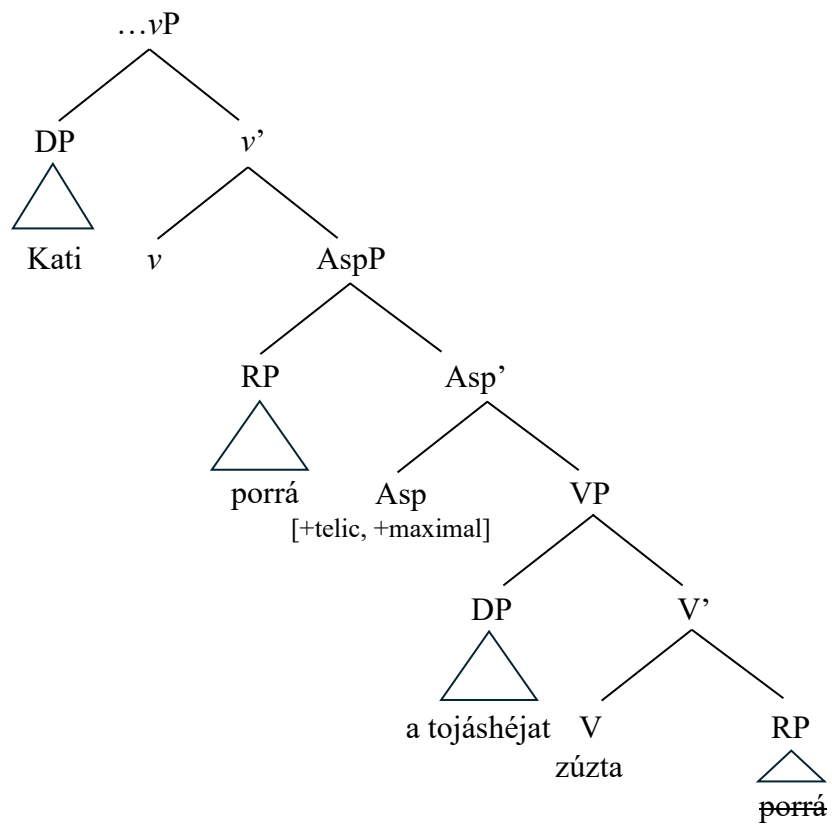
4. Lexical and superlexical RPs in Hungarian

In this section I propose a distinction in the syntax between the two kinds of translative-marked RPs that I illustrated above in (6) and (7), building on the analysis given by Kardos and Farkas (2022). My proposal is the following:

(15) The syntax of superlexical RPs in Hungarian



(16) The syntax of lexical RPs in Hungarian



I assume that in sentences such as in (15) where the translative RP fulfills an adverbial, intensifier-like function, it is base-generated in [Spec, AspP] between vP and VP. By extension, I assume these kinds of RPs to have become grammaticalized elements that serve a purely aspectual function, just like VParts, and as such, they have no referential, lexical content. In the remainder of the paper, I refer to them as superlexical RPs. In this regard, they stand in contrast with translative RPs that have referential content, such as in (16). These RPs are alike the more canonical sublative-marked RPs: they are base-generated in [Comp, VP] and in the absence of a VPart, they move to [Spec, AspP]. In what follows, I refer to these RPs as lexical RPs.

In the subsections that follow, I show through various diagnostics that the superlexical RPs resemble VParts like *meg-* in their distribution, syntactic behavior, and semantic content, and can be clearly set apart from lexical RPs.

4.1 The syntactic behavior of lexical vs. superlexical resultatives

In this section I demonstrate some similarities but crucially, several differences as well in the grammatical behavior of the two kinds of RPs in support of the syntactic analyses that I propose in (15) and (16).

Importantly, both lexical and superlexical translative RPs have a telicizing function in preverbal position, as it was also shown above in (3) with the canonical sublative RPs. This similarity between them serves as support for my assumption that their syntactic position is in AspP.

