

# Radically Truncated Clauses in Hungarian and Beyond: Evidence for the Fine Structure of the Minimal VP

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**Abstract.** This article explores the syntax of radically truncated clauses in colloquial Hungarian. I argue that radically truncated clauses arise when, in informal speech situations and under time pressure, the derivation is terminated prematurely, at the VP level, and the bare VP (lacking any of the higher functional projections) is sent to spellout (PF) and semantic interpretation (LF). Due to their radically truncated nature, such clauses provide us a unique window through which it becomes possible to explore the fine structure of the minimal VP in itself. I show that radically-truncated-clause data are highly relevant to various theoretical questions, such as the head–complement branching order, the adjunction analysis of topicalization and quantification, and the split-DP proposal. I argue that observations about radically truncated clauses support the availability of OV as a nonderived, basic word order, that they are in line with the adjunction analysis of topicalization and quantifier raising, and that they corroborate the split-DP analysis of arguments. The discussion is supported with evidence from corpus data and with rigorous statistical analysis of grammaticality-judgment-survey results.

## 1. Introduction

It has proved difficult to determine the shape and headedness of the minimal VP, owing to the fact that much or even all of the material originating in it routinely moves out of it in the course of the derivation of a clause. In this article, I will offer novel data from Hungarian as evidence of a clause type radically pared down to the minimal VP, making it possible to observe the VP by itself. The syntax of such radically truncated clauses (RTCs) will show that the Hungarian VP is, in fact, head final. I will also claim that RTCs in Hungarian provide *prima-facie* evidence against the universality of head–complement branching order (Kayne 1994) and strong support for the availability of OV as a basic, nonderived word order (Haider 2000). I will also show that RTC data are in line with the adjunction analysis of both topicalization (Lasnik & Saito 1992) and quantification (Chomsky 1995, Fox 1995, Reinhart 1995). Finally, I will discuss how RTC data corroborate the split-DP proposal of Sportiche 2005. In order to provide solid empirical grounding for the theoretical argumentation, I compiled a database of 3,032 attestations of RTCs from electronic corpora, including the Hungarian National Corpus (Oravecz, Váradi & Sass

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2014) and Hungarian-language web content indexed by Google. In addition to using corpus data, I carried out a web-based grammaticality-judgment survey (680 respondents), the results of which were analyzed by means of regression analysis.

The article is organized as follows. In section 2, the main facts about RTCs are presented. Section 3 is a discussion of the pragmatic conditions on the use of RTCs. Section 4 provides background on the syntax of the Hungarian extended VP. In section 5, I present the core of my proposal for analyzing RTCs. In section 6, I discuss what operations can and cannot target RTCs. Section 7 is dedicated to discussion of the lack of definite articles in RTC objects. Section 8 is a more detailed discussion of the fine structure of RTC objects. In section 9, the consequences of my proposal are considered in the light of various existing proposals for the syntax of the verb modifier in Hungarian. Section 10 is a discussion of comparable syntactic phenomena in other languages. Section 11 is the conclusion. The results of grammaticality-judgment tests (including regression analysis) and the corpus data are discussed in the appendix (supporting information, file 1).

## 2. RTCs: The Main Facts

RTCs are used in informal spoken registers (everyday speech) and informal written registers (such as blogs or discussion forums). Typically they describe a succession of subevents (or a single subevent) within a well-defined containing event or situation.<sup>1,2</sup>

- (1) Namármost amikor én alud-t-am ott, úgy kezd-t-em, hogy **szemét**  
 well when I slept-PST-1SG there so start-PST-1SG that rubbish  
**le-visz, szoba rendbe-rak, fürdőszoba el-pakol.**  
 PRT-carry room PRT-put bathroom PRT-pack  
 ‘So when I was sleeping there, the way I started was I took out the rubbish,  
 I cleared the room, I cleared the bathroom.’

This succession of RTCs is not a syntax-free to-do list: in fact, RTCs have a much stricter syntax than real to-do lists. To-do lists in Hungarian typically involve an infinitival construction with relatively free word order, with objects obligatorily carrying accusative case and optionally having the definite article:

- (2) a. (a) szemet-et le-vin-ni  
 the rubbish-ACC PRT-carry-INF  
 ‘to take out the rubbish’  
 b. le-vin-ni a szemet-et

<sup>1</sup> Note that all the grammatical examples in the article are actually attested utterances (web examples).

<sup>2</sup> Verb modifiers in Hungarian express the result state or location of the theme argument. There are two kinds of verb modifiers: verbal particles (such as *le* ‘down’ in (1)) and bare adjectival phrases or noun phrases (such as *rendbe* ‘into order’ in (1)). For convenience, I will use the term *verbal particle* and the gloss PRT for both, but all the claims and statements in the article are valid for the whole broad family of verb modifiers.

As opposed to this, RTCs are subject to a number of constraints.

First of all, RTCs lack all  $\phi$ -feature agreement (subject agreement as well as object agreement), and they also lack all tense, aspect, and mood features. RTCs also lack infinitival suffixation. Now, due to the fact that in Hungarian the present-tense suffix and (in the case of an indefinite object) the third-person singular subject-agreement suffix are phonologically null, the verb form in RTCs often coincides with a present third-person singular verb form; however, there are two compelling pieces of evidence that in RTCs no subject agreement is present. First, in many cases, it is clear from the context that the subject is first-person singular or plural (see (1) above) or second-person singular or plural. Second, there is a set of verbs in Hungarian, the so-called *-ik* verbs, where the third-person singular indefinite subject-agreement suffix is overt, and with these verbs it is always the *-ik*-less form that emerges in RTCs:<sup>3</sup>

- (3) a. Sör meg-isz.  
           beer PRT-drink  
           ‘I/you/she/he/it/we/they drink/drinks/drank a beer.’  
    b. \*Sör meg-isz-om/-ol/-ik.  
           beer PRT-drink-1SG.INDEF/-2SG.INDEF/-3SG.INDEF  
           Intended: ‘I/you/she/etc. drink/drinks/drank a beer.’  
    c. \*Sör meg-isz-om/-od/-sza.  
           beer PRT-drink-1SG.DEF/-2SG.DEF/-3SG.DEF  
           Intended: ‘I/you/she/etc. drink/drinks/drank the beer.’

In RTCs, the object is obligatorily in the morphologically unmarked case form (a form otherwise reserved for nominative subjects and possessors): compare (3a), for example, with the following.

- (4) \*Sör-t meg-isz.  
           beer-ACC PRT-drink  
           Intended: ‘I/you/she/etc. drink/drinks/drank the/a beer.’

This is highly unusual since objects in Hungarian obligatorily carry accusative case. The word order in neutral nontruncated sentences in Hungarian is verb initial:<sup>4</sup>

<sup>3</sup> These and all the other grammaticality judgments are underpinned by (i) corpus data and (ii) the results of a grammaticality-judgment survey; see the appendix (supporting information, file 1).

<sup>4</sup> In more detail, the generalization is that Hungarian topicless sentences—that is, sentences that are neutral in the sense of not assigning discourse prominence to either subject or object—are verb initial and have free word order after the verb (i.e., they can be either VSO or VOS). Topicalization is a widespread (even though nonobligatory) strategy in Hungarian and can apply to either S or O or indeed to both, so SVO and OVS surface word orders (and indeed SOV and OSV orders) are possible. Of these, SVO is the most common, since, other things being equal, subjects are more likely to be discourse prominent than objects. See Horvath 1986, Kenesei, István, Vago & Fenyes 1998, Surányi 2006b, É. Kiss 2011, among others.

- (5) Be-kapcsol-t-a János a tévé-t.  
 PRT-switch-PST-3SG.DEF John the television-ACC  
 ‘John switched on the television.’

As opposed to this, in RTCs, the word order is strictly O–verbal particle–V:

- (6) a. \*Be-kapcsol tévé, \*ki-nyit sör.  
 PRT-switch television PRT-open beer  
 Intended: ‘I/you/she/etc. switch/switches/switched on the/a TV and open/  
 opens/opened the/a beer.’  
 b. Tévét be-kapcsol, sört ki-nyit.

In RTCs, unlike in to-do lists (see (2) above), the object cannot have a definite article (even when it denotes a contextually salient, unique entity):

- (7) (\*A) kád ki-mos, (\*a) padló fel-mos.  
 the bathtub PRT-wash the floor PRT-wash  
 ‘I/you/she/etc. clean/cleans/cleaned the tub and mop/mops/mopped the floor.’

Importantly, the object in RTCs is a nominal phrase (not a mere N): it can be an AdjP, a NumP, a PossP, or a QP, as illustrated in (8)–(11), or even (as we will see later, in (45) in section 6.4) a CP. See section 8 for a detailed discussion of this observation.

- (8) Az üvegajtón lévő és eddig nem használt sötétítőfüggöny be-húz.  
 the glass.door.on being and so.far not used shading.curtain PRT-draw  
 ‘I/you/she/etc. close/closes/closed the shading curtain that is on the glass door  
 and has not been used so far.’  
 (9) Két sör meg-isz.  
 two beer<sup>5</sup> PRT-drink  
 ‘I/you/she/etc. drink/drinks/drank two beers.’  
 (10) Hajam meg-szárít.  
 hair.POSS.1SG PRT-dry  
 ‘I/you/she/etc. dry/dries/dried my hair.’  
 (11) Minden polc le-töröl.  
 every shelf PRT-wipe  
 ‘I/you/she/etc. wipe/wipes/wiped off every shelf.’

<sup>5</sup> In Hungarian, nouns premodified by a numeral appear in the singular. Plural marking does occur in RTCs, as shown by (12) below.

The RTC object can be in the plural:

- (12) Ablak-ok be-csuk.  
window-PL PRT-close  
‘I/you/she/etc. close/closes/closed the windows.’

No subject is allowed in transitive or unergative RTCs, as (13) shows; however, a subject is allowed in unaccusatives, as (14) shows.

- (13) a. (\*Én) tévé be-kapcsol.  
I television PRT-switch  
‘I switch/switched on the television.’  
b. (\*Én) fut.  
I run  
‘I start/started.’

- (14) Én át-öltöz.<sup>6</sup>  
I PRT-dress  
‘I change/changed clothes.’

Reflexive pronouns are not acceptable as RTC objects:

- (15) a. Kez-em meg-mos.  
hand-1SG PRT-wash  
‘I/you/she/etc. wash/washes/washed my hands.’  
b. \*Magam meg-mos.  
myself PRT-wash  
Intended: ‘I wash/washed myself.’

Importantly, RTCs are not cases of incorporation (true or pseudo; Mithun 1984, Massam 2001, Farkas & De Swart 2003, Borik & Gehrke 2015). Objects in RTCs can be arbitrarily complex: heavily modified NPs, as in (8), QPs, as in (11), NumPs, as in (9) and (12), and even CPs, as in (45). Verb adjacency is not required: objects can be topicalized, heavy-XP shift is possible, and indirect objects typically intervene between the object and the verb (see section 6 and (70) in section 9). Objects are not number neutral, as (9) and (12) show. There is no requirement of newsworthiness or conceptual unity:

<sup>6</sup> The unaccusative status of *át-öltöz* ‘change clothes’ (lit. ‘dress across’) is evidenced by (i) the presence of a verb modifier in it, (ii) the fact that it can appear in an adjectival participle expressing anteriority (*az át-öltözött fiú* = the PRT-dress-PTCP boy, ‘the boy who changed clothes’), and (iii) the fact that it can appear in predicative adverbial participial phrases (*a fiú át van öltözve* = the boy PRT be.3SG dress-PTCP, ‘the boy has changed clothes’, lit. ‘the boy is in a state of having changed clothes’). See É. Kiss 2002:223–229. Other attestations of an unaccusative with an overt subject include *Csaj-ok meg-érkez* = girl-PL PRT-arrive, ‘(The) girls arrive/arrived’, *Pincérlány meg-jelen* = waitress PRT-appear, ‘The/a waitress appears/appeared’, *Tányér le-es* = plate PRT-fall ‘the/a plate falls/fell down’, *Víz ki-foly* = water PRT-flow, ‘The/some water leaks/leaked out’. See also (46) in section 7.

