# Two positions for verbal modifiers: Evidence from derived particle verbs

Veronika Hegedűs and Éva Dékány

## **Abstract**

This paper brings into question recent proposals that all types of Hungarian verbal modifiers are merged in the complement zone of the verb, and argues that certain verbal particles and resultatives are merged as specifiers in the extended verb phrase. The empirical focus of the paper is inseparable particle verbs. Verbal particles and resultatives do not behave uniformly when it comes to combinability with inseparable particle verbs: some particles and resultatives can co-occur with inseparable particles verbs, while others cannot. We will argue that particles and resultatives that belong to the former group are merged in a specifier position, while those belonging to the latter group are merged in the verb's complement. Our results also support the view that objects are merged as specifiers rather than as complements (Bowers, 1993; Arad, 1996; Hale & Keyser, 1993; and Den Dikken, 2015b).

Keywords: verbal modifier, (in)separable verbal particle, exhaustive verbal particle, resultative, verb phrase, argument structure

#### 1. Introduction

This paper makes three main contributions. Firstly, we will propose that contrary to recent proposals (e.g. É. Kiss 2006), not all verbal modifiers (VMs) are merged in the same position, in the complement zone of the verb. Some verbal particles and resultatives will be shown to be merged higher, in a specifier position in the extended vP. Secondly, we will argue that in line with Bowers (1993); Hale & Keyser (1993); Arad (1996); and Den Dikken (2015b), objects are introduced as specifiers rather than as complements. In order to argue for these points, we are going to analyze Hungarian inseparable particle verbs. Our third contribution is to examine the structure of these verbs and explain how they are different from ordinary particle verbs with a separable particle.

Verbal modifier (VM) is an umbrella term for various predicative elements including verbal particles, bare object nouns and resultatives. Bringing these diverse elements together under one label is motivated by the fact that they have the same syntactic distribution: they appear in the immediately preverbal position in neutral sentences (i.e. declaratives without progressive aspect, negation or narrow focus), while they are postverbal in non-neutral sentences (declaratives with progressive aspect, negation or narrow focus as well as wh-interrogatives and imperatives). The minimal contrast in word order is illustrated in (1) versus (2).<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>In this assumption, our proposal converges with Surányi's (2009a; 2009b) but diverges in the base positions we assume. He proposes that particles are sometimes direct arguments of the verb, sometimes adjuncts and sometimes small clause specifiers, while we always take particles to be small clause predicates in the complement zone and to be slightly higher specifiers otherwise.

<sup>&</sup>lt;sup>2</sup>The paper uses the following glosses: ACC: Accusative case, ATTR: attributivizer suffix, DEF: definite conjugation (on a verb), DISC.PRT: discourse particle, IMP: imperative/subjunctive, INE: Inessive case, INF: infinitival suffix, NOM: derivational nominalizer suffix, PL: plural, POSS: possessive agreement, PRT: verbal particle that has no literal directional meaning or a direct equivalent in English, PST: past tense, SG: singular, SUBL: Sublative case, SUP: Superessive case, VRB: derivational verbalizer suffix.

#### (1) neutral sentence

a. János **fel-biciklizett** a hegyre.

John up-bike.PST.3SG the mountain.SUBL

'John biked up the mountain.'

b. János level-et írt.

John letter-ACC write.PST.3SG

'John wrote a letter.' bare object noun

c. János **pirosra festi** a kerítést.

John red.SUBL paint.3SG the fence.ACC

'John is painting the fence red.' resultative

# (2) non-neutral sentence with negation

a. János nem **biciklizett fel** a hegyre.

John not bike.PST.3SG up the mountain.SUBL

'John did not bike up the mountain.'

verbal particle

verbal particle

b. János nem **írt** level-et.

John not write.PST.3SG letter-ACC

'John did not write a letter.'

bare object noun

c. János nem **festi** pirosra a kerítést.

John not paint.3SG red.SUBL the fence.ACC

'John is not painting the fence red.'

resultative

It is generally thought that all Hungarian particles take part in the word order alternation in (1) and (2). There is a group of particle verbs that do not exhibit this contrast, however, that is, where the particle remains preverbal in non-neutral sentences as well, cf. (3) and (4).

(3) János **fel-vételizett** az egyetemre.

John up-exam.take.PST.3SG the university.SUBL

'John took an entrance exam.'

neutral sentence

(4) János nem **fel-vételizett** az egyetemre.

John not up-exam.take.PST.3SG the university.SUBL

'John did not take an entrance exam.'

non-neutral sentence with negation

In the next section we will introduce the data in more detail, then section 3 will provide generalizations about the syntactic visibility of inseparable particles. After briefly introducing our theoretical assumptions, section 4 will propose a syntactic account of the inseparability of the particles in question. Section 5 addresses the question of why inseparable particles exhibit a dual behavior with respect to compatibility with other particles or resultatives. Our analysis has consequences for the syntactic representation of argument structure, which we discuss in section 6. I section 7 we turn to the word order variation we find in our data and will argue that it is due to a structural reanalysis of the particle. Section 8 concludes the paper.

## 2. Inseparable particle verbs

Certain languages, for instance German, are well known to have both separable and inseparable verbal particles. There is a wide-spread consensus among researchers that this split does not exist in Hungarian, however: all verbal particles are separable in this language. In spite of this view, there exist a few cases in which the particle is not separable from the verb. We illustrate this with *felvételizik* 'take an entrance exam'. (6) through (9) are environments in which separable particles appear in postverbal position.

(5) János **fel-vételizett** az egyetemre.

John up-exam.take.PST.3SG the university.SUBL

'John took an entrance exam.'

neutral sentence

(6) János nem **fel-vételizett** az egyetemre. John not up-exam.take.PST.3SG the university.SUBL 'John did not take an entrance exam.'

negation

(7) JÁNOS **fel-vételizett** az egyetemre. John up-exam.take.PST.3SG the university.SUBL 'It was John that took an entrance exam.'

narrow focus

- (8) János éppen **fel-vételizett** az egyetemre amikor...

  John just up-exam.take.PST.3SG the university.SUBL when

  'John was taking an entrance exam when...' progressive aspect
- (9) **Fel-vételizz** az egyetemre! up-exam.take.IMP.2SG the university.SUBL 'Take an entrance exam!'

imperative

Inseparable particles also differ from their ordinary, separable counterparts in that they cannot be left behind in positive answers to polar questions (see Lipták, 2012, 2013 for in-depth discussion of such answers with garden variety particle verbs).

(10) Fel-bicikliztél a hegyre? Fel. up-bike.PST.2SG the mountain.SUBL up 'Did you bike up the mountain? I did.'

separable particle

(11) Fel-vételiztél az egyetemre? \*Fel. up-exam.take.PST.2SG the university.SUBL up 'Did you take an entrance exam? I did.'

inseparable particle

There are only a handful of particle verbs that feature inseparable particles.<sup>3,4</sup> We list them in (12).<sup>5</sup>

<sup>&</sup>lt;sup>3</sup>There are three further verbs that appear to have inseparable particles. On further inspection, however, all of them turn out to be spurious examples. At first sight, szembesiil 'face, encounter' seems to be composed of the particle szembe 'opposite' and either the verb  $s\ddot{u}l$  'bake' or  $\ddot{u}l$  'sit'.  $Szembes\ddot{u}l$ , however, is not a genuine particle verb. The lexical base of  $szembes\ddot{u}l$  is actually the adverb szembe 'opposite', which is adorned with the anticausative verbalizer suffix  $-(s)\ddot{u}l$ : [szembe  $_{Adv}$ ]  $-(s)\ddot{u}l$   $_{VRB}$ ]. Cf. also the corresponding causative verb from  $szembes\dot{u}l$  'confront sy with sth': [szembe  $_{Adv}$ ]  $-(s)\acute{u}l$   $_{VRB}$ ].