- (17) a. *Kati egy perc alatt / *egy percig porrá zúzta*
 Kati one minute under / one minute.TERM dust.TRANS crushed
a tojáshéjat.
 the eggshell.ACC
 ‘Kati crushed the eggshells to dust in one minute.’
- b. *Kati egy percig / *egy perc alatt zúzta a*
 Kati one minute.TERM / one minute under crushed the
tojáshéjat.
 eggshells.ACC
 ‘Kati spent one minute crushing the eggshells.’
- (18) a. *Kati egy perc alatt / *egy percig porrá alázta*
 Kati one minute under / one minute.TERM dust.TRANS humiliated
Jánost.
 János.ACC
 ‘Kati completely humiliated János in one minute.’
- b. *Kati egy percig / *egy perc alatt alázta Jánost.*
 Kati one minute.TERM / one minute under humiliated János.ACC
 ‘Kati spent one minute humiliating János.’

Applying the *in/for* test to these sentences, with (17) containing a lexical RP and (18) a superlexical RP, what we see is that the result phrase *porrá* ‘to dust’ ensures the telic interpretation of the sentences in both of its uses, i.e. a sentence containing any RP in

preverbal position is compatible with the *in* time span adverbial, denoting how much time the crushing and the humiliating event required to be completed, and it is incompatible with the *for* durative adverbial.

Additionally, these translative RPs also seem to behave like verbal particles and their canonical sublative counterparts in the contexts shown above in (4). Under negation or in focus constructions they are left behind in a postverbal position, while the rest of the phrase moves to a higher functional NegP or FocP (É. Kiss 2008). Consider the examples below in (19) and (20).

- (19) a. *Kati nem alázta por-rá Jánost.*
 Kati no humiliated dust-TRANS János.ACC
 ‘Kati didn’t humiliate János completely.’
 b. *KATI alázta por-rá Jánost (nem Mari).*
 Kati humiliated dust-TRANS János.ACC no Mari
 ‘It was Kati who humiliated János completely, not Mari.’
- (20) a. *Kati nem törte por-rá a tojáshéjat.*
 Kati no broke dust-TRANS the eggshell.ACC
 ‘Kati didn’t crush the eggshells to dust.’
 b. *KATI törte por-rá a tojáshéjat (nem Mari).*
 Kati broke dust-TRANS the eggshell.ACC no Mari
 ‘It was Kati who crushed the eggshells to dust, not Mari.’

In (19a) and (20a), under negation, both kinds of translative RPs appear on the surface in a postverbal position. In subject focus contexts, in (19b) and (20b), both RPs are postverbal as well. The fact that lexical and superlexical translative RPs pattern with canonical RPs and VParts in these non-neutral contexts suggests that lexical and superlexical translative RPs and sublative RPs occupy a similar syntactic position, which I argue to be [Spec, AspP].

The first piece of evidence that the RPs *rommá* and *porrá* in (6) and (7) above serve different functions in the grammar even if their forms are syncretized is that the co-occurrence of superlexical RPs with verbal particles is disallowed (21). As we have seen previously, sublative RPs can co-occur with VParts, and so can translative lexical RPs (22).

- (21) a. **Kati meg-alázta Jánost por-rá.*
 Kati PRT-humiliated János.ACC dust-TRANS
 Intended: ‘Kati completely humiliated János.’
 b. **Obamáék fel-díszítették a Fehér Házat rom-má.*
 Obama.APL PRT-decorated the White House.ACC ruin-TRANS
 Intended: ‘The Obamas decorated the White House from top to bottom.’
- (22) a. *Kati össze-zúzta a tojáshéjat por-rá.*
 Kati PRT-crushed the eggshell.ACC dust-TRANS
 ‘Kati crushed the eggshells to dust.’

- b. *A katonák le-bombázták a házat rom-má.*
 the soldiers PRT-bombed the house.ACC ruin-TRANS
 ‘The soldiers bombed the houses to ruins.’

In (21), the sentences with superlexical RPs are ungrammatical if they also have a particle in preverbal position. I consider this incompatibility to be support for my assumption that they have the same base-generation position in the syntax – they cannot co-occur since [Spec, AspP] can only host one syntactic element. In (22), the co-occurrence of particles and lexical RPs does not lead to ungrammaticality, which I assume to be evidence for their different base-generation sites – the particle is base-generated in [Spec, AspP], while the RP is base-generated in [Comp, VP].

Another piece of evidence that points in the direction that superlexical RPs are in fact different from lexical RPs is that lexical RPs can be modified by adjectives (23), while superlexical RPs cannot (24).