- (16) Borotvahab elő-vez.  
 shaving.foam PRT-take  
 ‘I/you/she/etc. take/takes/took out the shaving foam.’

Note also that the known cases of incorporation in Hungarian (Farkas & De Swart 2003) are very different from RTCs. First, incorporated objects are obligatorily accusative marked:

- (17) a. Újságot olvas-t-ak a lány-ok.  
 newspaper.ACC read-PST-3PL the girl-PL  
 ‘The girls read a/some newspapers.’ (The girls were engaged in newspaper reading.)  
 b. \*Újság olvas-t-ak a lány-ok.  
 newspaper read-PST-3PL the girl-PL

Also, incorporated objects and verbal particles are in complementary distribution:

- (18) a. Újságot olvas-t-ak a lány-ok.  
 newspaper.ACC read-PST-3PL the girl-PL  
 ‘The girls read a/some newspapers.’ (The girls were engaged in newspaper reading.)  
 b. \*Újságot el-olvas-t-ak a lány-ok.  
 newspaper.ACC PRT-read-PST-3PL the girl-PL

This is in stark contrast with RTCs, where objects cannot have accusative-case marking and verbal particles are typical.

In terms of operations targeting objects, topicalization is possible (but not obligatory) in RTCs (see section 6.1 for details), while focusing is impossible (section 6.2) and negation is only very marginally possible (section 6.3).

Table 1 summarizes the descriptive facts concerning RTCs.

**Table 1. Descriptive characterization of RTCs**

Property	Characterization
Word order	O–verbal particle–V
Case marking on object	None
φ features on verb	None
Infinitival suffix on verb	None
TAM marking on verb	None
Definite article on object	None
Object complexity	NP, DP, AdjP, NumP, PossP, QP, CP
Overt subject	Only with unaccusatives
Reflexive-pronoun object	None
Topicalization of object	Possible but not obligatory
Focusing	Impossible
Negation	Very marginally possible

### 3. A Note on Pragmatics

While the construction is productive, it is restricted pragmatically to describing a subevent (or succession of subevents) that have a well-defined containing event/situation. This containing situation can be contextually given or, as in (1), spelled out explicitly. Since an RTC is underspecified for tense, mood,  $\phi$  features, and so on, these have to be inferred by the hearer from contextual knowledge. In (1), the hearer infers based on the first half of the sentence that each RTC refers to an event in the past and involves a first-person singular actor (the speaker) as its external argument. Without a containing situation, out of the blue, RTCs are infelicitous since there is no way to infer the missing person/number/tense information from the context:

- (19) a. #Képzeld, szemét le-visz, szoba el-pakol.  
 imagine.IMP.2SG rubbish.NOM PRT-carry room-NOM PRT-pack  
 ‘Imagine, I/you/she/etc. take/takes/took out the rubbish,  
 clear/clears/cleared the room.’  
 b. Képzeld, a szemet-et le-vit-té-k, a szobá-t  
 imagine.IMP.2SG the rubbish-ACC PRT-carry-PST-3PL the room-ACC  
 el-pakol-tá-k.  
 PRT-pack-PST-3PL  
 ‘Imagine, they took out the rubbish, they cleared the room.’

Furthermore, RTCs are overwhelmingly telic (in my corpus of RTCs, 2,889 out of 3,032 are telic, ~95%): since RTCs typically describe a quick succession of nonoverlapping subevents, it is natural that atelic predicates are generally infelicitous, since by their unboundedness they would violate the condition on nonoverlapping. With the exception of inherently telic verbs (which are all derived via the denominal/deadjectival verbalizer *-ít*), a telicizing verbal particle is quasi-obligatory:

- (20) a. Könyv el-olvas.  
 book.NOM PRT-read  
 ‘I/you/she/etc. read/reads/read the book’ (the entire book: telic).  
 b. #Könyv olvas.  
 book.NOM read  
 Intended: ‘I/you/she/etc. read/reads/read the book’ (not necessarily the entire book: atelic).  
 c. Lazackocka pirít.  
 salmon.cube.NOM fry  
 ‘I/you/she/etc. fry/fries/fried the salmon cubes.’

RTCs are unspecified for illocutionary force: they can be interpreted as declarative, as in the examples above, or imperative, as in the following example.<sup>7</sup>

- (21) Pofa be-fog!  
 jaw PRT-keep  
 ‘Shut up!’ (Lit. ‘Keep your jaw closed!’)

There are no person or animacy restrictions on RTC subjects. The corpus attestations show that the only pragmatic requirement is that the missing external argument be recoverable from the context.

#### 4. Background: The VP in Hungarian

In my analysis, I will adhere to some fairly uncontroversial assumptions regarding Hungarian sentence structure. As far as vP and the inflectional domain is concerned, I assume the following structure (see Bartos 1999, Den Dikken 1999, É. Kiss 2002, among others).

- (22) [<sub>AgrSP</sub> [<sub>AgrOP</sub> [<sub>MoodP</sub> [<sub>TenseP</sub> [<sub>ModP</sub> [<sub>vP</sub> external argument [<sub>vP</sub> internal argument [<sub>v'</sub> V PRT]]]]]]]]]

In accord with Bartos 1999, I assume that the heads are joined to V via an operation called morphosyntactic merge and that the surface order of the suffixes is the mirror image of the morphosyntactic order (Baker 1985). In accord with É. Kiss 2006, I assume that verbal particles are phrasal and are base generated as complements of V (but nothing hinges on this particular choice; see section 9).

For the higher functional projections, I adopt the analysis of É. Kiss 2006 (see also Marác 1989, Brody 1995, Puskás 2000, Surányi 2003, Olsvay 2006, Surányi 2006a, for different proposals):

- (23) [<sub>CP</sub> [<sub>TopP</sub> [<sub>NegP</sub> [<sub>FocP</sub> [<sub>NegP</sub> [<sub>PredP</sub> [<sub>AgrSP</sub> . . . [<sub>vP</sub> [<sub>vP</sub> . . . ]]]]]]]]]]

I further assume that even in neutral sentences, the verb obligatorily moves to Pred<sup>0</sup> and the verbal particle moves to spec,PredP (É. Kiss 2006; see also Koopman & Szabolcsi 2000, Olsvay 2004, Csirmaz 2006, Surányi 2009b). This analysis is shown in (24). The word order of the postverbal elements is free: compare (24a) and (24b).

- (24) [<sub>PredP</sub> meg [<sub>Pred'</sub> ette [<sub>vP</sub> Péter [<sub>v'</sub> ~~ette~~ [<sub>vP</sub> a leves [<sub>v'</sub> ~~ette meg~~]]]]]]]  
 a. Meg-ette Péter a leves-t.  
 PRT-eat.PST.3SG Peter the soup-ACC  
 ‘Peter ate the soup.’  
 b. Meg-ette a leves-t Péter.

<sup>7</sup> They can also be used as interrogatives. Since, in Hungarian, interrogatives generally only differ from declaratives in intonation, this fact is not surprising.



The internal structure of the Hungarian VP (vP) has been long debated (Marác 1989, Brody 1995, É. Kiss 2002, Bene 2005, Surányi 2006a). While anaphora facts and the different behavior of unergative and unaccusative verbs seem to support a hierarchical VP with the external argument c-commanding (at some stage) the internal argument, other observations, concerning Binding Principle C violations, weak crossover, and the free postverbal word order, point to a flat VP. É. Kiss 2008 proposes a unified account, holding that as the verb moves to  $\text{Pred}^0$ , the vP is flattened: that is, at one stage of the derivation, the vP is hierarchical, but in later stages, it is flat. The hierarchical structure proposed is:

- (25) [<sub>VP</sub> external argument [<sub>V'</sub> v [<sub>VP</sub> internal argument [<sub>V'</sub> V verbal particle]]]

The proposal that the external argument is base generated in spec,vP and the internal argument in spec,VP is hardly controversial (see Larson 1988a and subsequent literature). With regard to the phrasal status of Hungarian verbal particles, É. Kiss 2006:44–47 and Surányi 2009b:209–212 convincingly argue for this. Here I limit myself to mentioning just three supporting observations: verbal particles can function as elliptical sentences (as short answers to yes/no questions); they can move nonlocally; and they can undergo focusing and contrastive topicalization. Finally, the analysis of verbal particles as complements to V is crosslinguistically well established (see Larson 1988a, 1988b, Winkler 1996). This analysis also complies with the predication theory of Williams 1980 and Rothstein 1985 in that the subject of secondary predication, the internal argument, c-commands its predicate, the verbal particle. (Verbs also impose categorial and lexical selectional requirements on verbal particles, another indication of a head–complement relationship.)

Intriguingly, however, while there is strong indirect evidence for the structure in (25), in full sentences, we can never directly observe the word order associated with this hierarchical vP, since it never emerges on the surface (the vP always flattens). We can only indirectly infer the structure based on tests and phenomena such as the unergative–unaccusative dichotomy and anaphora. Crucially, these only tell us about c-command relations, not head-final or head-initial status (unless taken in conjunction with a strict interpretation of the antisymmetry hypothesis of Kayne 1994).<sup>8</sup>

## 5. The Core Analysis

My claim is that in RTCs, what we see is this elusive creature: the Hungarian VP before V movement, emerging on the surface intact. That is, RTCs are simple VPs, lacking all the functional projections above VP, with the possible exception of NegP.

<sup>8</sup> RTC data in general and my proposal in particular are actually also compatible with those proposals that assume that the VP remains hierarchical all the way through the derivation. The important point is that, in full sentences, V and the verbal particle evacuate the VP, making the original, underlying VP-internal hierarchical relations unobservable, whether or not flattening actually takes place.

This analysis naturally explains the lack of  $\phi$ -feature agreement,<sup>9</sup> tense, mood, modality, and higher functional projections (such as focus).

The lack of accusative-case marking on the object and the fact that external arguments cannot be realized are both due to the lack of a vP layer: in the absence of v, accusative case cannot be assigned, and the absence of the spec,vP position means that no external arguments can be base generated (Bowers 1993, Chomsky 1995, Kratzer 1996).<sup>10</sup> Because of the lack of accusative-case assignment, the object

<sup>9</sup> A reviewer points out that since (i) external arguments in RTCs are syntactically unrealized and (ii) the third-person singular subject-agreement suffix and the indefinite object-agreement suffix in Hungarian are (in general) phonologically null, it would be technically possible to argue that instead of a lack of agreement, what we have is default third-person singular indefinite agreement; in other words, what we see on the surface may be not the root form of the verb, V, but rather its “third-person singular default form,” as the reviewer puts it: [[[V . . . ] 3SG] INDEF]. Evidence against this comes from the class of verbs where the third-person singular suffix has the nonnull spellout *-ik*: the so-called *-ik* verbs, already mentioned in section 2. In my corpus, there are 45 *-ik* verbs; all but two of them appear in an *-ik*-less form. Here are a couple of examples.