Felügyel 'monitor, oversee' is likely to have started its life as a genuine particle verb, however, our intuition is that it has been reanalyzed as a monomorphemic verb. Finally, the verb *fellebbez* 'appeal to a higher level' appears to comprise the particle *fel* 'up', the root *lebb*, perhaps paraphrasable as 'flitting', and the verbalizing suffix -z. This is the wrong parse, however (and even if it were the right parse, it would not involve a nominalization like the examples in (12) do). Here the verbalizing suffix -z attaches not to a (nominalized) particle verb, but the comparative form of the adverb *fel* 'up': *fellebb*, or according to standard orthography, *feljebb* (both: 'higher'), see Benkő (1967, 875–876).

<sup>&</sup>lt;sup>4</sup>Lipták & Kenesei (2014) discuss inseparable particles inside -ható adjectives, such as be-számít-ható in-count-able 'sane'. Our cases are different in two respects. Firstly, the particles in -ható forms appear to be completely invisible to syntax, while this is not the case with our derived verbs. Secondly, inseparable particle verbs are outwardly verbs, with the clausal functional projections erected on top of them. Thus the position where ordinary separable particles move on the surface (Spec, TP) is available within the extended projection of the outermost (verbalizing) head. -Ható forms, on the other hand, are topped off by an adjectival head; the position where the particle would move on the surface (Spec, TP) is simply not part of the extended projection of this head and so the particle is not expected to be able to move out. See Section 4.1 for discussion of the surface position of verbal particles.

<sup>&</sup>lt;sup>5</sup>Two verbs, *kivételez(ik)* and *felvételiz(ik)*, are generally cited with an -*ik* ending as their lexical form. We opted against citing them like that for the sake of uniformity, as the -*ik* ending is a 3rd person agreement morpheme, while the other forms have zero agreement markers on them. These so-called "-*ik* verbs" partially form a separate inflectional paradigm, and the group got its name from the 3rd person singular suffix.

(12) a. ki-fog-ás-ol, be-foly-ás-ol out-hold-NOM-VRB in-flow-NOM-VRB 'take objection to, influence'

b. ki-von-at-ol out-pull-NOM-VRB 'précis'

c. fel-té-t-el-ez ki-vi-t-el-ez

up-take-NOM-NOM-VRB up-take-NOM-NOM-VRB

'assume, carry out ki-vé-t-el-ez, be-vé-t-el-ez

out-bring-NOM-NOM-VRB in-take-NOM-NOM-VRB

show a favor toward, enter as income, szemre-vé-t-el-ez, után-vé-t-el-ez

PRT-take-NOM-NOM-VRB after-take-NOM-NOM-VRB inspect, collect (value) upon delivery'

d. fel-vé-t-el-i-z up-take-NOM-NOM-NOM-VRB 'take an entrance exam'

There are a number of generalizations that hold for all inseparable particle verbs. Firstly, the verbal stem is first nominalized by a derivational affix and then verbalized again by another derivational affix in all cases. Secondly, there might be multiple nominalizers (the examples in (54a) and (54b) have just one nominalizer suffix, the verbs in (54c) have two, while the example in (54d) has three), but there is always only one verbalizer. Thirdly, the particle is consistently attached to the verbal stem before the first nominalization. This is because in each case, the combination of the particle and the non-nominalized verbal stem yields a perfectly acceptable ordinary particle verb, and the meaning of this particle verb is implicated in the meaning of the innermost nominalization. Thus ki-fog 'fish out, entrap', ki-von 'subtract, take out (of commission)', fel-tesz 'assume', fel-vesz 'take up, put on', etc. are all well-formed particle verbs with a separable particle. On the other hand, the derived verbs in (12) are not well-formed without the particle: \*folyásol, \*vonatol, etc. are not used (and cannot be assigned any meaning) as derived verbs in the language. As a result, the forms in (12) could not be created by taking the verbal stem, nominalizing it and then verbalizing it again, and attaching the particle to this derived verb, i.e. outside of the outermost verbalizer (e.g. \*be+folyásol or \*ki+vonatol). That is, the simplified structure of befolyásol 'influence' in (54a), for instance, is [[[be-foly]-ás]-ol] rather than [be-[foly-ás-ol]], while the structure of kivonatol 'précis' in (54b) is [[[ki-von]-at]-ol] rather than [ki-[von-at-ol]].

The final generalization that holds over all verbs in (12) is that the innermost nominalizer is always -ás or -t. The suffix -ás can yield complex, simple, and result nominals (Szabolcsi & Laczkó, 1992; Laczkó, 2009). The suffix -t is productive only on a result nominal reading, with an event nominal reading available only in a few cases that are linguistic fossils from Old Hungarian (see Dékány, 2014 for discussion of the widespread availability of this reading of the suffix in Old Hungarian). In a framework like Distributed Morphology, the difference between result and (simple or complex) event nominals can be characterized by the amount of structure in the nominalizing head's complement: result nominals have the smallest structure in this position (possibly only a root), simple event nominals have a bigger structure, and complex event nominals have the largest amount of structure merged as a sister to the nominalizer (Alexiadou, 2001, 2013; Alexiadou et al., 2010). The availability of the result reading with -ás and -t means that both of these suffixes can attach fairly low (in fact, given the unavailability of the event reading, the latter suffix must attach low).

Within current Minimalism, there are two major approaches to morphologically complex forms: Distributed Morphology (Halle & Marantz, 1993, 1994; Embick & Noyer, 2001, 2007; Siddiqi, 2009;

Bobaljik, 2012, and the contributions in Matushansky & Marantz, 2013, among many others) and Nanosyntax (Ramchand, 2008; Caha, 2009; Taraldsen, 2010; Starke, 2009, 2014; Svenonius, 2012, among others). While these frameworks differ in significant details, they both embrace a syntax-all-the-way-down approach to morphology, that is, they hold that both phrases and morphologically complex words are assembled by the same set of rules in narrow syntax. In these approaches, deverbal nominalizations arise when a verbal projection is merged in syntax with a nominal head. Thus the forms in (12) involve the following derivational steps: i) the base verb and the particle merge in an extended vP, ii) this vP is then nominalized, and finally iii) a verbalizing head tops off the structure. Ordinary particle verbs are simply formed by merging the verb with the (projection of the) particle in syntax. That is, both ordinary (separable) particle verbs and inseparable particle verbs are created in syntax. This poses the immediate problem of how to block the inseparable particles from moving out of the root-domain.

A simple solution to this problem would be to assume that while ordinary, separable particles combine with the verb in syntax, hence they are separable from the verb by syntactic movements, inseparable particles verbs are lexicalized forms that are stored in the mental lexicon as monolythic units, and so the Lexical Integrity Principle prevents these forms from being scattered in syntax. As will be shown in section 3, however, inseparable particles are visible to syntax to some extent, which leads us to reject this line of analysis. The fact that the inseparable particle is visible for some syntactic processes leads us to pursue an analysis in which these particles combine with their verb in syntax, and so we will seek a syntactic explanation for their inertness in processes that normally create the inverted verb > particle order.<sup>6</sup>

# 3. Inseparable particles have some syntactic visibility

As already mentioned above, in neutral sentences VMs appear in the immediately preverbal position. In neutral sentences that contain more than one potential VM (e.g. a particle and a resultative or a bare nominal in rare cases), only one of these appears in the preverbal position; the others are generally in the postverbal field (Komlósy, 1992). Below we illustrate with a combination of a verbal particle and a resultative VM.

- (13) a. Mari be-festette a haját szőkére.

  Mari in-dye.PST.3SG the hair.POSS.3SG.ACC blond.SUBL

  'Mari dyed her hair blond.'
  - b. \*Mari szőkére be-festette a haját.
     Mari blond.SUBL in-dye.PST.3SG the hair.POSS.3SG.ACC
     'Mari dyed her hair blond.'
  - c. \*Mari be szőkére festette a haját. Mari in blond.SUBL dye.PST.3SG the hair.POSS.3SG.ACC 'Mari dyed her hair blond.'