- (23) a. *A katonák lakhatatlan rom-má bombázták a házakat.*
 the soldiers uninhabitable ruin-TRANS bombed the houses.ACC
 ‘The soldiers bombed the houses to uninhabitable ruins.’
 b. **Obamáék csillogó rom-má díszítették a Fehér Házat.*
 Obama.APL shiny ruin-TRANS decorated the White House.ACC
- (24) a. *Kati finom por-rá törte a tojáshéjat.*
 Kati fine dust-TRANS crushed the eggshell.ACC
 ‘Kati crushed the eggshells to fine dust.’
 b. **Kati finom por-rá alázta Jánost.*
 Kati fine dust-TRANS humiliated János.ACC

In the (a) sentences, *rommá* and *porrá* can be modified by the adjectives *lakhatatlan* ‘uninhabitable’ and *finom* ‘fine’ which I take to be evidence for the nominal complements of the PPs, *rom* ‘ruin’ and *por* ‘dust,’ still being syntactically active nouns, contributing referential meaning. In the (b) sentences, the RPs cannot be modified by adjectives, which seems to suggest that the nouns *rom* ‘ruin’ and *por* ‘dust’ in these cases are not referential nouns by themselves but form a grammaticalized unit together with the case suffix.

With these distributional facts in mind, in the following section I comment briefly on the semantic behavior of lexical and superlexical result phrases.

4.2 On the semantics of superlexical RPs

The aim of the section is to briefly illustrate some semantic characteristics of Hungarian superlexical RPs and to argue for their distinct grammatical status when compared to lexical RPs.

Despite being able to supply verbal predicates with telic interpretations as evidenced by the *in/for* test above, superlexical RPs also admit the *for* durative adverbial on the interpretation that there were multiple events of the same kind, predicated of one and the same entity. This is reminiscent of what MacDonald (2008) calls the *sequence of identical events* interpretation. He points out that in English it is possible to interpret an event

description telically even when it is judged as compatible with the *for*-adverbial, which in most canonical examples only accompanies atelic event descriptions. In these cases, the interpretation is an iterative one, meaning that the same exact event happened several times during the given period of time (*carried a goat into the barn in 10 minutes* vs. *carried a goat into the barn for 10 minutes*). This is not possible with lexical RPs as illustrated below in (25) and (26).

- (25) a. *Obamáék évekig rom-má díszítették a Fehér Házat.*
 Obama.APL years.TERM ruin-TRANS decorated the White House.ACC
 ‘The Obamas decorated the White House from top to bottom for years.’
 b. *Kati évekig minden nap por-rá alázta Jánost.*
 Kati years.TERM every day dust-TRANS humiliated John.ACC
 ‘Kati completely humiliated János every day for years.’
- (26) a. **/?A katonák napokig rom-má bombázták a házakat.*
 the soldiers days.TERM ruin-TRANS bombed the houses.ACC
 b. **Kati percekig por-rá törte a tojáshéjat.*
 Kati minutes.TERM dust-TRANS crushed the eggshell.ACC

Superlexical RPs are compatible with the *for*-adverbial on the interpretation that the same excessive event took place over and over again, carried out by the same agent, with the same patient as the undergoer. Since it is not the case in the events described by the sentences in (25) that the object referents turn into new entities such as dust and ruin, but rather that they continue to exist even after the first decorating or humiliating event, it is possible for the same event to happen again. Since, however, in the events in (26), the eggshells and the houses no longer exist, once they are crushed or bombed, it is not possible to crush or bomb them another time, thus a *sequence of identical events* interpretation is not available with lexical RPs.

Additionally, if superlexical prefixes telicize and denote excessiveness, they should be paraphrasable by the combination of two elements that denote these meaning components separately – one that denotes excessiveness and one that telicizes. This is what we see in the examples in (27) and (28) below. A sentence with a superlexical RP is paraphrasable with a sentence containing the intensifier *nagyon* ‘very’ and a verbal particle.

- (27) a. *János por-rá alázta Pétert.*
 János dust-TRANS humiliated Péter.ACC
 ‘János absolutely humiliated Péter.’
 b. *János nagyon meg-alázta Pétert.*
 János very PRT-humiliated Péter.ACC
 ‘János really humiliated Péter.’