(i) Fél liter víz meg-*isz*.  
half liter water PRT-drink  
‘I/you/she/etc. drink/drinks/drank a half liter of water.’

(ii) Csend-ben gyógyszer be-*vesz*, vissza-*feksz*.  
silence-in medicine PRT-take PRT-lie  
‘I/you/she/etc. silently take/takes/took the medicine and lie/lies/lay down again.’

There does seem to be a gap here between production and perception. On the one hand, corpus data show that speakers are perfectly willing to produce stem forms such as *meg-*isz** and *vissza-*feksz** in RTCs, and indeed, third-person singular indefinite forms such as *meg-*isz-ik** or *vissza-*feksz-ik** are unattested. At the same time, grammaticality-judgment tests show that RTCs containing *-ik* verbs (where the stem form and the third-person singular indefinite form are surface different) are somewhat less acceptable than RTCs containing non-*-ik* verbs (where the stem form and the third-person singular indefinite form are surface similar).

I think this reflects a frequency and analogy effect. Note first that RTCs typically have transitive predicates while, for diachronic reasons, most *-ik* verbs are intransitive: see Halm 2020. For this reason, *-ik* verbs are in general rare in RTCs: in my corpus of 3,032 RTC occurrences, only 57 are *-ik* verbs. This means that test participants were less likely to have been exposed to stem forms of *-ik* verbs than to stem forms of non-*-ik* verbs. This fundamental frequency effect is probably exacerbated by another factor: the acceptance of the stem forms of non-*-ik* verbs is probably boosted by their surface similarity to another form in their paradigm, namely, the third-person singular indefinite form. As we have seen, the stem forms of *-ik* verbs are not surface similar to the third-person singular indefinite form (or indeed any other form). Because of this double effect, they probably sound significantly more unfamiliar to hearers than the stem forms of non-*-ik* verbs.

<sup>10</sup> For simplicity, I assume here that v is responsible for both accusative-case marking and the introduction of the external-argument position. Nothing hinges on this, however: my proposal is fully compatible with frameworks that assume separate vP and VoiceP projections (see Harley 2013, Legate 2014 for recent overviews). Since I propose that all the functional projections above VP are missing in RTCs, this naturally includes VoiceP as well as vP, if they exist separately in Hungarian, a point on which I do not take a position in this article.

emerges in the nominative (with no overt case marking).<sup>11</sup> This dovetails with crosslinguistically supported proposals that treat the nominative as “caseless” (Bittner & Hale 1996), the “default case” (Marantz 1992, Schütze 2001), “no case at all” (Kornfilt & Preminger 2015). It also dovetails with Matushansky 2012’s observation that in small clauses in Hungarian, Finnish, and Estonian, the case of a predicate nominal depends on the complexity of the clause: nominative in the least complex clauses and dative, translative, or sublativ in more complex clauses. Additional evidence for the lack of an external argument comes from the observation that reflexive-pronoun objects are unacceptable in RTCs (see (15)),<sup>12</sup> something that is

<sup>11</sup> The lack of accusative-case assignment in transitive RTCs is actually compatible with a dependent-case theory too (Marantz 1992): since the external argument is not generated, there is no c-commanding argument nominal above the object, leading to a failure to assign dependent accusative case. Where an agreement-based case-assignment theory and a dependent-case-assignment theory would make different predictions is in RTCs that involve a predicate with two VP-internal arguments: here, the *v* head is missing, but there are two argument nominals in an asymmetric c-command relation. Dative-experiencer verbs of the *piacere* class such as *tetsz-ik* ‘appeals to’ and object-experiencer verbs of the *preoccupare* class such as *aggaszt* ‘worry’ and *bosszant* ‘irritate’ are indeed analyzed as having two internal arguments on their stative reading (Rákosi 2015). However, unfortunately for our purposes, none of these verbs are attested in RTCs. This is probably due to the fact that RTCs have to be telic (see section 3). Telic experiencer predicates are attested in RTCs (e.g., *Tábla észre-vesz* = traffic.sign PRT-take, ‘I/you/she/etc. notice/notices/noticed the traffic sign’); however, they are standardly analyzed as having a transitive structure, with an external-argument experiencer.

<sup>12</sup> Whether one assumes that a reflexive-pronoun object is *licensed* by an external argument or *is* itself an external argument (Marantz 1984, Kayne 1988), the unacceptability of reflexive-pronoun objects in RTCs points to the absence of an external argument.

corroborated both by the corpus data and by grammaticality judgments (see the appendix: supporting information, file 1).<sup>13</sup>

The strict word order of these deficient clauses is further evidence that the VP (prior to V moving out) is indeed hierarchical underlyingly. However, in contrast to earlier proposals, the word order of this minimal VP is strictly head final: O-verbal particle-V. The most straightforward way to derive this is to assume the following structure.<sup>14</sup>

- (26)      Sör                          meg                          íz.  
[<sub>VP</sub> internal argument [<sub>V'</sub> verbal particle V]]  
         beer                          PRT                          drink  
'I/you/she/etc. drink/drinks/drank the beer.'

The internal argument is generated in spec,VP (as standardly assumed for themes; note that RTCs are typically telic, as discussed in section 3 in relation to (20): i.e., they have a theme internal argument), and the verbal particle is a complement to the left of V. The alternative would be to assume an [<sub>VP</sub> O [<sub>V'</sub> V verbal particle]] structure

<sup>13</sup> Further evidence for the lack of a vP layer comes from the apparently optional drop of the semiproductive verbalizing suffix *-VI* in RTCs (*V* here means *vowel*, the phonological realization of which is governed by the vowel-harmony rules of Hungarian; see Rebrus & Törkenczy 2015, among others). This suffix appears productive in the sense that it can apply to novel words, such as recent loanwords:

- (i) tverk-el  
twerk<sub>N-VBLZ</sub>  
'twerk<sub>V</sub>'

At the same time, in many cases, *-VI* suffixation appears to be semantically nontransparent: for instance, *kapocs* means ‘link<sub>N</sub>’, whereas *fel-kapocs-ol* = *PRT-link<sub>N</sub>-VBLZ* means ‘switch on (electronic device)’. Thus, whether a noun + *VI* string is to be represented as a *N* + *VBLZ* compound or as a monolithic lexical verb, *V*, is not straightforward, and interspeaker variation is possible (i.e., the same string may be represented as *N* + *VBLZ* for one speaker and *V* for another speaker). In any case, if *RTCs* lack *vP* and if *-VI* is—at least for some speakers, with some verbs—a verbalizer in *v*<sup>0</sup>, then we would expect to find some attestations of *-VI* being dropped in *RTCs*. Intriguingly, this is in fact the case:

- (ii) Öv be-csat, rádió be-állít.  
 belt PRT-buckle<sub>N</sub> radio PRT-tune  
 'I/you/she/etc. fasten/fastens/fastened the seatbelt, turn/turns/turned on the radio.'

In my corpus, out of 334 potential cases, *-VI* is dropped in 174 cases (see supporting information, file 2). The fact that the same verbs, such as *fel-kapcs-ol* ‘switch on’, are attested both with and without *-VI* suggests that two different parses are available for them: *[kapcsol]<sub>V</sub>* versus *[[kapcs]<sub>N</sub> + [ol]<sub>VB.LZ</sub>]<sub>V</sub>*. The variation in the relative frequency of suffix drop may reflect interverb variation as to degree of transparency (e.g., *kapcs-ol* may be transparent for more speakers than *csomag-ol* is). Alternatively, the pattern may reflect a simple frequency effect: since *ki-kapcs-ol* and *be-kapcs-ol* are vastly more frequent in RTCs than the other verbs, respondents are likely to have heard the verbalizerless forms of these verbs more frequently than the verbalizerless forms of *le-park-ol* and *be-csomag-ol*. Further research, including production tests, is needed to clarify this question. For the results of grammaticality-judgment tests, see the appendix (supporting information, file 1).

<sup>14</sup> In terms of linearization, I assume that specifiers precede the head and its complement, whereas the linear order of the head and the complement is a function of headedness: a left-branching complement linearly precedes the head, whereas a right-branching complement linearly follows the head.

and derive the O–verbal particle–V surface order of RTCs by stipulating a set of movements (either movement of the elements of VP out of VP or remnant movement of VP itself; see, e.g., Zwart 1993, Koster 1994, Zwart 1997 for the former and Hinterhölzl 1997, Haegeman 2000 for the latter). Note, however, that in RTCs, the lack of structure above VP means that there are no structural positions that these hypothetical movements could target. This means that while the object may be topicalized, the verbal particle and V are stuck in their base-generated positions within the VP.

My argument thus is that while Hungarian seems to be VO on the surface (at the TP level), it is in fact revealed to be OV if one looks deeper into the structure (to the VP level). The idea that an apparently head-initial language may in fact be head final (or vice versa) is not new (see Bach 1962 or Ross 1967 on German). However, RTCs in Hungarian, being VPs without any additional structure and exhibiting a strict OV surface linear order, provide us a unique opportunity to examine the predictions of certain theories concerning OV–VO (or headedness in general).

For reasons of space, I will focus here on the two arguably most influential theories currently, the Linear-Correspondence Axiom of Kayne 1994, 1998 and the Basic Branching Constraint (plus the general view of the directionality of licensing) of Haider 1992, 2000. Under Kayne’s Linear-Correspondence Axiom, the linear order of elements is the function of asymmetric c-command relations: this means, among other things, that all projections are (underlyingly) head initial. Surface orders where a complement does in fact precede the head do exist, but these are invariably the result of movement operations. To consider a famous example, the OV order in Dutch subordinate clauses is taken to be derived from a VO base through movements that evacuate the VP (Zwart 1993: chap. 4, Koster 1994):

- (27) . . . dat [A<sub>gr</sub>SP Jan<sub>1</sub> [A<sub>gr</sub>OP het boek<sub>2</sub> [PredP op de tafel<sub>3</sub> [V<sub>P</sub> wil t<sub>1</sub>  
that John the book on the table will  
leggen t<sub>2</sub> t<sub>3</sub>]]]]  
put  
‘that John will put the book on the table’

Haider’s alternative theory assumes that the linearization of a head–complement relation is the function of a general parameter that concerns the directionality of structural licensing. Licensing to the left gives rise to an OV structure and licensing to the right gives rise to a VO structure. Haider also stipulates that a projecting node always has to follow a nonprojecting sister node: the Branching Constraint axiom. This means that objects are left complements to the verb; that is, OV is the basic, nonderived word order. In the case of left licensing, the licensing requirements and the Branching Constraint axiom are both satisfied in situ: no movement of the verb or the object is needed. In the case of right licensing, the verb needs to be head-moved to the left into a higher position so that it can occupy a position from which to right license the object.

Kayne thus takes VO to be basic and OV to be derived by the movement of the arguments out of VP and possibly subsequent remnant movement of the (partially) evacuated VP. Haider takes OV to be basic and VO to be derived by head movement of V to higher positions. Since RTCs (i) are strictly OV on the surface and (ii) lack any higher functional positions that movements of the object or remnant movement of the VP might target, they provide us new linguistic data that are easily compatible with a Haider-style account but appear incompatible with a Kayne-style account.

I wish to clarify that I naturally do not consider this a knockout argument in the OV–VO debate: I think this is simply a novel observation, a piece of data that should be added to the plethora of observations against which any theoretical accounts of OV–VO should be tested. I hasten to add that, besides Haider 1992, 2000, the RTC data appear to be in principle compatible with many earlier accounts as well, notably those that assume a category-specific or even general headedness parameter (see Svenonius 2000 for an overview). Unfortunately, this topic needs to be left for further research for the time being; the potential directions are briefly outlined in the conclusion of this article.