We can test the syntactic visibility of inseparable particles by trying to combine these particles with other VMs. If inseparable particle verbs freely combine with other VMs such that the latter are in the preverbal, canonical VM position in neutral sentences, then we have every reason to believe that

<sup>&</sup>lt;sup>6</sup>A reviewer points out that in lexicalist models the possibility of treating inseparable particles on a par with syntactically active, separable particles would not arise, precisely because as discussed above, inseparable particle verbs cannot be analyzed as particle+[root+affixes]. While within the Minimalist program strong lexicalism was adopted in Chomsky (1993) and so this approach to morphology became the mainstream approach for a longer period of time, recently Chomsky, too, moved away from this framework and embraced the concept of acategorial roots (Chomsky, 2013), a position that is only compatible with the syntax-all-the-way-down approach to morphology. Given that current Minimalism does not hold a lexicalist stance, we do not consider possible lexicalist approaches here. We refer the interested reader to Ackerman (1987); Ackerman & Webelhuth (1998) for a lexicalist account of ordinary particle verbs in Hungarian.

inseparable particles are invisible to syntax. In this case, it is plausible that inseparable particles combine with their verbs in the lexicon. If, on the other hand, inseparable particle verbs cannot be preceded by a VM in neutral sentences, then we can conclude that inseparable particles are visible to syntax, because syntax treats them as occupants of the canonical VM position. In this case inseparable particles must combine with their verbs in narrow syntax. In this section we will use this test and check whether bare objects, ordinary verbal particles, and resultatives may occur in the VM position with inseparable particle verbs.

## 3.1 *Co-occurrence with preverbal bare objects*

Let us begin testing the syntactic visibility of inseparable particles by looking at their combination with bare objects. As shown by (14), bare objects appear in the VM position in neutral sentences.

(14) Mari tervet kovácsolt (\*tervet).

Mary plan.ACC make.PST.3SG plan.ACC
'Mary made a plan.'

If the verb has an inseparable particle, bare objects can still appear in the VM position (15).<sup>7</sup> This supports the view we already have from the fact that the particle is inseparable: inseparable particles do not appear to be visible to syntax.

(15) Mari egész délután **terveket ki**-vonatolt (\*terveket).

Mary all afternoon plan.PL.ACC out-précis.PST.3SG plan.PL.ACC 'Mary spent the afternoon making (a) précis of plans.'

## 3.2 Co-occurrence verbal particles

Ordinary verbal particles systematically have both literal, directional and purely telicizing readings. Which reading arises in a certain sentence depends on the verb that the particle combines with. For instance, the particle *el* has a directional reading ('away') in combination with the verb *utazik* 'travel' (16a) and a purely telicizing reading with the verb *olvas* 'read' (16b).<sup>8</sup>

(16) a. Mari el-utazott.

Mary away-travel.PST.3SG

'Mary went on a trip.'

directional

b. Mari el-olvasta a könyvet. Mary away-read.PST.3SG.DEF the book.ACC

'Mary has read (all of) the book.'

telicizing

(i) Mari egész délután tervet ki-vonatolt.
 Mary all afternoon plan.ACC out-précis.PST.3SG
 'It was a plan that Mary spent the whole afternoon making a précis of.'
 (But \* as a neutral sentence 'Mary spent the whole afternoon making a précis of a plan.')

(i) Mari meg-főzte a levest.

Mary PRT-cook.PST.3SG the soup.ACC

'Mary has cooked the soup.'

<sup>&</sup>lt;sup>7</sup>Interestingly, a singular bare object is out in this environment. According to our judgments, (i) is grammatical only if the object is interpreted as being is focus. That reading, however, involves a non-neutral sentence, so it is not relevant in the present context. At present we have no suggestions as to the source of this difference.

<sup>&</sup>lt;sup>8</sup>The particle *meg* is exceptional in the sense that it has lost its literal, directional reading over time (Hegedűs, 2014). In contemporary Hungarian it is typically used in a purely telicizing function, but see Eszes (2005, 2006) for a more detailed discussion of other functions as well. Its syntactic distribution is entirely identical to that of ordinary particles, however.

Regardless of whether they occur in the directional or the purely telicizing reading, ordinary particles cannot co-occur with inseparable particle verbs (it is not even possible to place them in the postverbal field of inseparable particle verbs).

(17) János (\*el/\*ki/\*meg) befolyásolta Marit.

John away/out/PRT influence.PST.3SG.DEF Mary.ACC

'John (succesfully) influenced Mary.'

Admittedly, in some cases, the combination with a telicizing particle is excluded because of independent, aspectual factors. This is the case when the inseparable particle verb is inherently telic (e.g. *kivitelez* 'carry out'). At the same time, it is clear that in certain cases aspectual incompatibility is not at play. As shown by the *for an hour / in an hour* test in (18), the inseparable particle verb *befolyásol* 'influence' featured in (17) is atelic. However, adding a second, separable particle (with the purpose of telicizing the verb phrase) is still ungrammatical (17).

- (18) a. János éveken át/keresztül befolyásolta Marit.

  John year.PL.SUP through/through influence.PST.3SG.DEF Mary.ACC

  'John has influenced Mary for many years.'
  - b. \*János évek alatt befolyásolta Marit.

    John year.PL under influence.PST.3SG.DEF Mary.ACC

    'John has influenced Mary in many years.'

Hungarian disallows particle stacking on verbs; one verb may take at most one particle. (17) is what is expected if syntax treats the *be* of *befolyásol* 'influence' as a genuine particle: if the verbal stem *foly*-already has a particle, then a second particle cannot appear. This provides evidence that inseparable particles have some syntactic visibility (syntax treats them as occupants of the VM position, thereby preventing another particle from appearing there).

However, on closer inspection it turns out that not all particles behave alike. In addition to particles with a directional and a purely telicizing reading discussed above, Hungarian also has particles with an exhaustive or durative interpretation. The latter may co-occur with inseparable particle verbs, and when they do so, they occupy the immediately preverbal, VM position of the inseparable particle verb.

The verbal particles that may receive an exhaustive (to full degree) interpretation are ki 'out' and  $sz\acute{e}t$  'apart'. (They both have literal, directional readings and a purely telicizing reading as well. They cannot co-occur with inseparable particles on these readings.) The exhaustive readings of these particles are illustrated in (19). The co-occurrence with inseparable particle verbs is shown in (20).

- (19) Exhaustive particles
  - a. Ki-futottam magamat. out-run.PST.1SG self.POSS.1SG.ACC 'I ran myself to exhaustion.'
  - b. Szét-tanultam az agyamat. apart-learn.PST.1SG the brain.POSS.1SG.ACC 'I have studied to exhaustion.'
- (20) Exhaustive particles with inseparable particle verbs
  - a. [after 5 exams] mára **ki-fel**-vételiz-t-em magam today.SUBL out-up-exam.take-PST-1SG self.POSS.1SG.ACC 'I got exhausted with entrance exams for the day.'
  - b. **Szét-fel**-vételiztem az agyam. apart-up-exam.take.PST.1SG the brain.POSS.1SG.ACC 'I got exhausted with taking entrance exams.'

The particles that can have a durative reading are el 'away' and  $\acute{a}t$  'through/via/across'. (They both

have a directional and a purely telicizing reading as well, but they do not combine with inseparable particle verbs on these readings.) The durative readings are shown in (21); the combination with inseparable particle verbs is illustrated in (22).

- (21) Durative particles
  - a. El-beszéltük az időt. away-speak.PST.1PL the time.ACC 'We spoke away and ran out of time.'
  - b. Át-aludtam a napot. through-sleep.PST.1SG the day.ACC 'I slept through the day.'
- (22) Durative particles with inseparable particle verbs
  - a. El-fel-vételiztem az időt.
     away-up-exam.take.PST.1SG the time.ACC
     'I spent all the available time with taking entrance exams.'
  - b. **Át-fel**-vételiztem a napot. through-up-exam.take.PST.1SG the day.ACC 'I spent all day with taking entrance exams.'

Ordinary, separable verbal particles thus give mixed evidence for the syntactic visibility of inseparable particles: the lack of combination with directional and telicizing particles favors the view that inseparable particles are visible for syntax, while combinations with exhaustive and durative particles support the view that these particles are not visible for syntax.

## 3.3 *Co-occurrence with resultatives*

Let us now turn to the distribution of resultatives in sentences with inseparable particle verbs. The picture that emerges here is very similar to what we have seen with ordinary, separable particles. Most resultatives cannot co-occur with inseparable particles. Compare the resultative *vörösre* 'to red' with a particles verb in (23) and with an inseparable particle verb in (24).