- (28) a. *Obamáék rom-má díszítették a Fehér Házat.*
 Obama.APL ruin-TRANS decorated the White House.ACC
 ‘The Obamas decorated the White House from top to bottom.’
 b. *Obamáék nagyon fel-díszítették a Fehér Házat.*
 Obama.APL very PRT-decorated the White House.ACC
 ‘The Obamas really decorated the White House.’

In the examples in (27b) and (28b), the meanings of superlexical *porrá* and *rommá* are decomposed by the use of the intensifier *nagyon* and a particle on the verb. In (27a) and (28a), these two meaning components – excessiveness and telicity – are packaged into one syntactic element, the superlexical RP.

The assumption that superlexical RPs lexicalize both of these meaning components is supported by the fact that they are unable to co-occur with either an intensifier or a particle. In (21) above, I have already illustrated the ungrammaticality of the co-occurrence of particles and superlexical RPs. Here in (29) and (30), sentences in which *nagyon* ‘very’ and superlexical RPs co-occur with each other sound redundant. I assume that this is due to the fact that the intensifier’s meaning is already included in the meaning of the superlexical RP.

- (29) ??*János nagyon por-rá alázta Pétert.*
 János very dust-TRANS humiliated Péter.ACC
 Intended: ‘János absolutely humiliated Péter.’

- (30) ??*Obamáék nagyon rom-má díszítették a Fehér Házat.*
 Obama.APL very ruin-TRANS decorated the White House.ACC
 Intended: ‘The Obamas decorated the White House from top to bottom.’

On the other hand, however, canonical sublative RPs like *laposra* ‘lit. onto flat’ are modifiable by *nagyon* ‘very.’ This is shown below in (31). Additionally, as it has already been demonstrated above in (5), canonical Hungarian RPs can co-occur with VParts.

- (31) *János nagyon lapos-ra kalapálta a vasat.*
 János very flat-SUBL hammered the metal.ACC
 ‘János hammered the metal really flat.’

In the literature on gradability (see e.g., Kennedy and McNally 2005, 2010, Bochnak 2010, 2013, *i.a.*), it has been argued that being modifiable by intensifiers like *very* would be an indication that a lexical element lexicalizes a gradable scale. Lexical elements that lexicalize a non-gradable scale do not admit modification by *very*. Consider (32).

- (32) a. *The coffee at the airport is very expensive.*
 b. ?? *That drug is currently very available.*

Kennedy and McNally (2005: 369, 370)

In (32a), the adjective *expensive* is assumed to lexicalize a gradable scale that is composed of multiple points, i.e., we may talk about different degrees of expensiveness. In (32b), on

the other hand, the adjective *available* is assumed to lexicalize a scale that is not gradable – a scale of availability only has two points, one corresponding to the drug being either available or not available with no in-between points like in the case of *expensive*.

As it was discussed above, Hungarian superlexical RPs also resist modification by *nagyon* ‘very.’ I assume, however, that this is not because they lack scalar structure but because they already lexicalize the intensifier’s meaning. That they do in fact lexicalize a scalar structure is evidenced by the fact they are modifiable by a degree adverb such as *félig* ‘half.TERM’ (33) (see e.g. Beavers 2011, Bochnak 2013).

- (33) *Kati félig por-rá alázta Jánost.*
 Kati half.TERM dust-TRANS humiliated János.ACC
 ‘Kati almost completely humiliated János.’

Based on the example in (33), it seems that *porrá* ‘to dust’ lexicalizes a gradable scale, similarly to gradable adjectives like *expensive*. Without any further modification, its function is to express that the result of the event described by the verbal predicate was excessive, but it appears that this additional meaning component of excessiveness is associated with a multi-point scale. It is possible, then, to modify these RPs with degree adverbs that express that the final point on the scale of excessiveness was not achieved.

With this synchronic analysis in mind, in section 5 I turn to the diachronic development of superlexical RPs in Hungarian. I illustrate with the help of both historical and contemporary corpus data that some superlexical RPs seem to be at a higher level of grammaticalization than others.