A terminological note might be in order at this point. Clauses that lack some otherwise expected layers have been described in the literature as *truncated* before (see Rizzi 1993 and subsequent work on root infinitives and language acquisition, discussed in section 10); I follow this tradition here. While in everyday usage *truncation* may suggest the removal of some existing material, this is not the sense in which it has been used in the linguistic literature: truncated clauses are typically ones that lack some layers because those layers were never built up in the first place. It is in this very technical sense that I use *truncated* in this article.

My claim thus is that RTCs arise in situations where speakers terminate the derivation of a clause prematurely, at the VP level, and send the VP to spellout (PF) and semantic interpretation (LF). The motivation for this is to maximize the efficiency of the exchange of information: if all the information that is encoded above VP can be assumed to be safely recoverable by the hearer from the context, it might make sense not to waste time and effort building the above-VP level.<sup>15</sup> However, such early termination and spellout comes at a serious price in that it constitutes a breach of various grammaticality conditions: the Theta Criterion (since the external-argument role is not assigned to any element in an RTC); spellout by phase (since the phase head *v* is not merged, yet VP is spelled out); semantic interpretability at LF (the external argument of the predicate is not represented in the structure since spec, VoiceP/vP is not projected, meaning that the structure sent to LF has an unsaturated argument slot); and the principle that the numeration needs to be exhausted (since several elements of the numeration are not used up in RTCs). In the grammaticality-judgment survey (see the appendix: supporting information, file 1), RTCs were judged as acceptable but degraded in a colloquial speech situation (receiving an

<sup>15</sup> One reviewer expresses their general skepticism with regard to such “functional” explanations for the lack of syntactic layers. While I agree with the reviewer that there does not exist an “economy metric” along which to exactly quantify the effort and time of building a syntactic structure, I think it is fairly reasonable to assume that building structure B takes more effort than building structure A if in order to build structure B, one first needs to build structure A.

average score of 4.2 on a 1-to-7 Likert scale; grammatical non-RTCs received 6.8 and ungrammatical non-RTCs received 1.2). This sheds light on the different factors of grammaticality. RTCs are properly built, faultless VPs: in this sense, they breach no rules of grammar. However, the fact that the derivation is terminated prematurely at the VP stage is in itself a breach of various fundamental rules. This complex situation is reflected in RTCs' degraded but acceptable status in colloquial registers.<sup>16</sup>

## 6. Operations Targeting RTCs

In a database compiled through extensive corpus search (containing 3,032 tokens of RTCs), in more than 75% of RTCs, we find the pure O–verbal particle–V sequence. Certain (X)–O–(X)–verbal particle–V sequences are also attested and are judged as grammatical by speakers. Importantly, however, the O–verbal particle–V order is never violated. In this section, I will look at the possibility of topicalization and the availability of higher functional projections, namely FocP and NegP. (As I argued in section 5, the lower, morphosyntactic sequence of projections is not projected and neither are PredP and vP.)

### 6.1. Topicalization as Adjunction: Possible but Not Obligatory

Topicalization is a fairly flexible operation in Hungarian: topics can be left adjoined to PredP, FocP, or NegP, and there is no principled reason why topics cannot be adjoined to a pure VP. One standard test of the topic–predicate boundary in Hungarian involves manner adverbs (see É. Kiss 2002). Most manner adverbs, such as *óvatosan* 'carefully', can be left adjoined to PredP or VP but crucially not to a topic. (Other manner adverbs, such as *gyorsan* 'quickly', can also be adjoined to topics under certain pragmatic conditions.) *Óvatosan* is attested in RTCs in two positions:<sup>17</sup>

- (28) a. [<sub>VP</sub> *Óvatosan* [<sub>VP</sub> *ajtó ki-nyit*]].  
           carefully           door PRT-open  
           'I/you/she/etc. open/opens/opened the door carefully.'
- b. [<sub>VP</sub> *Ajtó* [<sub>VP</sub> *óvatosan* [<sub>VP</sub> ~~*ajtó*~~ *ki-nyit*]]].  
           door           carefully           door PRT-open  
           'The door, I/you/she/etc. open/opens/opened carefully.'

<sup>16</sup> As a possible analytical alternative, a reviewer wonders whether RTCs could not be analyzed as some sort of passive construction or as something similar to the absolute participial small clauses known from Romance:

(i) Une fois la porte ouverte, j'ai été assailli par la fumée.  
       once     the door open.PTCP.FEM I.have been beset by the smoke  
       'After the door was opened, I was immediately beset by smoke.'

Hungarian does not have a passive construction—this makes a passive-like analysis of RTCs implausible. Also, ergatives are attested in RTCs too (see (13b)). Unlike the Romance construction, RTCs lack any participial suffixation (indeed, any suffixation). Finally, RTCs are interpreted as propositions denoting events (see section 2), and a single RTC can constitute a complete utterance, whereas absolute participial small clauses have a temporal adverbial interpretation and cannot appear on their own.

<sup>17</sup> The availability of both positions is evidenced by corpus attestations and also by the results of the grammaticality-judgment survey (see the appendix: supporting information, file 1).

Since *óvatosan* can be left adjoined to VP but not to a topic, we can conclude that the object is in situ in VP in (28a) and has been topicalized in (28b). Thus, while RTCs are minimally VPs, topicalization of the object is possible. Crucially, topics in Hungarian are always left adjoined and topicalization does not induce verb movement: this means that topicalization of the object keeps the O–verbal particle–V order intact (it moves the leftmost element O further to the left, and since the V stays within VP, the VP does not flatten). The availability of topicalization accounts for O–X–verbal particle–V sentences such as:

- (29) [<sub>VP</sub> Telefon [<sub>VP</sub> éppen a pillanatban [<sub>VP</sub> ~~telefon~~ le-tesz]]].  
 phone this.in the moment.in phone PRT-put  
 ‘I/you/she/etc. put/puts/put the phone down this very moment.’

The PP *éppen a pillanatban* ‘in this moment’ is adjoined to the VP, and the NP *telefon* is topicalized (for the adjunction analysis of adverbials in the Hungarian sentence, see É. Kiss 2010a). Naturally, the object can also remain in situ, which results in X–O–verbal particle–V sequences:

- (30) [<sub>VP</sub> Egy ablakkal arrébb [<sub>VP</sub> csekk be-fizet]].  
 one window.with further bill PRT-pay  
 ‘I/you/she/etc. pay/pays/paid the bill at the next window.’

Crucially, the adverb-placement facts illustrated in (28)–(30) show that topicalization in RTCs is possible but not obligatory. Additional evidence for the existence of topicless RTCs comes from idioms involving nonreferential objects. In such idioms, the object is strongly nonreferential and thus cannot be topicalized. Consider:

- (31) a. János ki-ver-te a balhét-t.  
 John PRT-beat-PST.3SG.DEF the trouble-ACC  
 Literal meaning: ‘John beat out the trouble.’  
 Idiomatic meaning: ‘John protested very strongly.’  
 b. \*A balhét ki-ver-te János.

The ungrammaticality of (31b) is strong: in the Hungarian National Corpus, looking at non-RTCs, the nontopicalized word order is attested 38 times and the topicalized word order zero times. Consider also:

- (32) a. Mari ki-ver-te a biztosíték-ot.  
 Mary PRT-beat-PST.3SG.DEF the fuse-ACC  
 Literal meaning: ‘Mary broke the fuse.’  
 Idiomatic meaning: ‘Mary caused consternation.’



- b. \*A biztosítékot ki-ver-te Mari.

Here, the nontopicalized word order is attested 707 times and the topicalized word order zero times in the Hungarian National Corpus. Both of these idioms, and many others with nontopicalizable nonreferential objects, are attested as RTCs in my corpus: examples are in (33). Such RTCs are also judged as acceptable by native speakers. (See table A11 of the appendix—supporting information, file 1—for the judgments and file 4 for the corpus data).

- (33) a. Balhé ki-ver.  
trouble PRT-beat  
'I/you/she/etc. protest/protests/protested very strongly.'
- b. Biztosíték ki-ver.  
fuse PRT-beat  
'I/you/she/etc. cause/causes/caused consternation.'
- c. Kalap meg-emel.  
hat PRT-lift  
'I/you/she/etc. express/expresses/expressed admiration.'
- d. Fonal el-veszít/fel-vesz.  
thread PRT-lose/PRT-take  
'I/you/she/etc. lose/loses/lost the plot.'  
'I/you/she/etc. start/starts/started to follow the plot.'
- e. Csatabárd el-ás.  
battle.ax PRT-bury  
'I/you/she/etc. bury/buries/buried the hatchet.'
- f. Biztosíték ki-csap/le-ver.  
fuse PRT-hit/PRT-beat  
'I/you/she/etc. cause/causes/caused consternation.'

This proves that topicalization in RTCs is not obligatory: otherwise, these idioms with nontopicalizable objects would be unavailable as RTCs.

A reviewer points to the apparently pair-list character of RTCs as potential evidence for an obligatory topic–comment structure. While it is true that many RTCs indeed have a pair-list character, it is not the case that all of them do. As just discussed, topicless propositions with nonreferential objects are perfectly acceptable as RTCs (they freely occur in corpora and are rated by native speakers as no less acceptable than RTCs containing a topic). Note also that even in cases where the object of an RTC is clearly referential, it is far from certain that the corresponding full sentence would have a topicalized object. Consider the following full-sentence counterparts to our initial RTC example in (1).

- (34) Namármost amikor én alud-t-am ott, úgy kezd-t-em, hogy . . .  
well when I slept-PST-1SG there so start-PST-1SG that  
'So when I was sleeping there, the way I started was . . .'

- a. . . le-vit-t-em a szemet-et, rendbe-rak-t-am a szobá-t,  
PRT-carry-PST-1SG the rubbish-ACC PRT-put-PST-1SG the room-ACC  
el-pakol-t-am a fürdőszobá-t.  
PRT-pack-PST-1SG the bathroom-ACC  
' . . . I took out the rubbish, I cleared the room, I cleared the bathroom.'
- b. . . a szemet-et le-vit-t-em, a szobá-t rendbe  
the rubbish-ACC PRT-carry-PST-1SG the room-ACC PRT  
rak-t-am, a fürdőszobá-t el-pakol-t-am.  
put-PST-1SG the bathroom-ACC PRT-pack-PST-1SG  
' . . . I took out the rubbish, I cleared the room, I cleared the bathroom.'

It is not the case that the version in (34b), with topicalized objects, sounds more natural than (34a), with in-situ objects. In fact, native speakers assigned (34a) a slightly higher score than (34b) in the grammaticality-judgment test (6.2 versus 5.9; see table A1 in the appendix: supporting information, file 1). This shows that even though a series of RTCs describes a series of subevents, as in (1), it does not automatically follow that the RTCs will each have a topic-comment pairwise character.

To conclude, there are strong arguments in favor of the nonobligatoriness of topicalization (adverb-placement facts and the availability of nonreferential idiomatic objects), and the possible counterarguments appear to be unconvincing.

### 6.2. *Focusing: Not Possible*

The two hallmarks of the identificational-focus construction in Hungarian (see Szabolcsi 1981, Horvath 1986, Kenesei 1986, Brody 1995, É. Kiss 1998, Horvath 2004, É. Kiss 2010b, among others) are inversion of the verb and verbal particle and a special intonation contour. The focused element receives heavy stress, and all the elements that follow the focused element are obligatorily destressed:

- (35) 'JÁNOS hívta meg Marit.  
John invite-PST.3SG PRT Mary-ACC  
'It was John who invited Mary.'