- (23) Vörösre sírtam a szemem.
  red.SUBL cry.PST.1SG the eye.POSS.1SG.ACC
  'I got red eyes by crying.'
- (24) \*Vörösre fel-vételiztem a szemem.
  red.SUBL up-entrance.exam.take.PST.1SG the eye.POSS.1SG.ACC
  'I got red eyes by taking entrance exams/an entrance exam.'

A subgroup of resultatives, however, can felicitously appear in the VM position of inseparable particle verbs. Such resultatives are *halálra* 'to death', *agyon* 'over/to death', *betegre* 'sick', and a few more of the same semantic type.

- (25) Halálra/betegre/agyon ettem magam. death.SUBL/sick.SUBL/over eat.PST.1SG self.POSS.1SG.ACC 'I ate myself entirely full/sick/full.'
- (26) **Halálra/betegre/agyon fel**-vételiztem magam. death.SUBL/sick.SUBL/over up-exam.take-PST.1SG self.POSS.1SG.ACC 'I got myself sick by taking entrance exams.'

To summarize, the appearance of bare objects, exhaustive and durative particles, and the *agyon*-type of resultatives in the VM position of inseparable particle verbs suggests that inseparable particles are invisible for syntax. On the other hand, the lack of combination with ordinary, non-durative and

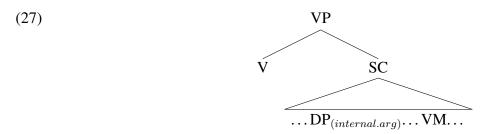
non-exhaustive particles and ordinary resultatives supports the view that inseparable particles are visible for syntax. Viewing from another angle, combinability with inseparable particle verbs shows that not all particles and resultatives are created equal: durative and exhaustive particles and some resultatives are different from ordinary particles and resultatives.

## 4. Accounting for the inseparability of the particle

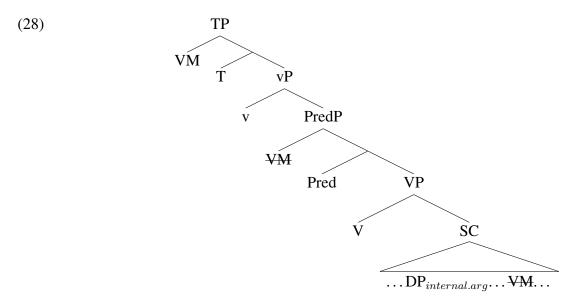
In this section we analyze the syntactic structure of inseparable particle verbs. The analysis will have consequences for argument structure representation and the merge-in position of VMs, which we will spell out in sections 5 and 6.

## 4.1 Theoretical background

We assume that particle verbs in general are constructed in narrow syntax. We further assume that VMs – in this specific case, particles – are predicative (É. Kiss, 2006); they are merged in the predicate of a Small Clause that is the complement of V (Hegedűs, 2013). The subject of the Small Clause is the internal argument – the internal subject of unaccusative verbs or the accusative object of transitive verbs.



As for the specifics of the syntactic derivation of particle verbs, we adopt Surányi's (2009a; 2009b) proposal: Particles are merged inside the VP, move to a vP-internal position (spec, PredP)<sup>9</sup> where semantic incorporation happens, and they move on to their surface position in Spec, TP (see also Kenesei, 1998).



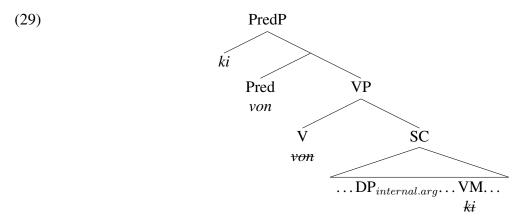
We take derivational suffixes to be exponents of syntactic heads; our labels NOM and VRB are meant to be theory-neutral labels corresponding to the nominalizer and verbalizer suffixes.

<sup>&</sup>lt;sup>9</sup>Note that we use PredP in the sense of Zwart (1993) and Koster (1994): the projection whose specifier is occupied by a predicate, the locus of complex predicate formation; not to be confused with Bowers' (1993) Predicative Phrase.

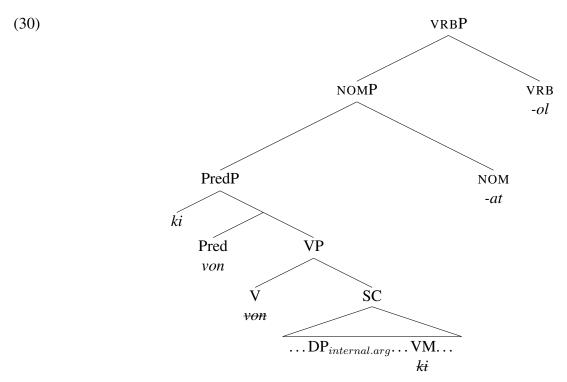
## 4.2 The structure of inseparable particle verbs

The gist of our proposal is that the nominalization merged to the particle-verb construction is responsible for the inseparability of the particle in these cases. This means that when the particle is introduced into the structure lower than a nominalizer head, it is going to be inseparable, while derived verbs with particles outside the nominalizer will have ordinary separable particles.

In the derivation of the verbs in (12), a verb and a particle are merged in syntax, with the particle being a secondary predicate in the complement of the verb. The particle undergoes movement to the position above VP for semantic incorporation (Surányi, 2009a,b).



As the next step, a nominalizer is (or, possibly, even further nominalizers are) merged, and, finally, the outermost verbalizer is merged, resulting in a derived verb with the particle attached low.



We suggest that in these examples, the particles in question cannot move to their regular surface positions, which is Spec, TP (Surányi, 2009a,b) above the higher verbal head, because the nominal head NOM is a phase head, and so the particle could only move to Spec, TP via NOMP's specifier (on the existence of a DP-internal phrase that corresponds to NP or nP, see Baumer, 2008; Punske, 2011; Cornilescu & Dinu, 2013; Cornilescu & Nicolae, 2011). This movement is impossible, however, since PPs cannot occupy specifier positions in the extended NP.

Let us discuss this latter point in more detail. Particles are (functional) P elements, so particle

movement in the clause is movement of a PP category (Hegedűs, 2013; Dékány & Hegedűs, 2015). In order for the PP to move to Spec, TP, it would have to move through the edge of NOMP, that is, at some point in the derivation it would have to occupy a specifier position of a nominal projection. This configuration is excluded in Hungarian, however: in the extended noun phrase PPs can only be complements (i.e. postnominal modifiers, see (31)) but they cannot occupy a specifier (i.e. a prenominal) position (32).

- (31) a pad [PP] a kertben] (32) \*[PP] a kertben] pad the bench the garden.INE the garden.INE bench the garden' the bench in the garden'
- (32) can be salvaged by attributivizing the PP either with the help of the functional suffix -i (33) or with the participle  $lev\~o$  (34) (on the attributivizer suffix see Kenesei 2014). In both cases, the PP is embedded under a non P-type functional layer, meaning that kerti and  $kertben\ lev\~o$  are outwardly not PPs. This way they can function as nominal modifiers (i.e. depending on the analysis, be adjoined to or sit in a specifier position of a nominal functional projection).
- (33) a kert-i pad (34) a kertben levő pad the garden-ATTR bench 'the bench in the garden' (34) a kertben levő pad the garden.INE being bench 'the bench in the garden'

Even this possibility is unavailable in the case of particles, however, as they cannot be attributivized by either of the above strategies.

(35) \*az el-i futás (36) \*az el történő futás the away-ATTR running 'the running away' 'the running away'

This results in the particle being 'trapped' within NOMP, therefore, the particle of the verb derived this way is inseparable. Since the particle was introduced in the complement position of the deepest verbal head, further complements cannot be added, which makes the particle interfere with the possibility of adding more particles or other secondary predicates. In the next section we will turn to these restrictions and their analysis.

### 5. Accounting for the co-occurrence restrictions

'The firm carried out the plan.'

As was shown in section 3, inseparable particle constructions are incompatible with ordinary particles and ordinary resultatives. This is illustrated again in (37)-(38).