5. On the diachronic development of superlexical RPs

In this section I present some corpus data from three Hungarian corpora that feature superlexical RPs. The earliest data are from the Middle Hungarian Memoir and Drama Corpus, followed by data from the Hungarian Historical Corpus, and finally the contemporary data are taken from the Hungarian National Corpus. Based both on historical and contemporary data, it appears that three superlexical RPs, *rommá* ‘to ruin’, *porrá* ‘to dust’ and *halálra* ‘to death’ seem to be at different stages of grammaticalization which is evidenced by the different argument structural patterns that they allow, particularly regarding the kind of verb that they can appear with.

Hegedűs (2020) also relies on similar evidence when discussing the grammaticalization of Hungarian postpositional elements such as *át* ‘over’, *végig* ‘along’ or *közel* ‘near’ into verbal particles. She observes that *át* ‘over’ shows a high level of productivity and can appear with a variety of different verbs, as well as be followed by a variety of differently case-marked prepositional phrases. *Végig* ‘along’ is a P element that shows a lower level of flexibility regarding the kind of verb it can appear with or the kind of PP that the verb can be followed by, while *közel* ‘near’ is the least flexible both regarding the verb and the PP complement that can follow it.

Regarding the grammaticalization of result phrases in Hungarian, Forgács (2004) discusses the diachronic development of *agyon-* ‘to death / over.’ It is a verbal particle in Modern Hungarian, though its case-marked RP-like nature is still detectable today, as it can

be decomposed into *agy* ‘brain’ or originally ‘skull’ and *-on* which is the superessive case suffix, meaning ‘on/onto.’

Originally, dating back to the 17th century, *agyon-* was only used in its literal locative sense. For example, with the verb *üt* ‘hit’ it formed the compound *agyon üt* simply meaning ‘hit on the head.’ Over time, by around the 19th/20th century, it has lost this transparent, lexical ‘on the head’ meaning and has grammaticalized into a verbal particle-like element whose function is to lexicalize excessiveness.

On this semantically bleached interpretation, it functions as an intensifier and appears with a variety of verbs, meaning ‘over’ or ‘to death.’ For example, in *agyon-ver* ‘beat to death’ or *agyon-dolgozza magát* ‘work oneself to death.’ In Modern Hungarian, the particle verb *agyon-ver* does not mean ‘hit on the head,’ but that a person was beaten excessively, so much so that they have died. The ‘to death’ interpretation of *agyon-* seems to be even more semantically bleached in *agyon-dolgozza magát* ‘work oneself to death’ where the working activity does not lead to death, but simply means that a person has done an excessive amount of work and has become absolutely exhausted.

Additionally, regarding the RP *halálra* ‘to death’ Jurth (2013) notes that since in her corpus search in the Hungarian National Corpus she did not find any occurrences of the RP *halálra* ‘to death’ in co-occurrence with verbal particles, it must mean that *halálra* ‘to death’ itself has become a verbal particle-like element.

Superlexical uses of *porrá* ‘to dust’ and *halálra* ‘to death’ can already be found in the Middle Hungarian Memoir and Drama Corpus. *Porrá* ‘to dust’ appears in 6 sentence and *halálra* ‘to death’ appears in 7 sentences altogether, though there are no sentences containing *rommá* ‘to ruin.’ Examples are shown below.

- (34) [...] egygyet se mukkany, mindgyárt porrá zuzlak. (1762)
 one.ACC not make.sound.IMP right.away dust.TRANS crush.1SG
 ‘Do not say a word, or I will **crush you to dust** right away.’
- (35) Meg-vagyon a parantsolat, hogy én amannak
 PRT-be.3SG the order that I that.person.DAT
 tagjait porrá törjem [...]. (1766)
 limbs.POSS dust.TRANS break.1SG.SUBJ
 ‘I have been ordered to **break** that person’s limbs **to dust**.’

Furthermore, the Hungarian Historical Corpus contains 300 instances of *porrá* ‘to dust’, 19 instances of *rommá* ‘to ruin’ and 1041 instances of *halálra* ‘to death.’ Consider the examples from (36) to (38).

- (36) [...] hajnal hafadtánál porrá törlek [...]. (1780)
 dawn breaking.ADE dust.TRANS I.break.you
 I will **break you to dust** at the break of dawn.’
- (37) rommá dőlt életterve [...] mellett miért csüggedne
 ruin.TRANS collapse.PART life.plan.POSS next.to why lament.COND
 el épen az ember [...]. (1858)
 PRT even the person

‘Why would someone even lament over [...] their life’s plan that has *collapsed to dust?*’

- (38) *mi után halálra neveték magokat hívtak*
 after which death.SUBL laugh.3PL themselves.ACC they.invited.me
templomba, [...]. (1836)
 church.ILL

These RPs in the sentences from (34) to (38) all describe situations in which it is not the case that the object referents turn into dust or ruin or die as a result of the events described by the verbs, but that the results of the events described by the primary predicates were excessive.