Importantly, however, verbal particle–V inversion is only obligatory in tensed clauses; in tenseless clauses (such as infinitives or participles), it is optional (Brody 1995). Since RTCs are tenseless, the fact that the O–V–verbal particle order is unattested does not, in itself, rule out the focus construction. However, in radically truncated clauses, both O and verbal particle + V are obligatorily stressed (the verbal particle and V form a single phonological word), which rules out focus, since after a focused O, verbal particle + V would be destressed:

- (36) a. 'Ajtó 'be-csuk.  
door PRT-close  
'I/you/she/etc. close/closes/closed the door.'

- b. \*'AJTÓ be-csuk.  
 door PRT-close  
 Intended: 'It is the door that I/you/she/etc. close/closes/closed.'

### 6.3. Negation: Marginally Available?

Negation is only very marginally attested in RTCs (22 cases out of 3,032 total, <1%). All attestations are O–Neg–verbal particle–V:

- (37) a. Telefon nem fel-vesz.  
 phone not PRT-pick  
 'I/you/she/etc. do/does/did not pick up the phone.'
- b. \*Nem telefon fel-vesz.  
 not phone PRT-pick  
 'I/you/she/etc. do/does/did not pick up the phone.'

The grammaticality-judgment survey shows average scores of 2.7 for O–Neg–verbal particle–V and 1.2 for Neg–O–verbal particle–V (see table A15 in the appendix: supporting information, file 1). This confirms that negation as such is only very marginally acceptable in RTCs. There does appear, however, to be a contrast between the two word orders. In this section, I will examine what might be the reason for this contrast.

Descriptively speaking, clausal negation in finite clauses in Hungarian involves inversion of the verbal particle and V:

- (38) a. Meg-látogatja János Mari-t.  
 PRT-visits John Mary-ACC  
 'John visits Mary.'
- b. Nem látogatja meg János Mari-t.  
 not visits PRT John Mary-ACC  
 'John does not visit Mary.'

Neg and V are immediately adjacent and form a single phonological word. There is one exception: a focused element can intervene between Neg and V. The following illustrates the possible configurations involving negation and focus.

- (39) a. JÁNOS látogatja meg Mari-t.  
 John visits PRT Mary-ACC  
 'It is John that visits Mary.'
- b. Nem JÁNOS látogatja meg Mari-t.  
 not John visits PRT Mary-ACC  
 'It is not John that visits Mary.'

- c. JÁNOS nem látogatja meg Mari-t.  
 John not visits PRT Mary-ACC  
 'It is John that does not visit Mary.'
- d. Nem JÁNOS nem látogatja meg Mari-t.  
 not John not visits PRT Mary-ACC  
 'It is not John that does not visit Mary.'

Like negation, focusing also involves verbal particle–V inversion. Importantly, the focus and the verb (or the focus and the negated verb) also have to form a single phonological word (Kenesei 1994:330). This means that Neg and V always form a single phonological word (Neg + V or Neg + Foc + V).

Various models have been proposed to account for the facts above. Olsvay 2000 and Puskás 2000 assume that negation involves a NegP that dominates TP. The negation particle is base generated in Neg<sup>0</sup>, spec,NegP is filled by an empty operator, and the verb is adjoined to Neg<sup>0</sup> to form a complex head. In the case of focusing above negation, this complex head moves further to Foc<sup>0</sup>. Surányi 2002 points out problematic aspects of this account and instead proposes that the locus of both focusing and negation is a projection dubbed ZP, which, in the case of focusing and negation both being present, has two specifiers, one of them housing the focused element and the other the negation particle. (For cases such as (39d) above, Surányi argues that the higher negation is an instance of metalinguistic negation.) As an alternative to this, several authors have proposed that there are two NegPs in Hungarian (Olsvay 1998, Szendrői 1998, Olsvay 2000, É. Kiss 2002, Olsvay 2006). É. Kiss 2008 and É. Kiss 2009 argue, in accord with Olsvay 2000, that in nonneutral sentences (i.e., sentences with focus or clausal negation) PredP is dominated by a projection (called Nonneutral Phrase or NNP) whose function is to type shift the PredP so that it can serve as an input to negation or focusing (in essence, this type change turns PredP from a predicate into an argument of a predicate). V inversion happens because of the obligatory movement of V into NN<sup>0</sup>:

(40) [<sub>NegP</sub> Neg [<sub>NNP</sub> [<sub>NN'</sub> V [<sub>PredP</sub> verbal particle [<sub>Pred'</sub>  $\nabla$  . . . ]]]]]

All these proposals involve a movement of the verb induced by negation, either into the head of NegP or to the head of NNP, a movement that results in the verb forming a single phonological word with the negation particle (Neg + V or Neg + Foc + V). One crucial contrast is that while most proposals assume that NegP or ZP directly dominates the extended verbal projection (TP/AspP/PredP), É. Kiss claims that PredP in itself cannot be a complement of Neg<sup>0</sup> or Foc<sup>0</sup>.

With these preliminaries in mind, we have three issues to account for with regard to negated RTCs: (i) their rarity, (ii) the lack of verbal particle–V inversion, and (iii) the strict O–Neg–verbal particle–V word order.

The lack of inversion is, in fact, not that surprising: while negation obligatorily triggers verbal particle–V inversion in tensed clauses in Hungarian, it is well known

that the inversion is only optional (and in fact marked) in tenseless clauses such as infinitives or participles (Brody 1995):

- (41) a. Hiba volt nem meg-hív-ni Marit.  
 mistake was not PRT-invite-INF Mary-ACC  
 'It was a mistake not to invite Mary.'
- b. ?Hiba volt nem hív-ni meg Marit.  
 mistake was not invite-INF PRT Mary-ACC

With respect to the rarity of negation in RTCs, recall that our general observation about RTCs is the overall lack of dedicated functional projections above VP. In particular, as established in the previous section, the focus projection is completely unattested in RTCs. Given the otherwise very close structural similarity of focus and negation in the Hungarian sentence, one might in fact expect that if one of them is unavailable, then the other is unavailable too. Note that the proposal of Surányi 2002, where focus and negation are housed in the specifiers of the same projection, actually predicts this. As far as those proposals are concerned where NegP directly dominates PredP/AspP/TP, there is in principle no reason why a NegP could not directly dominate VP (in the absence of PredP/AspP/TP). One possible explanation of why negation is very marginally available whereas focusing is completely unattested is that while focusing always requires Merge and Move (since the focused material has to be fronted), negation in nonfinite clauses is possible without movement.

The final riddle is the strict O–Neg–verbal particle–V word order. Under our assumptions, NegP dominates VP: [<sub>NegP</sub> Neg [<sub>VP</sub> O verbal particle V]]. This means that the expected word order in topicless RTCs is Neg–O–verbal particle–V. This is, however, unattested. I will consider two possible explanations of why only O–Neg–verbal particle–V is attested.

If one looks at the 22 cases of negated RTCs attested in the database, it is striking that in all of them, the object is a specific NP having an existential presupposition. This suggests that the word-order facts might be related to the crosslinguistically well-attested constraint that requires an indefinite within the scope of negation to receive a nonspecific interpretation. Scope relations are known to be reflected in overt syntax in Hungarian (as far as the preverbal field, the left periphery, is concerned). This means that an NP wedged between Neg and V would be interpreted as being within the scope of negation and, as such, being a nonspecific indefinite:

- (42) [<sub>NegP</sub> Neg [<sub>VP</sub> O verbal particle V]]

In order to ensure a specific interpretation, the NP needs to be topicalized, resulting in the observed word order:<sup>18</sup>

- (43) [<sub>TopP</sub> O [<sub>NegP</sub> Neg [<sub>VP</sub>  $\Theta$  verbal particle V]]

An alternative explanation can also be formulated, based on independently attested phonological properties of the negation particle and the verb. In all configurations in nontruncated sentences, the negation particle and the verb form a single phonological word: Neg + V or Neg + Foc + V in finite clauses, Neg + verbal particle + V in nonfinite clauses. In finite clauses, this phonological constraint is satisfied trivially in overt syntax by negation-induced verb movement. In nonfinite clauses, NegP dominates PredP/AspP/TP directly, meaning that Neg is adjacent to the verbal particle that directly precedes V (since the verbal particle is in spec,PredP and V is in Pred<sup>0</sup>). The verbal particle and V are known to form a single phonological word when the verbal particle immediately precedes V; thus, Neg, the verbal particle, and V form a single phonological word in nonfinite clauses.

In RTCs, however, this linear-adjacency requirement can only be satisfied by a postsyntactic PF operation. First, there is no negation-induced verb movement; this is the case for nonfinite clauses as well. Second, there is no movement of the verbal particle to spec,PredP (or spec,AspP or spec,TP, depending on one's theory) and no movement of V to Pred<sup>0</sup> (or Asp<sup>0</sup> or T<sup>0</sup>); this is unique to RTCs. As a result, the phonological requirement of linear adjacency of Neg and (verbal particle +) V is not satisfied in visible syntax. The only way to remedy this is by linearizing Neg at PF immediately to the left of verbal particle + V.<sup>19</sup>

(Such phonologically motivated operations at PF have been stipulated in Hungarian for various phenomena, such as the D-deletion rule that Szabolcsi 1992 proposes and

<sup>18</sup> A short remark is in order here. For independent syntactic reasons (the fact that NegP cannot dominate TopP), in non-RTCs the object actually never ends up between Neg and V (unless it is focused). This means that in non-RTCs, the problem just discussed simply does not arise. In a non-RTC, a specific object can stay in situ, in which case it is linearized postverbally. Since scope relations between the preverbal field and the postverbal field are not reflected in word order or prosody, a postverbal NP can be interpreted as having scope over negation, that is, as specific; or a specific object may be topicalized, in which case it has overt scope above negation in the preverbal field. In RTCs, on the other hand, the object cannot be postverbal (since the verb is stuck in situ). So the only way for O to have scope over negation and thus to receive a specific interpretation is for it to be topicalized.

<sup>19</sup> There is an interesting parallel here with participial relatives, which are known to be head final in Hungarian. The Neg + verbal particle + V word order is obligatory in them too:

- (i) a   nem meg-old-ott    matekpélda  
       the   not   PRT-solve-PTCP math.problem  
       'the math problem that has not been solved'
- (ii) a   matekpéldát       nem meg-old-ó    diák  
       the math.problem-ACC not   PRT-solve-PTCP student  
       'the student who did not solve the math problem'

I am grateful to K. É. Kiss (p.c.) for calling my attention to this.

the reordering of the elements in the postverbal field according to their phonological weight that É. Kiss 2008 proposes. Note also that this proposed phonological requirement concerning Neg and V can be thought of as a natural extension of the well-established one concerning Foc and V, originally proposed by Kenesei 1994, on which see discussion of (39) above.)

Where these two alternative analyses make different predictions is with respect to whether the Neg–O–verbal particle–V word order is available with nonspecific objects. However, since negation as such is only very marginally available (~1%), the different predictions are difficult to test straightforwardly.<sup>20</sup> (Note also that most RTCs are telic verbs with verbal particles, which typically require specific objects.)