(37) a. \*A cég **meg-ki**-vitelezte a tervet. the firm PRT-out-carry.PST.3SG.DEF the plan.ACC

meg

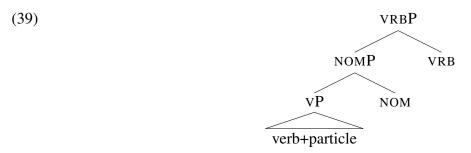
b. \*A cég **el-ki**-vitelezte a tervet. the firm away-out-carry.PST.3SG.DEF the plan.ACC 'The firm carried out the plan.'

directional/telicizing

- (38) a. \*Vörösre fel-vételiztem a szemem.
  red.SUBL up-exam.take.PST.1SG the eye.POSS.1SG.ACC
  'I got red eyes by taking entrance exams/an entrance exam.'
  - b. \*A cég készre ki-vitelezte a tervet. the firm ready.SUBL out-carry.PST.3SG.DEF the plan.ACC

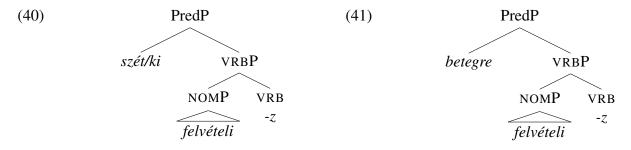
'The firm carried out the plan.' ordinary resultatives

The proposed structure of inseparable particle verbs accounts for this incompatibility. VMs in general, including ordinary particles and resultatives, are introduced in the complement of the verb. In the case of inseparable particle verbs, there are two verbal heads. The most deeply embedded verbal head already has its complement position filled by the inseparable particle (which later moves to a position in front of the verb, as discussed in section 4), so there is no place to add another VM to this verbal head. The outermost verbal head also has its complement position filled, by the nominalized constituent NOMP. Therefore no complement position is available for VMs, and no new predicative complements can be introduced.



However, not all particles and resultatives are excluded from these sentences. Co-occurrence of an inseparable particle and some particles or resultatives is possible. The list of the relevant particles is quite short: we find exhaustive ki 'fully', exhaustive  $sz\acute{e}t$  'completely', durative el, and durative  $\acute{a}t$ . The resultatives that are allowed include but are not limited to  $hal\acute{a}lra$  'to death', agyon 'over/to death', and betegre 'sick'.

It is important that the VMs that inseparable particle verbs can combine with have the semantic component 'to full degree' in common. We suggest that there is a structural difference between these particles/resultatives and ordinary particles/resultatives in that the former are not merged as small clause predicates. These particles and resultatives are merged as modifiers rather than complements of the verb, and we submit that the place of merger is the specifier of PredP, which is the place of semantic incorporation. In other words, while spec, PredP is a derived intermediate position for ordinary VMs, it is the base-generation site of VMs that inseparable particle verbs can combine with. This proposal explains the fact that their presence does not depend on the availability of the verbal complement position. Since inseparable particles are trapped in NOMP and so do not move to the spec, PredP of the outermost verbal head; that position is available for merging predicative modifiers and, therefore, they can co-occur with the inseparable particles.



## 6. Consequences for argument structure

In the previous section we argued that in the case of inseparable particle verbs the complement of the most deeply embedded verb is occupied by the (Small Clause containing the) particle, while the complement of the outermost verbal head is occupied by NOMP. The majority of inseparable particle verbs are, however, transitive verbs. In (15), repeated here as (42), we have already shown that they are compatible with (plural) bare objects. Naturally, other indefinite and definite objects are also possible (43). (Note that only bare objects are VMs, so only they appear in the immediately preverbal VM position.)

- (42) Mari egész délután terveket ki-vonatolt.

  Mary all afternoon plan.PL.ACC out-précis.PST.3SG

  'Mary spent the afternoon making (a) précis of plans.'
- (43) a. Mari ki-vonatolt egy tervet.

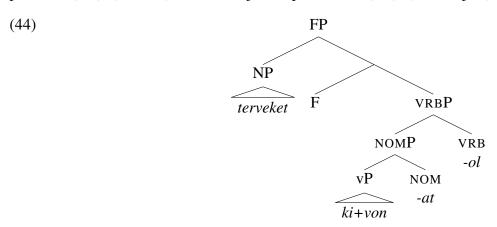
  Mary out-précis.PST.3SG a plan.ACC

  'Mary made a précis of a plan.'
  - b. Mari ki-vonatolta a tervet.

    Mary out-précis.PST.3SG.DEF the plan.ACC

    'Mary made a précis of the plan.'

The question that naturally arises here is where the object is introduced into the structure if no complement position is available. We take the Hungarian inseparable particle verb data to be supportive of the general proposal that objects are also merged as specifiers (see Bowers, 1993; Hale & Keyser, 1993; Arad, 1996; and Den Dikken, 2015b). The partial structure of (42) is given in (44). We label the projection that hosts objects as FP for functional projection. While the exact identity of F is immaterial for our purposes (and we refer the reader to the cited works for specific proposals), we suggest that it is a Relator type of head, i.e. a head that establishes a predication relation between a predicate (in (44), VRBP) and the subject of predication (in (44), the object). <sup>10</sup>



(44) captures the right syntactic and semantic relationships within the lower portion of the verb phrase in (42). In this structure the object establishes a syntactic relationship with the entire denominal verb, i.e. the whole inseparable particle verb, not just the most deeply embedded (particle) verb. This correctly captures the semantic intuition that *tervek* 'plans' is the object of *kivonatol* 'précis' rather than the object of the verb (phrase) which is the input of the nominalization, i.e. (*ki)von* 'pull (out)'.

The structure in (44) can also capture the distribution of fake reflexives with inseparable particle verbs. When garden variety intransitive verbs combine with an exhaustive or durative particle or a resultative, a fake reflexive is obligatorily introduced in the clause.

(45) Mari ki-sírta \*(magát / a szemét).

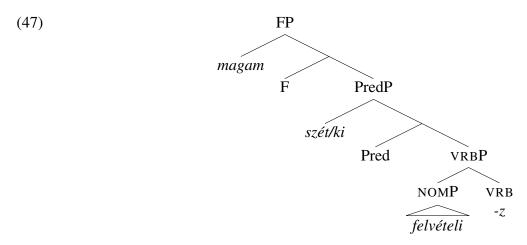
Mary out-cry.PST.3SG.DEF self.POSS.3SG.ACC / the eye.POSS.3SG.ACC 
'Mary cried herself / her eyes out.'

Similarly, the fake reflexive also becomes obligatory when an intransitive inseparable particle verb (e.g. *felvételizik* 'take an entrance exam') combines with an exhaustive or durative particle or a resultative.

(46) **Betegre/Szét/Ki fel**-vételiztem \*(magam). sick.SUBL/APART/OUT up-exam.take-PST.1SG self.POSS.1SG.ACC 'I got myself sick/exhausted by taking entrance exams.'

<sup>&</sup>lt;sup>10</sup>On Relators, see Den Dikken (2006, 2007, 2015a) and Den Dikken (2015b).

The fake reflexive is obligatory because both the inseparable particle verb *felvételiz* 'take an entrance exam' and the VP-modifier particle/resultative introduce an argument. Neither *felvételiz* 'take an entrance exam' nor the VP-modifier particle/resultative has a complement position available, therefore in this case, too, the fake reflexive *magam* 'self.1SG.ACC' must be introduced as a specifier.



This is a welcome result for two reasons. Firstly, the theme in (46) has the same syntactic and thematic properties as ordinary objects. Moreover, a fake reflexive blocks the appearance of the optional argument of verbs like *read* or *eat*. Therefore it is desirable that both types of objects occupy the same syntactic position.

- (48) a. Betegre olvastam magam (\*a könyvet) sick.SUBL read.PST.1SG self.POSS.1SG.ACC the book.ACC 'I have read myself sick (\*the book).'
  - b. Rongyosra olvastam a könyvet (\*magam). torn.and.worn.SUBL read.PST.1SG the book.ACC self.POSS.1SG.ACC 'I have read (\*myself) the book torn-and-worn.'

