

Partitive Noun Phrases in Hungarian

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PARTITIVE NOUN PHRASES IN HUNGARIAN*

Abstract

Although a variety of nominal constructions have been examined in Hungarian linguistics, partitive noun phrases have barely received any attention. In this paper, it is argued that there are four basic types of partitive construction in Hungarian: (i) *genitive*, (ii) *dative*, (iii) “*közül*”, and (iv) *relative*. In distinction to *genitive partitives*, *dative*, “*közül*” and *relative partitives* allow splitting of head and dependent. What is more, split partitive noun phrases show diagnostics of long-distance dependencies: they are subject to the *Adjunct Island Constraint* and to the constraint imposed by *non-bridge verbs*. It is argued that the syntactic behaviour of split partitives can be accounted for in purely functional terms.

1. Introduction: the data

There are four types of partitive construction in Hungarian: two types of *possessive partitives* and two types of *oblique partitives*. These subsequently divide into *genitive* and *dative partitives*, and “*közül*” and *relative partitives*, as illustrated in (1) – (4):¹

Possessive Partitives

- (1) [[a könyvek]_{NP} [bármelyik-e]_N]_{NP} *genitive partitive*
the book.3PL.GEN any-3SG.POSS
'any of the books'
- (2) [[a cukor-nak]_{NP} a [fel-e]_N]_{NP} *dative partitive*
the sugar.3SG-DAT the half-3SG.POSS
'half of the sugar'

Oblique Partitives

- (3) [[bármelyik]_N [a könyvek **közül**]_{PP}]_{NP} “*közül*” *partitive*
any the book.3PL **from among**
'any of the books'
- (4) [[bármennyi]_N [a cukor-ból]_{NP}]_{NP} *relative partitive*
any the sugar.3SG-ELAT
'any of the sugar'

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¹ The suffixes *-nak/nek* and *-ból/ből* attach to the stem in accordance with vowel harmony rules.

What is common in all four constructions is that they consist of two main parts: an N and an embedded NP/PP. Morphological case-marking associated with the arguments of given verbs occurs on the N rather than on the embedded NP/PP. This case-marking pattern argues in favour of treating N as the head of the partitive NP, and the embedded NP/PP as its dependent.

Possessive partitives are morphologically analogous to possessor constructions in Hungarian: hence the name “possessive” partitive. Compare examples (5) and (6) with (7) and (8):

Possessive noun phrases

- | | | | | |
|-----|--|---|---|---|
| (5) | [a diák-ok] _{NP}
the student-3PL.GEN
'the students' book' | [könyv-e] _N
book-3SG.POSS | ⇒ | könyv-ük
book-3PL.POSS
'their book' |
| (6) | [a diák-ok-nak] _{NP}
the student-3PL-DAT
'the students' book' | a [könyv-e] _N
the book-3SG.POSS | ⇒ | könyv-ük
book-3PL.POSS
'their book' |

Partitive noun phrases

- | | | | | |
|-----|--|---|---|--|
| (7) | [a diák-ok] _{NP}
the student-3PL.GEN
'any of the students' | [bármelyik-e] _N
any-3SG.POSS | ⇒ | bármelyik-ük
any-3PL.POSS
'any of them' |
| (8) | [a diák-ok-nak] _{NP}
the student-3PL -DAT
'ten percent of the students' | a [tíz százalék-a] _N
the ten percent-3SG.POSS | ⇒ | tíz százalék-uk
ten percent-3PL.POSS
'any of them' |

As is illustrated in (5) and (6), in possessor constructions the possessive relation is marked on the possessum N by the suffix *-(j)a/(j)e* in accordance with vowel harmony rules; the possessor NP is either genitive or dative marked.² The same morphological marking occurs in *possessive partitives*: in (7) and (8), the N heads bear the 3rd singular possessive inflection *-e/a*, and the dependent NPs the genitive and the dative case (*-nak/nek*) respectively (hence the names *genitive* and *dative partitives*).