#### 6.4. O–verbal particle–V–X

Some vanishingly rare instances of material to the right of V are attested (70 cases out of 3,032, ~2%). However, these are principled exceptions and do not violate the head finality of VP. They are either due to right adjunction of free adjuncts and adverbials (something that Hungarian generally allows: see É. Kiss 2010a) or to heavy-CP shift:

- (44) [<sub>VP</sub> [<sub>VP</sub> Gyógyszer ki-vált] [<sub>PP</sub> teljes ár-on]].  
 medicine PRT-redeem complete price-on  
 ‘I/you/she/etc. buy/buys/bought the medicine at full price.’
- (45) [<sub>VP</sub> Kávézóban [<sub>VP</sub> ~~merre vannak a koalák~~ meg-kérdez] [<sub>CP</sub> merre  
 café.in where are the koalas PRT-ask where  
 vannak a koalák]].  
 are the koalas  
 ‘I/you/she/etc. ask/asks/asked in the café where the koalas are.’

### 7. Lack of Definite Article

As we saw in (7), the objects of RTCs cannot have a definite article. The definite article is unavailable even in cases where a contextually salient, unique entity is being referred to. However, proper names (standardly analyzed as DPs) are admitted:

- (46) Anya fel-öltöz, Malacka le-vetkőz.  
 mother PRT-dress Piglet PRT-undress  
 ‘Mother gets/got dressed, Piglet undresses/undressed.’

<sup>20</sup> Strongly nonreferential idiomatic objects (discussed in section 6.1) are a case in point. Since these are nontopicalizable, the two analyses make different predictions: only the PF-adjacency-based account predicts O–Neg–verbal particle–V to be available.

PossPs, which are obligatorily definite in Hungarian (e.g., they obligatorily trigger definite agreement within the differential-object-marking system of Hungarian), are also admitted in RTCs, as we saw in (10). The fact that RTC objects are often topicalized (section 6.1) also suggests that they can be interpreted as definites even if they lack a definite article. Note that the lack of AgrOP (the projection responsible for object agreement on the verb) does not explain the unavailability of the definite article, since infinitives also lack AgrOP but can readily have an object with a definite article:

- (47) a *gázszerelő-t ki-hív-ni*  
       the gas.fitter-ACC PRT-call-INF  
       ‘call the gas fitter’ (as an element on a to-do list; lit. ‘to call the gas fitter’)

The constraint that accounts for the lack of definite articles on RTC objects might be of a pragmatic nature: it could be the case that the defective clause lacks any frame of reference of its own, so definiteness is not specified within the defective clause itself but is inferred later on from the context (much as tense,  $\phi$  features, etc. are inferred from the context). This would be in line with De Lange, Vasic & Avrutin 2009’s proposal that article drop in newspaper headlines is due to the limited processing resources of hearers (readers).

However, the very low availability of definite articles in RTCs (22 out of 3,032, < 1%) and their low acceptability (average score 2.4; see table A3 and subsequent discussion in the appendix: supporting information, file 1) suggest that the constraint is probably syntactic. Note also that definite articles appear to be allowed within adverbial adjunct PPs (29) and object CPs (45): article drop appears to be sensitive to syntactic position.

In principle, there are two broad possibilities: either RTC objects have a silent DP layer or they lack a DP layer altogether. Note that silent Ds have been hypothesized for other reduced registers. Weir 2017 gives an analysis of optional article drop in subjects and objects in the English reduced written register, or RWR (diaries, recipes, headlines, etc.; see section 10). Weir proposes that a phonologically null determiner ( $\emptyset_D$ ) with the semantics of a choice function (Reinhart 1997, Winter 1997, Kratzer 1998) is present in the apparently articleless subjects and objects:

- (48)  $\emptyset_D$  boss brought in  $\emptyset_D$  broken laptop today. (Weir 2017:171)

- (49) a.  $[[\emptyset_D]] = f_{\langle \text{et}, e \rangle}$   
       b.  $[[\emptyset_D \text{ boss}]] = \text{some entity in the extension of } \textit{boss}$   
       c.  $[[\emptyset_D \text{ broken laptop}]] = \text{some entity in the extension of } \textit{broken laptop}$



Weir argues that  $\emptyset_D$  is unspecified with respect to definiteness: it can be interpreted as definite (*the boss*) or indefinite (*a broken laptop*) depending on the context. Technically speaking, this proposal could easily be extended to RTC objects:

- (50)  $\emptyset_D$  hűtő ki-nyit.  
fridge PRT-open  
‘I/you/she/etc. open/opens/opened the fridge.’

Such a treatment has intuitive appeal, but it leaves some questions unanswered. In Weir’s proposal, it is not clear why null Ds are only available in the RWR and not available in nonreduced registers of English. Weir argues that this is a lexical matter: null Ds are part of the lexicon of the RWR but not part of the lexicon of nonreduced registers of English. But this is more like a formalization of the descriptive facts than an actual explanation. Note also that both in the RWR and in RTCs, article drop is limited to arguments (subjects and objects in the RWR and objects in RTCs); nonarguments fail to exhibit article drop. This is a pattern that Weir notices but leaves unexplained. Also, proposing the same account for RTCs and the RWR may lead us to gloss over an important difference: while object article drop in the RWR is optional, it is obligatory in RTCs.

On the other hand, the strong unacceptability of overt Ds in RTC objects is straightforward to derive if one adopts the well-known split-DP proposal of Sportiche 2005:

- (51) a. The arguments of predicates are NPs.  
b. DPs are not underlying constituents, they are derived constituents, with NPs as predicate arguments and the non-NP portion part of the functional domain of the clause. (Sportiche 2005:45–46, slightly modified for clarity)

Specifically, Sportiche argues that “in a simple clause, the D is introduced outside of the VP in which an NP argument of the verb is introduced as in [(52a)], and the DP is formed by Move as in [(52b)]” (p. 45).

- (52) a. . . . D . . . [NP V . . . ] . . .  
b. . . . [D NP] . . . [~~NP~~ V . . . ] . . .

Since RTCs are VPs that lack the whole functional domain above VP, the lack of definite articles in RTC objects falls out automatically once one adopts Sportiche’s proposal.

To evaluate the viability of these two proposals with regard to the data from RTCs, we need to take a closer look at the structure of DP. The Hungarian DP has a complex structure, with a number of layers between the uppermost DP layer and the lowermost NP layer. As we saw in (8)–(12), these intermediate layers—housing adjectives, numerals, quantifiers, and so on—are all available in RTCs. I will discuss the

technical details of this in section 8. For our purposes in this section, it suffices to concentrate on the two extremities and on one of the intervening layers, NumP.

In the standard generative analysis of the Hungarian DP (see Szabolcsi 1994, Bartos 2000, É. Kiss 2000, among others), the definite article is taken to occupy the D head position (while spec,DP can be filled with a demonstrative):

- (53)  $[_{DP} [_{D'} D [\dots [_{XP} \dots [_{NumP} \dots [_{YP} \dots [_{NP} N]]]]]]]$

Bartos 2000 and É. Kiss 2000 argue that the DP layer is only projected when the nominal phrase is [+definite]. This includes cases where the definite article *a(z)* ‘the’ is present on the surface, as well as proper names and third-person personal pronouns (which are taken to involve N-to-D movement). [–definite] nominal phrases lack the DP layer altogether. The so-called indefinite article *egy* is analyzed as the unstressed version of the numeral *egy* ‘one’, and its structural position is taken to be spec,NumP. In addition to the support for this positioning of the indefinite article that its numerical meaning provides (it is only compatible with nouns in the singular), clear word-order facts support this positioning as well. Thus, indefinite noun phrases are analyzed as NumPs. Incorporated bare noun phrases are analyzed as bare NPs; however, since incorporation is not relevant for RTC (see section 2), I will not discuss bare NPs further. Bartos’s and E. Kiss’s analysis can be summarized as follows.

- (54) a.  $[_{DP} [_{D'} D_{[+definite]} [\dots [_{XP} \dots [_{NumP} \dots [_{YP} \dots [_{NP} N]]]]]]]$  [+definite]  
           *a(z)*  
       b.  $[\dots [_{XP} \dots [_{NumP} \text{spec,NumP} \dots [_{YP} \dots [_{NP} N]]]]]$  [–definite]  
           *egy*

Szabolcsi 1994 claims that both [+definite] and [–definite] nominal phrases involve a DP layer, arguing that in addition to the overt [+definite] article *a(z)* ‘the’, there is also a phonologically null [–definite] article. Szabolcsi claims that what was traditionally analyzed as the indefinite article *egy* is simply the numeral *egy* ‘one’:

- (55) a.  $[_{DP} [_{D'} D_{[+definite]} [\dots [_{XP} \dots [_{NumP} \dots [_{YP} \dots [_{NP} N]]]]]]]$  [+definite]  
           *a(z)*  
       b.  $[_{DP} [_{D'} D_{[–definite]} [\dots [_{XP} \dots [_{NumP} \text{spec,NumP} \dots [\emptyset \text{egy} \dots [_{NP} N]]]]]]]$  [–definite]

Whereas Bartos and É. Kiss analyze the definite article as a determiner, Szabolcsi argues that it (as well as the null indefinite article) is not a determiner but a subordinator, the function of which is to turn a nominal expression into an argument. (This is based on the observation that bare NPs such as the ones found in incorporation (see section 2) can never be arguments: they are of a predicative nature.)

In light of the above discussion, extending Weir 2017’s proposal to Hungarian RTCs would face another hurdle in addition to those already discussed. Note that demonstratives are unacceptable in RTCs:

- (56) a. [DP Az-t [D' az [NP ajtó-t]]] be-csuk-t-am.  
           that-ACC the door-ACC PRT-close-PST-1SG  
           'I closed that door.'
- b. \*Az ajtó be-csuk.  
       that door PRT-close  
       Intended: 'I/you/she/etc. close/closes/closed that door.'

(Hungarian has a double-demonstrative construction: the demonstrative obligatorily co-occurs with the definite article.<sup>21</sup>) This lack of demonstratives falls out automatically from a Sportiche 2005–style account: since the DP layer is missing, the spec,DP position is also unavailable. In Weir's framework, where the DP is present (headed by a silent D), one would need to make additional stipulations to account for the absence of overt demonstratives. One might assume that demonstratives are only licensed in spec,DP if D is filled by an overt [+definite] element. Alternatively, one might stipulate the existence of phonologically null demonstratives. While these solutions may technically work, they appear rather ad hoc.

In light of this, a no-DP-layer account has a better chance of explaining the empirical facts than a silent-D account. As far as the theoretical compatibility of the different proposals is concerned, the following remarks can be made. Since Szabolcsi 1994 and Weir 2017 both assume the existence of silent D heads, if one adopts a Szabolcsi-style analysis of the Hungarian DP, then adopting a Weir-style analysis of Hungarian's RTCs requires a smaller leap of faith: if silent indefinite articles are already available in Hungarian, positing silent definite articles is less stipulative. On the other hand, Szabolcsi's assumption that the function of the articles is to turn predicative bare NPs into arguments of predicates (DPs) seems difficult to reconcile with the spirit of Sportiche 2005's proposal, the basic assumption of which is that the arguments of predicates are NPs. On the other hand, Bartos 2000's and É. Kiss 2000's proposals seem to be theoretically compatible with either a silent-D proposal or a VP-external-D proposal.

On balance, we can conclude that a Sportiche 2005–style no-DP-layer account in conjunction with Bartos's and É. Kiss's model for the Hungarian DP seems to be superior to the analytical alternatives. The question then arises how, in the absence of a DP layer, hearers still end up interpreting some RTC objects as specific/definite and others as indefinite. My proposal is that, as with other kinds of missing information, such as tense and person, readers use contextual knowledge and general world knowledge to fill in the gap. Looking at the sentence in (1), for example, hearers can safely guess that the external agent of the RTCs is first-person singular, the tense is past, and *fürdőszoba* 'bathroom' is

<sup>21</sup> The demonstrative has the same phonological form as the definite article, *a(z)*, which is not a coincidence: diachronically, the definite article derived from the demonstrative (Egedi 2014). However, one crucial difference between them is that the demonstrative agrees in case and number with the noun, whereas the definite article is caseless and numberless.

probably definite (as most flats have a single bathroom), even though none of this information is explicit.