Finally, what the contemporary data from the Hungarian National Corpus seem to suggest is that *rommá* ‘to ruin’ and *halálra* ‘to death’ are at a relatively higher level of grammaticalization since they are able to co-occur with a variety of different verbs.

- (39) [...] *hogy [...] az egész város rommá röhögje magát.*
 so.that the entire city ruin.TRANS laugh.SUBJ itself.ACC
 ‘So the entire city will *laugh itself to ruin.*’
- (40) *míg egy nagy esőzés rommá nem áztatta,*
 ‘til one big rainfall ruin.TRANS no soaked.it.3SG
 ‘til some heavy rainfall *soaked it to ruin.*’
- (41) *és rommá lövöm a palit.*
 and ruin.TRANS shoot.1SG the guy.ACC
 ‘And I *shoot the guy to ruin.*’
- (42) *Arca [...] kifejezéstelen, mint aki halálra unja az*
 face.POSS.1SG expressionless like who death.SUBL bore.3SG the
egész hercehurcát.
 whole thing.ACC
 ‘His/her face is expressionless, like of somebody who is *bored to death* of the whole thing.’
- (43) [...] *a rituális táncosok szinte halálra táncolják magukat.*
 the ritual dancers almost death.SUBL dance.3PL themselves.ACC
 ‘Ritual dancers almost *dance themselves to death.*’

These superlexical RPs seem compatible both with transitive verbs and pseudo-object verbs of various types. Verbs of motion like *táncol* ‘dance’, verbs of nonverbal expression such as *röhög* ‘laugh’, but also verbs of killing such *lő* ‘shoot’ (for verb classifications and alternations, see Levin (1993)).

On the other hand, in comparison with *rommá* ‘to ruin’ and *halálra* ‘to death’, *porrá* ‘to dust’ appears to be at a lower level of grammaticalization. It seems less productive and seems to show a tendency for co-occurring with verbs describing disintegration.

- (44) [*Az*] *előválogató testület négy jelentkező reményeit gyorsan*
 the preselection board four applicant hopes.POSS.ACC quickly
porrá zúzta.
 dust.TRANS crushed.3SG

- ‘The preselection board quickly **crushed the hopes of four applicants to dust.**’
- (45) [...] *a nevezők fele az első kanyarban porrá*
 the applicants half.POSS the first turn.INE dust.TRANS
törte a járművét.
 broke.3SG the vehicle.POSS.ACC
 ‘Half of the applicants **broke their vehicles to dust** at the first turn.’

As opposed to the high level of productivity in the case of *rommá* ‘to ruin’ and *halálra* ‘to death’, *porrá* ‘to dust’ mostly appears with verbs such as *zúz* ‘crush’ and *tör* ‘break.’ In other words, these are verbs which are transitive and describe processes of disintegration.

Based on these data, it appears that not all superlexical RPs are at the same level of grammaticalization. Since *rommá* ‘to ruin’ and *halálra* ‘to death’ show a higher level of productivity, it can be said that they are further along the grammaticalization process than *porrá* ‘to dust’, which shows a lower level of productivity.

6. Conclusion

I have argued for a syntactic distinction between lexical and superlexical result phrases in Hungarian. I have attempted to show that superlexical RPs are grammaticalized, adverbial elements that are base-generated in the specifier of an aspectual functional projection between *vP* and *VP* just like verbal particles, while lexical RPs are base-generated in the complement of *VP*.

I also assume that the RPs that I have cited above in my examples are becoming grammaticalized in a similar fashion, just like *agyon-*. I have attempted to briefly demonstrate the diachronic development of RPs in Hungarian such as *rommá* ‘to ruin’, *porrá* ‘to dust’ and *halálra* ‘to death’. It appears that similarly to *agyon-* these RPs are also going through a grammaticalization process and are taking on verbal particle-like functions, though not all of them seem to be at the same level of grammaticalization.

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