Secondly, with (47) we can cash out the semantic intuition that what is predicated of the fake reflexive is the whole complex expression *szét/ki felvételiz* 'take entrance exams to exhaustion' rather than only *felvételiz* 'take an entrace exam'. Since the former is a transitive predicate and the latter is an intransitive one, it is the right move to first merge the exhaustive particle and only then introduce the object.

An important issue raised as a consequence of our analysis is related to the co-occurrence of a regular separable particle and a VP-modifier particle/resultative. Since one is merged in the verb's complement and the other higher in a specifier position, one might reasonably expect them to co-occur, i.e. to have a single verb with two different particles. This, however, is not possible; the sentences in (49) are ungrammatical.

(49) a. \*Ki el-futottam magam.
out away-run.PST.1SG self.POSS.1SG.ACC
'I got myself exhausted by running away.'

directional

b. \*Ki el-olvastam magam /a könyvet.
out away-read.PST.1SG self.POSS.1SG.ACC / the book.ACC
'I got myself exhausted by reading all of the book.'

perfectivizing

We can think of two possible reasons for this incompatibility, which might even be related to each other. The first reason is the cross-linguistically attested ban on the double delimitation on events (Filip, 2003). This ban states that for semantic reasons, one event can be only be telicized or delimited once. As particles often have a delimiting effect on the event, it is not possible for two delimiting particles to be associated with the same verb. This line of reasoning covers many cases, but since

not all particles have a delimiting effect on the verb (e.g. *fel-olvas* lit. up-read 'read out'), it cannot account for the whole empirical picture.

A second possible explanation for the impossibility of having two particles is that there emerges a clash between them in the VM position, since both need to semantically incorporate into the verb and syntactically form a complex predicate with it. This approach extens to all relevant cases of particle combinations, thus we take it on board here.

That inseparable particle verbs cannot combine with regular particles is explained by the fact that the complement position of the innermost VRB head is occupied by the inseparable particle (in a Small Clause), while the complement position of the higher VRB is occupied by NOMP. This raises the question whether any derived verb is able to occur with ordinary particles at all. As (50) illustrates, denominal verbs can combine with regular particles.

- (50) a. János el-lapát-ol-t-a a havat.

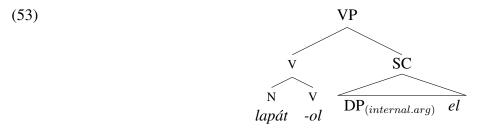
  John away-shovel-VRB-PST-3SG.DEF the snow.ACC

  'John has shoveled the snow away.'
  - b. Ma el-email-ez-t-em a választ. today away-email-VRB-PST-1SG.DEF the answer.ACC 'I emailed the answer today.'

Since we take regular particles to be Small Clause predicates, which are introduced as the complement of the verb, we have to account for these data. We suggest that these structures are merged differently than the ones involving more complex structures under the higher VRB. We follow the proposal by Haugen (2009), who develops Hale and Keyser's (1993; 2002) syntactic analysis of denominal verbs. Haugen proposes that not all denominal verbs are derived via movement of the nominal head to a higher verbal head, as in (51). Some of them are base-generated complex heads, where the verbal root and the nominal root are 'conflated' (52). In these derived verbs, the simple nominal root can form a complex head with the verbalizer.



We suggest that Hungarian examples like *lapátol* 'shovel' in (50) involve a structure like (52). This makes the structural complement position available for the run-of-the-mill particle/resultative. This results in a structure such as (53).



With inseparable particle verbs, however, what combines with the outermost verbalizer head is not just a nominal head but a whole nominal phrase with a complex internal structure, with the nominalizer head topping off a verbal projection with a particle verb. The conflation structure as in (52) is not possible in this case because the VRB head may not contain phrasal categories. This distinction excludes additional ordinary particles with inseparable particle verbs but makes it possible to add particles to denominal verbs that have no phrasal internal structure themselves.

<sup>&</sup>lt;sup>11</sup>See also Mateu (2012) on resultative constructions.

#### 7. Variation

The uniformity of inseparable particle verbs is challenged by the fact that about half of the verbs on our list (those in bold in (54)) actually feature optionally separable particles. These particles may be separated from the verb to some extent, in some contexts.

(54) a. ki-fog-ás-ol, **be-foly-ás-ol** out-hold-NOM-VRB in-flow-NOM-VRB 'take objection to, influence'

b. ki-von-at-ol out-pull-NOM-VRB 'précis'

inspect,

c. fel-té-t-el-ez ki-vi-t-el-ez

up-take-NOM-NOM-VRB up-take-NOM-NOM-VRB

'assume, carry outki-vé-t-el-ez, be-vé-t-el-ez

out-bring-NOM-NOM-VRB in-take-NOM-NOM-VRB show a favor toward, enter as income,

**szemre-vé-t-el-ez**, után-vé-t-el-ez PRT-take-NOM-NOM-VRB after-take-NOM-NOM-VRB

d. fel-vé-t-el-i-z up-take-NOM-NOM-NOM-VRB 'take an entrance exam'

Consider the examples in (55). While the full inseparable particle verb may always appear in front of the finite (auxiliary) verb in verb clusters (55a), in some – but not all – cases, it is possible to only raise the particle, thereby separating it from its selecting verb, as is generally the case with ordinary particle verbs. As (55b) shows, this is possible, for instance, with *feltételez* 'assume' but not with *kifogásol* 'take objection to'.

collect (value) upon delivery'

(55) a. János **fel-tételezni** / **ki-fogásolni** akart valamit.

John up-assume.INF / out-object.INF want.PST.3SG something.ACC 'John wanted to assume / take objection to something.'

b. János **fel** akart **tételezni** / \*ki akart **fogásolni** valamit.

John up want.PST.3SG assume.INF / out want.PST.3SG object.INF something.ACC 'John wanted to assume / take objection to something.'

The optional separability depends both on the actual particle verb and on the syntactic context. Thus, certain particle verbs are better in all contexts than others, and certain contexts allow for the separation more than others. *Befolyásol* 'influence' is one of the verbs that is not fully ungrammatical with the particle separated from the verb, but, in our judgments, it is not equally easily separated in all contexts, with verb clusters being the best and imperatives being the worst.

#### (56) verb cluster

a. János **be-folyásolni** akarta Marit. John in-influence.INF want.PST.3SG.DEF Mary.ACC 'John wanted to influence Mary.'

b. ?(?)János **be** akarta **folyásolni** Marit.

John in want.PST.3SG.DEF influence.INF Mary.ACC

'John wanted to influence Mary.'

## (57) negation

- a. János nem **be-folyásolta** Marit.

  John not in-influence.PST.3SG.DEF Mary.ACC

  'John did not influence Mary.'
- b. ?\*János nem **folyásolta be** Marit.

  John not influence.PST.3SG.DEF in Mary.ACC

  'John did not influence Mary.'

#### (58) narrow focus

- a. JÁNOS **be-folyásolta** Marit John in-influence.PST.3SG.DEF Mary.ACC 'It was John that influenced Mary.'
- b. \*JÁNOS **folyásolta be** Marit
  John influence.PST.3SG.DEF in Mary.ACC
  'It was John that influenced Mary.'

## (59) imperative

- a. Hát **be-folyásold** Marit!

  DISC.PRT in-influence.IMP.2SG.DEF Mary.ACC

  'So try to influence Mary!'
- b. \*Hát **folyásold be** Marit!

  DISC.PRT influence.IMP.2SG.DEF in Mary.ACC

  'So try to influence Mary!'

There is no systematic (morpho)syntactic difference between the strictly inseparable and the optionally inseparable particle verbs. It does not seem to be relevant whether the nominalizer suffix is -t or -ás: kifogásol 'take objection to' and kivételez 'show a favor toward' are strictly inseparable, while befolyásol 'influence' and feltételez 'assume' are optionally separable. It is not a difference that is due to the number of nominalizing affixes either: kifogásol 'take objection to' has one affix but is strictly inseparable, while feltételez 'assume' has two nominalizing suffixes and is still optionally separable. Furthermore, the same verb+nominalizer+verbalizer sequence may appear with a strictly inseparable particle and an optionally separable particle as well: ki-vét-el-ez 'show a favor toward' is strictly inseparable, while be-vét-el-ez 'enter as income' is optionally separable. That is to say, the difference must be in something else, other than the morphosyntactic make-up of these constructions.