## 8. The Fine Structure of RTC Objects

This section presents a more detailed look at the structure of RTC objects, examining the layers between DP and NP. I added this section for the sake of completeness; it will be of interest to scholars of Hungarian, while those with a more general interest may want to skip it. The main finding of this section is that all the functional projections of the extended Hungarian NP up to (but crucially, excluding) DP are attested in RTCs.

In (57) is the phrase structure I assume for the lower portion of the extended NP. In accord with much research (Szabolcsi 1983, 1994, Bartos 2000, É. Kiss 2000, among others), I assume that the NP layer is dominated by PossP, projected by the possessive suffix. On top of this comes a Classifier Phrase layer, projected by specific or null classifiers (see (60) below for an example). This is in turn dominated by NumP, with Num<sup>0</sup> hosting the generic classifier *darab* ‘piece’ (see (61) below) and the plural suffix while spec,NumP hosts numerals and certain quantifiers such as *néhány* ‘some’ and *sok* ‘many’ (see, among others, Bartos 1999, É. Kiss 2000 on quantifiers in spec,NumP and Dékány 2011, Csirmaz & Dékány 2014 on classifiers and low and high adjectives). In accord with Bartos 1999 and É. Kiss 2000, among others, I assume a Quantifier Phrase above NumP, with spec,QP housing certain quantifiers such as *mindegyik* ‘each’ and *minden* ‘every’.<sup>22</sup>

- (57) [<sub>QP</sub> quantifier [<sub>NumP</sub> numeral/quantifier [<sub>Num'</sub> general classifier [<sub>AdjP</sub> adjective  
[<sub>CIP</sub> specific classifier [<sub>AdjP</sub> adjective [<sub>PossP</sub> possessor [<sub>NP</sub> . . . ]]]]]]]]]

As far as the higher part of the DP is concerned, QP is dominated, as shown in (58), by a Demonstrative Phrase, whose head position is filled by so-called noninflecting demonstratives (see Szabolcsi 1994, É. Kiss 2000, Egedi 2014, among others). This is dominated by AgrP; spec,AgrP houses nominative possessors, and the Agr head position is filled by the possessive agreement suffix (Den Dikken 1999, Bartos 2000, among others). AgrP is dominated by a DP, whose head position is filled by the definite article, with inflecting demonstratives housed in spec,DP (Szabolcsi 1994, Bartos 2000, É. Kiss 2000).

- (58) [<sub>DP</sub> demonstrative [<sub>D'</sub> D [<sub>AgrP</sub> possessor [<sub>Agr'</sub> possessive agreement  
[<sub>DemP</sub> demonstrative [<sub>QP</sub> [ . . . ]]]]]]]

<sup>22</sup> Actually, while Bartos assumes that *minden* is in spec,QP, É. Kiss assumes that it is in spec,NumP. I follow Bartos here, but nothing hinges on this choice.

All these layers between NP and DP<sup>23</sup> are only projected if necessary. Also, I will assume in accord with Bartos 2000 and É. Kiss 2000 that DP is only projected when the nominal expression is definite (which is evidenced by, e.g., the triggering of definite object agreement on the verb): indefinite NPs lack a DP layer. I further assume with Bartos and É. Kiss and other authors that the so-called indefinite article, which is in fact an unstressed version of the numeral *egy* ‘one’, is housed in spec, NumP.

As we have already seen, RTC objects are not limited to being bare NPs. In fact, all the projections up to (but excluding) DP are available in RTCs (with the exception of the stylistically marked lower demonstratives, which are only used in very formal registers). This is confirmed by corpus attestations—examples are given in (59)–(67)—and by the grammaticality-judgment survey (see the appendix: supporting information, file 1).

- (59) [<sub>AdjP</sub> Új [<sub>NP</sub> kategória]] létre-hoz.  
new category PRT-bring  
'I/you/she/etc. create/creates/created a new category.'
- (60) [<sub>NumP</sub> Három [<sub>CIP</sub> szál [<sub>NP</sub> cigi]]] el-szív.  
three SPEC.CL cigarette PRT-suck  
'I/you/she/etc. smoke/smokes/smoked three cigarettes.'
- (61) [<sub>NumP</sub> Négy [<sub>Num'</sub> darab [<sub>NP</sub> imbusz]]] ki-csavar.  
three GEN.CL Allen.screw PRT-twist  
'I/you/she/etc. screw/screws/screwed off three Allen screws.'
- (62) [<sub>NumP</sub> Két [<sub>Num'</sub> [<sub>NP</sub> sör]]] meg-isz.  
two beer PRT-drink  
'I/you/she/etc. drink/drinks/drank two beers.'
- (63) [<sub>NumP</sub> [<sub>Num'</sub> -ok [<sub>NP</sub> ablak]]] (→ ablak-ok) be-csuk.  
PL window PRT-close  
'I/you/she/etc. close/closes/closed the windows.'
- (64) [<sub>QP</sub> Minden [<sub>NP</sub> polc]] le-töröl.  
every shelf PRT-wipe  
'I/you/she/etc. wipe/wipes/wiped off every shelf.'
- (65) [<sub>QP</sub> Összes [<sub>NP</sub> ruha]] le-vesz.  
all cloth PRT-take  
'I/you/she/etc. take/takes/took off all the clothes.'

<sup>23</sup> The preceding discussion is of course very limited; for a good overview, see Dékány 2011 and references therein.

The syntactic status, base-generated position, and movement options of verbal particles in Hungarian have been the subject of considerable discussion in the literature (for recent overviews, see Hegedűs 2013, Hegedűs 2017). For ease of exposition, so far I have assumed the analysis of É. Kiss 2006: verbal particles are base generated as phrasal complements of  $V^0$  (they are AdvPs, which consist of a single head in the case of verbal particles proper; see note 2 on the use of the term *verbal particle* in this article), and in neutral sentences they are moved to spec, PredP (and the verb is moved to Pred<sup>0</sup>). But nothing really hinges on this choice. In this section, I discuss how my analysis carries over to other, alternative frameworks.

In addition to the verbal-particle-as-phrasal-complement-of-V<sup>0</sup> analysis, there is another school of thought that assumes a tighter connection between the verbal particle and V<sup>0</sup>. The most radical execution of this idea is to assume that the verbal particle and the verb constitute a complex lexical entry (Ackerman 1984, 1987, Ackerman & Webelhuth 1998). Another proposal is that the verbal particle and V<sup>0</sup> constitute a complex head that is base generated in syntax: Horvath 1986 and Brody 1990 assume that verbal particles are phrases adjoined to V<sup>0</sup>, creating a complex V head, while É. Kiss 1999 and Szendrői 2003 assume that verbal particles are heads adjoined to (in effect, incorporated into) V<sup>0</sup> (see also Neeleman 1994 for a similar head-adjunction analysis for verbal particle-V combinations in Germanic). A paper on preverb climbing in complex verbs, Ackema 2004, also assumes that verbal particles (or preverbs) are left adjoined to V<sup>0</sup>. Ackema explicitly claims that this shows that the Hungarian VP is verb final, a claim not dissimilar to ours (even if the technical assumptions and the analysis are rather different). Olsvay 2004 assumes that verbal particles have a dual nature of sorts: they can either be phrasal complements to V<sup>0</sup> or heads incorporated into V<sup>0</sup>.

Crucially for our purposes, however, many of these proposals (Brody 1990, É. Kiss 1999, Olsvay 2004) also assume that in neutral sentences, the verbal particle is moved to a higher position outside of *vP*. This means that our proposal (that the verbal particle and *V* are trapped inside *VP* in the case of RTCs because of a lack of higher functional projections to move to, and that, as a result of this, RTCs reflect the original, premovement structure of the minimal *VP*) can be straightforwardly implemented in these frameworks as well.

In the lexicalist approach (Ackerman 1984, 1987, Ackerman & Webelhuth 1998), no movement of the verbal particle is assumed in neutral sentences, and, crucially, it is assumed that verbal particle + *V* is inserted into syntax as a complex lexical unit. In consequence, the strict verbal particle–*V* word order observed in RTCs would fall out trivially from these models. (Note, however, that the lexicalist approach as a whole has been cogently argued to be inadequate for various reasons by many authors: see, e.g., Hegedűs 2003:18–21 for a discussion.)

Uniquely among the nonlexicalist models, Horvath 1986 and Szendrői 2003 assume no movement of the verbal particle or *V* in neutral sentences. Also, both authors assume that the verbal particle is base generated to the left of *V*. Adding the trivial assumption that direct objects are in a specifier position, these models would also predict the *O*–verbal particle–*V* word order observed in RTCs. Note, however, that the assumption of a nonphrasal verbal particle has been convincingly argued to be problematic for independent reasons by various authors (see É. Kiss 2006:44–47, Surányi 2009b:209–212); note also that the near consensus in the literature is that the verbal particle and the *V* *are* moved even in neutral sentences.

Before concluding this section, I will review two proposals in more detail. Surányi 2009b argues that in neutral sentences, the verbal particle, which is phrasal, moves to *spec,TP* through an intermediate landing position. Based on arguments from the taxonomy of verbal particles, Surányi claims that this intermediate position, identified as the specifier of a *PredP* projection, is below *vP* and above *VP*.<sup>24</sup> In this article, I argue that RTCs lack the functional projections above *VP* (including *vP*, *FocP*, *AspP*, etc.). While I wish to remain agnostic as to whether the intermediate landing position for verbal particles proposed by Surányi exists in general, if it indeed exists, it apparently is not projected in RTCs. If this projection were available in RTCs, then the obligatory movement of the verbal particle to *spec,PredP* and of *V* to *Pred*<sup>0</sup> would produce a verbal particle–*V*–*O* surface word order, which is completely unattested with RTCs.

Hegedűs 2013 argues that, in line with their predicative nature, verbal particles are in fact contained in a small-clause complement of *V*, together with the internal argument: [<sub>VP</sub> [<sub>V'</sub> *V* [<sub>SC</sub> . . . internal argument . . . verbal particle . . . ]]] (see also Hegedűs & Dékány 2017). In Hegedűs 2017, the small clause is instantiated as *pP*, with the internal argument base generated in *spec,pP* and the verbal particle merged under *p*: [<sub>VP</sub> [<sub>V'</sub> *V* [<sub>pP</sub> internal argument [<sub>p'</sub> *p* PathP]]]]. PathP is taken to house regular directional PPs, which may co-occur with a verbal particle (in what has been dubbed

<sup>24</sup> Note that this is different from É. Kiss 2006, where *PredP* is situated above *vP* and where *spec,PredP* is the final landing slot for the verbal particle in neutral sentences.

locative doubling; see Surányi 2009a) but may also occur on their own. The word order of RTCs falls out from this structure, as long as one assumes that the pP complement of V is to its left:<sup>25</sup>

- (68)
- |   |      |  |     |       |
|---|------|--|-----|-------|
|   | Sör  |  | meg | isz.  |
| [ <sub>VP</sub> [ <sub>V'</sub> [ <sub>pP</sub> internal argument [ <sub>p'</sub> p PathP]] V]] | beer |  | PRT | drink |
- ‘I/you/she/etc. drink/drinks/drank the beer.’

RTCs where a verbal particle and a directional or locative adverbial co-occur (a locative-doubling configuration) have an O–adverbial–verbal particle–V word order, which indicates that the pP itself is head final (in line with the Final-over-Final Constraint, on which see Biberauer, Holmberg & Roberts 2014):

- (69)
- |   |       |  |           |     |       |
|---|-------|--|-----------|-----|-------|
|   | Kulcs |  | zár-ba    | be  | tesz. |
| [ <sub>VP</sub> [ <sub>V'</sub> [ <sub>pP</sub> internal argument [ <sub>p'</sub> PathP p]] V]] | key   |  | lock-into | PRT | put   |
- ‘I/you/she/etc. put/puts/put the key into the lock.’

RTCs containing a dative-marked recipient can receive a similar analysis:

- (70)
- |   |      |               |            |     |      |
|---|------|---------------|------------|-----|------|
|   | Fél  | kiflivég      | gyerek-nek | oda | ad.  |
| [ <sub>VP</sub> [ <sub>V'</sub> [ <sub>pP</sub> internal argument [ <sub>p'</sub> PathP p]] V]] | half | croissant.tip | child-DAT  | PRT | give |
- ‘I/you/she/etc. give/gives/gave a bit of croissant to the/a child.’

## 10. Comparison with Other Constructions

In this section, I provide a brief comparison of RTCs to other constructions discussed in the literature that bear some similarity to them: (i) the *Inflektiv* in German, (ii) truncated clauses that are larger than VP, (iii) root infinitives in child language, (iv) clause chains, and (v) the English RWR.

The nonfinite construction in German known in the literature as the *Inflektiv* (Teuber 1998, Schlobinski 2001, Bücking & Rau 2013, Gärtner 2017) is in some ways similar to the RTC: it exhibits a lack of inflection, strict O–verbal particle–V

<sup>25</sup> A reviewer suggests that an alternative analysis, still assuming a head-final VP, might also work. Suppose that pP is right adjointed to V. Then we might still get the observed surface word order if we assume that O moves to spec,VP and the verbal particle head-moves and head-adjoints to V. To the best of my knowledge, this is a completely new proposal. The reviewer provides no independent motivation for this derivation other than that it would enable us to derive the O–verbal particle–V word order on a head-final-VP basis, by way of VP-internal movement operations—an argument that appears to me rather circular. In addition to being unmotivated, this proposed derivation is also problematic: as I discussed in this section, the vast majority of authors these days (and all authors who propose a small-clause analysis; see, e.g., Hegedűs 2017) assume that verbal particles are phrasal: thus, adjoining them to V via head movement and head adjunction is not possible.



order (which is not surprising for German), and a lack of overt subject, as the following example illustrates.

- (71) Meinen satz        direkt    wieder streich.  
 my.ACC sentence directly again cancel  
 'I am canceling my sentence again on purpose.'      (Bücking & Rau 2013:72)

However, there are significant differences too. The use of the *Inflektiv* is more limited than that of RTCs: it is used only in internet-based written communication and comics. The silent subject can only be interpreted as first-person singular or plural, the tense is interpreted as the immediate present, and the illocutionary force is taken to be performative. The object can have a definite article, and it carries accusative case. Subject drop happens across the board: subjects of unaccusatives are compulsorily dropped too (unlike what we saw in (13) versus (14) for Hungarian). The obligatory accusative-case assignment suggests that, in contrast to RTCs, the *Inflektiv* does have a vP layer. (The lack of overt subjects cannot be attributed to a lack of vP, since unaccusative subjects are also silent; rather, it appears to be the result of a more general subject-drop rule.) Bücking & Rau 2013 analyzes the *Inflektiv* as a VP without a vP layer. However, such an analysis would predict that objects in the *Inflektiv* do not receive accusative case, contrary to fact.

Truncated clauses that are not bare VPs are well known from the theoretical and acquisition literature. Haegeman 2003 and Haegeman 2010 analyze adverbial clauses as lacking ForceP, FocP, and TopP; however, these clauses are considerably less truncated than RTCs since they retain FinP, TP (IP), and vP.<sup>26</sup>

- (72) a. Main clauses (“full” structure): (SUB) Top\* Focus Force Fin IP  
 b. Adverbial clauses (“reduced” structure): SUB Fin IP  
 (Haegeman 2010:631–633; slightly modified)

Another crucial difference is that the truncated clauses discussed by Haegeman and in subsequent literature are subordinated clauses, whereas RTCs are main clauses. (An interesting exception is the case of so-called internal-argument-drop sentences in Romance, discussed by Cecchetto 2019: these are tensed main clauses that are specified for force yet appear to lack a vP layer.)

In child-language studies, truncated matrix clauses that lack either agreement or tense (or indeed both) and in which the verb emerges in either infinitival or bare form have been widely reported and discussed under the name of *root infinitives* or *optional infinitives* (Rizzi 1993, Wexler 1998, Guasti & Rizzi 2002). Note that RTCs are more radically truncated than root infinitives: the verb obligatorily emerges in the bare form, not the infinitival form, and tense, agreement, and even vP are obligatorily missing. Another obvious difference is that whereas root infinitives are child-language phenomena, RTCs are attested in adult language (see footnote 2 of the appendix: supporting information, file 1).

<sup>26</sup> SUB in (72) stands for a subordinating conjunction.

*Clause chains* consist of a succession of clauses all of which but the final one are deficient in the sense of lacking finiteness (tense or mood) marking; see Weisser 2015 for a recent overview. Unlike RTCs, however, the clauses in a clause chain do exhibit subject and object agreement, are able to have external arguments, and are not reported to lack accusative-case marking. Most importantly, a clause chain always ends in a fully specified clause (in terms of tense and mood) that in a sense licenses the preceding chain of deficient clauses. With RTCs, no such morphosyntactic licensing is required: the only acceptability condition is the pragmatic requirement that the missing information be inferrable from the context by the hearer.

Finally, it is useful to compare RTCs to the well-known English RWR (Haegeman 1987, Massam & Roberge 1989, Massam 1992, Weir 2017, among others). This register is known from diaries, instructional writing (recipes and stage directions), and so-called global-topic texts (e.g., encyclopedia entries). Its most-studied characteristics are optional subject drop and optional object drop:

(73) Am reading the book of Job. (Sylvia Plath, cited by Haegeman 2017:232)

(74) Received credit card bill in mail today. Will shred later. (Weir 2017:157)

The pragmatic conditions of the use of the RWR and of RTCs are similar: they can be used in cases where there is a well-defined containing situation, which makes it possible for hearers to recover whatever is left unspecified in the reduced utterance. One difference concerns medium: while RTCs are only available in colloquial speech (and certain electronic written contexts closely reflecting colloquial speech), the RWR is confined to written contexts.

In terms of their syntax, RTCs and RWR sentences are very different. While RWR sentences may optionally lack the subject and (to a lesser extent) the object, otherwise, they are full-fledged sentences, specified for tense, mood, and modality, with the verb carrying subject-agreement features, objects receiving accusative case, and reflexives and PRO licensed:

(75)  $\emptyset_1$  am not going to let myself<sub>1</sub> be treated like that. (Weir 2017:166)

(76)  $\emptyset_1$  want [PRO<sub>1</sub> to go to gym later]. (Weir 2017:166)

In RTCs, on the other hand, all tense, mood, and modality specification and all agreement is missing, accusative case is not assigned to objects, reflexives are not licensed, and the absence of the external argument is obligatory. In other words, RWR sentences are full (or mildly truncated) sentences in which a syntactically present subject can be phonologically null under given circumstances, whereas RTCs are radically truncated sentences where the external argument is not present syntactically.

Accounts of subject drop in the RWR fall into broadly two groups. Some proposals (Haegeman 1990, Hyams & Wexler 1993, Matushansky 1995, among others) hold that subject drop in the RWR is a case of topic drop, known from Standard German

and Standard Dutch. Other proposals (Haegeman 1997, 2007, among others) argue that sentences in the RWR can optionally be truncated at the level of SubjP (Subject Phrase), without FinP, FocP, TopP, and ForceP being projected, and the nonspellout of the subject is simply due to SubjP being the root phase (Rizzi 2006) in such cases.

Importantly, all these accounts assume that the subject is syntactically active and that the clause is at minimum a TP. This is different from RTCs, where the clause is nothing more than a VP and the external-argument position is not projected, resulting in the total absence of an external argument and all functional projections above VP.

## **11. Conclusion: Implications for Hungarian and Crosslinguistically**

The examination of RTCs has allowed us to directly observe the Hungarian VP, which is otherwise obscured even in the simplest of clauses due to the obligatory movement of V out of VP. RTCs provide solid evidence that the VP in Hungarian is, in fact, contrary to the broad consensus in the literature, head final. Note that there are several known surface phenomena in Hungarian that are typical of SOV languages: the lexical layer of the NP is head final, the PP is head final, the possessor precedes the possessum, participial relatives precede the nominal that they modify, manner adverbs precede the verb, predicative nominals precede the copula, verbal particles precede the verb (see É. Kiss 2013 for a detailed discussion). However, the broad consensus has been that these phenomena are either fossils from an earlier head-final stage in the history of Hungarian or can be derived without assuming a head-final VP. The fact that the Hungarian VP is head final may make some of these phenomena worth revisiting.<sup>27</sup>

From a more general perspective, as discussed in section 5, RTCs in Hungarian provide *prima-facie* evidence against the universality of head-complement branching order (Kayne 1994) and strong support for the conception of OV as a basic, nonderived word order (Haider 2000).

We saw in section 6 that whereas the focus position is absolutely unavailable in RTCs, topicalization can happen freely. This is in line with the analysis of topicalization as adjunction (Lasnik & Saito 1992; see also the studies in É. Kiss 1995 as well as Szendrői 2003): while in RTCs the functional projections above VP, including FocP, are missing (with the possible exception of NegP), topicalization via adjunction remains possible. Similarly, the fact that QPs are attested in RTCs (see (11)) favors the analysis of quantifier raising as adjunction (Chomsky 1995, Fox 1995, Reinhart 1995, É. Kiss 2010a), since the alternative analysis in terms of movement to the specifiers of designated functional projections (Beghelli & Stowell 1997, Szabolcsi 1997) would require that such functional projections (DistP, RefP) be available in RTCs, and as we have established, RTCs typically lack functional projections above VP.

The unavailability of definite articles in RTC objects, as discussed in section 7, may be interpreted as supporting evidence for the split-DP hypothesis of Sportiche 2005.

<sup>27</sup> The languages most closely related to Hungarian, Khanty and Mansi, are SOV. É. Kiss 2003 argues that Proto-Hungarian was also SOV. I claim that Modern Hungarian, too, is in essence SOV, even if this quality is masked in nontruncated clauses due to the obligatory movement of the verb out of vP.

Finally, the absence of syntactically realized external arguments in RTCs is consistent with the assumption that the external argument is introduced not by V but by a higher functional head.

RTCs may prove to be worthy of attention in the exploration of the fine structure of VP in other languages as well. RTCs are most easily identifiable in languages that have all or some of the following characteristics: rich inflectional morphology, an articulated left periphery, overt accusative-case marking, and overt definite articles.

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## Supporting Information

Additional supporting information may be found in the online version of this article:

1. Overview of the corpus data and survey results.
2. Data on the rate of -*VI* drop in RTCs.
3. Grammaticality-judgment survey: survey design, survey questions, and output of statistical analysis.
4. Corpus data on idioms with nonreferential subjects.