We propose that the difference is structural and the separable variety has a different derivation. We suggest that the two orders (separated vs. not separated) correlate with different structures for the particle-verb construction. As we have proposed above, the inseparable particle use corresponds to the particle being generated below the outermost nominalization. In the separated use, however, an analogical reanalysis has taken place: in this case the particle is merged above the outermost nominalization. When the particle has a relatively transparent directional meaning, this reanalysis can happen more easily, as the directional particle can be reinterpreted to apply to the derived verb (e.g. bevételez 'enter as income'). This is in contrast with particle verbs associated with a less transparently directional meaning, which are less prone to reanalysis (e.g. kivételez 'show a favor toward').

The existence of a morphologically simple verb with identical meaning also seems to facilitate analogical reanalysis. Compare the (optionally) inseparable particle verb *feltételez* 'assume' with the ordinary particle verb *fel-tesz* 'assume', which features the ordinary, separable particle *fel* 'up' and the non-derived, morphologically simple verb *tesz* 'put, take'. In the case of *feltételez* 'assume', the existence of the morphologically simple, run-of-the mill particle verb that has the same meaning, the same particle, and the same verbal stem, helps the reanalysis of the particle as one attached to the derived denominal verb:  $[[[v_P \text{ fel+t\'e}] - t_{NomP}] - el_{NomP}] - ev_{VrbP}] \rightarrow [v_P \text{ fel}][[v_P \text{ t\'e}] - t_{NomP}] - el_{NomP}]$ 

 $_{NomP}$ ] -ez  $_{VrbP}$ ]].<sup>12</sup>

While reanalysis as a separable particle is possible when the particle has a transparent directional meaning, almost complete loss of semantic transparency of the particle facilitates reanalysis in the opposite direction, into a monomorphemic form. We suggest that this is what happens with *kifogásol* 'take objection to'. In the case of this particle verb, the semantic contribution of both the particle ('out') and the verbal stem ('hold, take') to the overall meaning are very opaque. We have seen above that inseparable particle verbs do not combine with a second, telicizing particle, but in the case of *kifogásol* 'take objection to', combination with the telicizing particle *meg* is actually possible for some speakers. We suggest that for these speakers, *kifogásol* has been reanalyzed as a monomorphemic verb, and so the form *megkifogásol* is not a double particle construction for them. This view is supported by the fact that in our intuition, the meaning of *megkifogásol* is not compositionally derivable from the meaning of *meg* 'PRT' and *kifogásol* 'take objection to': *megkifogásol* means 'criticize' rather than 'perfect/telic + take objection to'.

## 8. Conclusions

The purpose of this paper was to argue for the view that not all VMs are base-generated in the complement position of the verb. We argued that particles and resultatives with a 'to full degree' semantics are merged in the extended vP in a specifier position, in particular, in spec, PredP, the position of semantic incorporation. In order to argue for this point, we examined the distribution of inseparable particle verbs.

We argued that inseparable particle verbs are constructed in syntax rather than in the lexicon, and the particles are inseparable because they are introduced under a nominalizer in the structure, and they cannot move to the regular surface position of particles across this nominalizer. Regular particles/resultatives are predicates of complement Small Clauses. They are incompatible with inseparable particle verbs because in these particle verbs the complement position of the verbal heads is already occupied. Semantically bleached particles/resultatives referring to '(full) degree' are compatible with inseparable particle verbs because they are introduced as specifiers. Our analysis also supports the view that objects are merged as specifiers rather than as complements.

Finally, we also analyzed the limited word order variation attested with inseparable particle verbs. We suggested that the occasional separability is due to a structural reanalysis, whereby the particle is reanalyzed from a particle belonging to the most deeply embedded verb into a particle attaching to the entire denominal verb form. The reanalysis comes about as a result of analogy with ordinary particle-verb constructions, and is facilitated by a transparent directional reading available to the particle or the existence of a garden variety particle verb that has the same particle, the same base verb, and an identical meaning.

## Acknowledgements

This material is based upon work supported by the Hungarian Research Fund under Grant No. OTKA NK 100804 "Comprehensive Grammar Resources: Hungarian" and Dékány's postdoctoral grant of the Hungarian Academy of Sciences.

<sup>&</sup>lt;sup>12</sup>The word order variation in (56) through (59) has also been observed in Farkas (2013). Farkas calls our inseparable particles 'fake particles' and similarly to our claim, she also attributes the separated use to the analogical effect of verb + verb modifier constructions.

### References

- Ackerman, Farrell. 1987. Pronominal incorporation: The case of prefixal adverbs. In István Kenesei (ed.), *Approaches to Hungarian 2: theories and analyses*, 213–260. Szeged: JATE.
- Ackerman, Farrell & Gert Webelhuth. 1998. A theory of predicates. Stanford: CSLI Publications.
- Alexiadou, Artemis. 2001. Functional structure in nominals: nominalization, and ergativity. Amsterdam: John Benjamins. doi:10.1075/la.42.
- Alexiadou, Artemis. 2013. Nominal vs. verbal –*ing* constructions and the development of the English progressive. *English Linguistics Research* 2(2). 126–140. doi:10.5430/elr.v2n2p126.
- Alexiadou, Artemis, Gianina Iordăchioaia & Elena Soare. 2010. Number/aspect interactions in the syntax of nominalizations: a Distributed Morphology approach. *Journal of Linguistics* 46. 537–573. doi:10.1017/S0022226710000058.
- Arad, Maya. 1996. A minimalist view of the syntax-lexical semantics interface. *UCL Working Papers in Linguistics* 8. 1–30.
- Baumer, Donald. 2008. *On nP: Evidence for a DP-internal phase head*. University of Washington MA thesis.
- Benkő, Loránd (ed.). 1967. *A magyar nyelv történeti-etimológiai szótára*, vol. 1. A–GY. Budapest: Akadémiai Kiadó.
- Bobaljik, Jonathan David. 2012. *Universals in comparative morphology: suppletion, superlatives, and the structure of words.* Current Studies in Linguistics. Cambridge, MA: MIT Press.
- Bowers, John. 1993. The syntax of predication. Linguistic Inquiry 24(4). 591–656.
- Caha, Pavel. 2009. *The Nanosyntax of Case*: University of Tromsø, CASTL dissertation.
- Chomsky, Noam. 1993. A minimalist program for linguistic theory. In Kenneth Hale & Samuel Jay Keyser (eds.), *The view from building 20: Essays in linguistics in honor of Sylvain Bromberger*, 1–52. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2013. Problems of projection. Lingua 130. 33-49.
- Cornilescu, Alexandra & Anca Dinu. 2013. Adjectives and specificity. *Revue roumaine de linguistique* 58(4). 455–480.
- Cornilescu, Alexandra & Alexandru Nicolae. 2011. On the syntax of Romanian definite phrases: Changes in the patterns of definiteness checking. In Petra Sleeman & Harry Perridon (eds.), *The Noun Phrase in Romance and Germanic: Structure, variation, and change*, 193–222. Amsterdam and Philadelphia: John Benjamins. doi:10.1075/la.171.14cor.
- Dékány, Éva. 2014. Argument structure and functional projections in Old Hungarian verbal gerunds. *Acta Linguistica Hungarica* 61(3). 317–361. doi:10.1556/ALing.61.2014.3.4.
- Dékány, Éva & Veronika Hegedűs. 2015. Word order variation in Hungarian PPs. In Balázs Surányi Katalin É. Kiss & Éva Dékány (eds.), *Approaches to Hungarian 14: papers from the 2013 Piliscsaba conference*, 95–120. Amsterdam and Philadelphia: John Benjamins. doi: 10.1075/atoh.14.04dek.
- Dikken, Marcel den. 2006. *Relators and linkers: The syntax of predication, predicate inversion, and copulas*. Linguistic Inquiry Monographs 47. Cambridge, Mass: MIT Press.
- Dikken, Marcel den. 2007. Phase extension: Contours of a theory of the role of head movement in phrasal extraction. *Theoretical Linguistics* 33(1). 1–41. doi:10.1515/TL.2007.001.
- Dikken, Marcel den. 2015a. The morphosyntax of alienable and inalienable possession: The Hungarian contribution. In Balázs Surányi Katalin É. Kiss & Éva Dékány (eds.), *Approaches to Hungarian 14: papers from the 2013 Piliscsaba conference*, 121–145. Amsterdam and Philadelphia: John Benjamins. doi:10.1075/atoh.14.05dik.
- Dikken, Marcel den. 2015b. Raising the subject of the 'object-of' relation. In Ángel J. Gallego & Dennis Ott (eds.), *MIT Working Papers in Linguistics 77. 50 years later: Reflections on Chomsky's Aspects*, 85–98. Cambridge, MA: MIT Press.
- É. Kiss, Katalin. 2006. The function and the syntax of the verbal particle. In Katalin É. Kiss (ed.),

- Event structure and the left periphery. Studies on Hungarian, vol. 68 Studies in natural language and linguistic theory, 17–56. Dordrecht: Springer.
- Embick, David & Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32(4). 555–595. doi:10.1162/002438901753373005.
- Embick, David & Rolf Noyer. 2007. Distributed morphology and the syntax-morphology interface. In Gillian Ramchand & Charles Reiss (eds.), *The Oxford handbook of linguistic interfaces*, 289–324. Oxford: Oxford University Press.
- Eszes, Boldizsár. 2005. Experiens alanyú *meg* igekötős igék szemantikája. *Nyelvtudományi Közle-mények* 102. 113–135.
- Eszes, Boldizsár. 2006. Verbal particles telicizing stative psych verbs. In Katalin É. Kiss (ed.), *Event structure and the left periphery. studies on Hungarian*, vol. 68 Studies in natural language and linguistic theory, 57–74. Dordrecht: Springer.
- Farkas, Judit. 2013. Az ige analógiájára működő -hAtÓ és -AndÓ konstrukciók. In Szilágyi N. Sándor & Edit Kádár (eds.), *Analógia és modern nyelvtudomány*, 51–62. Kolozsvár: Erdélyi Múzeum Egyesület.
- Filip, Hana. 2003. Prefixes and the delimitation of events. *Journal of Slavic Linguistics* 11(1). 55–101. Hale, Ken & Samuel Jay Keyser. 1993. On the argument structure and the lexical expression of syntactic relations. In Ken Hale & Samuel Jay Keyser (eds.), *The view from building 20: essays in linguistics in honor of Sylvain Bromberger*, 53–109. Cambridge, MA: MIT Press.
- Hale, Ken & Samuel Jay Keyser. 2002. *Prolegomenon to a theory of argument structure*. Cambridge, MA: MIT Press.
- Halle, Moris & Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In Ken Hale & Samuel Jay Keyser (eds.), *The view from building 20: Essays in linguistics in honor of Sylvain Bromberger*, 111–176. Cambridge, MA: MIT Press.
- Halle, Moris & Alec Marantz. 1994. Some key features of Distributed Morphology. *MIT working papers in linguistics* 21. 275–288.
- Haugen, Jason D. 2009. Hyponymous objects and late insertion. *Lingua* 119(2). 242–262. doi: 10.1016/j.lingua.2007.10.008.
- Hegedűs, Veronika. 2013. *Non-verbal predicates and predicate movement in Hungarian*: Tilburg University dissertation.
- Hegedűs, Veronika. 2014. A névutós kifejezések grammatikalizációja és belső szerkezeti változásai. In Katalin É. Kiss (ed.), *Magyar generatív történeti mondattan*, 154–176. Budapest: Akadémiai Kiadó.
- Kenesei, István. 1998. Adjuncts and arguments in VP-focus in Hungarian. *Acta Linguistica Hunga-riaca* 4. 61–88.
- Kenesei, István. 2014. On a multifunctional derivational affix: Its use in relational adjectives or nominal modification and phrasal affixation in Hungarian. *Word Structure* 7(2). 214–239. doi: 10.3366/word.2014.0066).
- Komlósy, Andás. 1992. Régensek és vonzatok. In Ferenc Kiefer (ed.), *Strukturális magyar nyelvtan 1. Mondattan. [Hungarian structural grammar 1. Syntax]*, 299–529. Budapest: Akadémiai Kiadó.
- Koster, Jan. 1994. Predicate incorporation and the word order of Dutch. In Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi, & Rafaella Zanuttini (eds.), *Paths towards universal grammar. studies in honor of Richard S. Kayne*, 255–276. Washington DC: Georgetown University Press.
- Laczkó, Tibor. 2009. On the -ás suffix: word formation in the syntax? *Acta Linguistica Hungarica* 56(1). 23–114. doi:10.1556/ALing.56.2009.1.2.
- Lipták, Anikó. 2012. Verb-stranding ellipsis and verbal identity: the role of polarity focus. In Marion Elenbaas & Suzanne Aalberse (eds.), *Linguistics in the Netherlands* 29, 82–96. Amsterdam and Philadelphia: John Benjamins. doi:10.1075/avt.29.07lip.
- Lipták, Anikó. 2013. The syntax of emphatic positive polarity in Hungarian: evidence from ellipsis.

- Lingua 128. 72–94. doi:10.1016/j.lingua.2012.11.013.
- Lipták, Anikó & István Kenesei. 2014. A putative multifunctional affix: the case of -ható (-able) in Hungarian. Ms., Leiden University and RIL HAS.
- Mateu, Jeume. 2012. Conflation and incorporation processes in resultative constructions. In Violeta Demonte & Louise McNally (eds.), *Telicity, change, and state: A cross-categorial view of event structure*, 252–278. Oxford: Oxford University Press.
- Matushansky, Ora & Alec Marantz (eds.). 2013. *Distributed Morphology today: Morphemes for Morris Halle*. Cambridge, MA: MIT Press.
- Punske, Jeffrey. 2011. Escape hatches and the derivation of the DP. Poster presented at WCCFL 29, April 22-24, 2011, University of Arizona.
- Ramchand, Gillian. 2008. *Verb Meaning and the Lexicon: A First Phase Syntax*. Cambridge: Cambridge University Press.
- Siddiqi, Daniel. 2009. *Syntax within the word. Economy, allomorphy and argument selection in Distributed Morphology*. Linguistik Aktuell/Linguistics Today 138. Amsterdam and Philadelphia: John Benjamins. doi:10.1075/la.138.
- Starke, Michal. 2009. Nanosyntax: a short primer to a new approach to language. *Nordlyd: Tromsø University Working Papers in Linguistics* 36(1). 1–6. doi:10.7557/12.213.
- Starke, Michal. 2014. Towards elegant parameters: Language variation reduces to the size of lexicaly-stored trees. In Carme M. Picallo (ed.), *Linguistic variation in the Minimalist Framework* Oxford linguistics, 140–152. New York: Oxford University Press. doi: 10.1093/acprof:oso/9780198702894.003.0007.
- Surányi, Balázs. 2009a. Locative particle and adverbial incorporation at the interfaces. In Katalin É. Kiss (ed.), *Adverbs and adverbial adjuncts at the interfaces* Interface explorations 20, 39–74. Berlin and New York: Mouton de Gruyter.
- Surányi, Balázs. 2009b. Verbal particles inside and outside *vP. Acta Linguistica Hungarica* 56(2–3). 201–249. doi:10.1556/ALing.56.2009.2-3.3.
- Svenonius, Peter. 2012. Spanning. Ms., University of Tromsø, draft of April 25, 2012. http://ling.auf.net/lingBuzz/001501.
- Szabolcsi, Anna & Tibor Laczkó. 1992. A főnévi csoport szerkezete. [The structure of the noun phrase]. In Ferenc Kiefer (ed.), *Strukturális magyar nyelvtan 1. Mondattan. [Hungarian structural grammar 1. Syntax]*, 181–298. Budapest: Akadémiai Kiadó.
- Taraldsen, Knut Tarald. 2010. The nanosyntax of Nguni noun class prefixes and concords. *Lingua* 120(6). 1522–1548. doi:10.1016/j.lingua.2009.10.004.
- Zwart, Jan-Wouter. 1993. Dutch syntax: A minimalist approach: University of Groningen dissertation.