In Hungarian, overt 3rd singular possessums (NP) can co-occur with plural possessors (N), but when the possessor is omitted, its person/number marking appears on the possessum: hence the form *könyv-ük* [book-3PL.POSS] ‘their book’ in (5) and (6). The same pattern can be observed in

² According to standard analyses, the overtly unmarked possessor is assumed to bear nominative case, since nominative is the overtly empty case-marker in Hungarian. The possessor can also be dative-marked. Consequently, these two possessor constructions are referred to as the nominative possessor construction and the dative possessor construction (e.g. Szabolcsi 1994, Laczkó 1995, É.Kiss 2000). Contrary to these standard analyses, in Payne and Chisarik (2001) we have argued that the case of the “nominative” possessor should be analysed as genitive. This new genitive case developed through the reanalysis of the definite article *az* ‘the’ as a case prefix, and hence a marker of genitive case rather than nominative. Therefore, the two types of possessor noun phrases are referred to as genitive and dative, rather than nominative and dative.

possessive partitives in (7) and (8) resulting in the forms *bármelyik-ük* [any-3PL.POSS] ‘any of them’ and *tíz százalék-uk* [ten percent-3PL.POSS] ‘ten percent of them’.³

Since *possessive partitives* are morphologically analogous to possessor constructions in Hungarian, it is reasonable to assume the same syntactic analysis for these NPs. In Chisarik and Payne (2001) we argue that possessor constructions require the postulation of two unrestricted argument functions: NCOMP (nominal complement) for genitive possessors and SUBJ (subject) for dative ones. By allowing the *partitive* semantic relation to be included in the range of semantic relations that can be encompassed by these unrestricted functions, the analysis of Chisarik and Payne (2001) can be straightforwardly extended to *possessive partitives*. The dependent in *genitive partitives* then associates with the grammatical function NCOMP, while in the *dative partitive* it associates with SUBJ, as illustrated in (9) and (10):

- (9) [[a diák-ok]_{NCOMP} [bármelyik-e]_N]_{NP} *genitive partitive*
the student-3PL.GEN any-3SG.POSS
‘any of the students’
- (10) [[a diák-ok-nak]_{SUBJ} a [tíz százalék-a]_N]_{NP} *dative partitive*
the student-3PL -DAT the ten percent-3SG.POSS
‘ten percent of the students’

There is a difference between genitive possessor NPs and *genitive partitives*: the former show the definiteness effect while the latter do not. Therefore, in genitive possessor constructions, the embedded NP which is in complementary distribution with the definite article, in the absence of any specific indication of the indefiniteness of the noun phrase, is assumed to function as a definite determiner. In distinction to this, since the (in)definiteness of *genitive partitives* is determined by the head N, the embedded NP is treated as a pre-head complement, rather than a determiner. Consequently, the grammatical function NCOMP is allowed to associate with two distinct structural positions in the NP, that of a determiner and a complement. In *dative possessor* and *dative partitive* constructions, the embedded NP is structurally a pre-determiner preceding the definite article.

Partitive relations can also be expressed by *oblique partitive noun phrases* which subdivide to the “közül” *partitive* (or ‘from among/between’ partitive) and to the *elative partitive* (or ‘from/out of’ partitive). The “közül” and *elative partitives* consist of an N head and a PP/NP post-head complement.⁴ As illustrated by the examples in (3) and (4), in the former the NP complement is marked with the case-like postposition *közül* ‘from among/between’ (hence the name “közül” *partitive*), while in the latter it is marked with the elative case-marker *-ból/ből* (hence the name *elative partitive*).⁵ In the “közül” *partitive* the complement is associated with the grammatical function OBL_{közül} and in the *elative partitive* with OBL_{ELAT}, as illustrated in (11) and (12):

³ I assume that such forms are nouns incorporating the pronominal inflection.

⁴ Post-head complements also occur in derived nominals, e.g. *János megérkez-és-e Budapestre* [John arrive-NOM-3SG Budapest-SUBL] ‘John’s arrival to Budapest’.

⁵ For the classification of postpositions in Hungarian see Payne and Chisarik (2000).

- (11) [[bármelyik]_N [a könyvek közül]_{OBL közül}]_{NP} “közül” *partitive*
 any the book.3PL from among
 ‘any of the books’
- (12) [[bármennyi]_N [a cukor-ból] _{OBL ELAT}]_{NP} *elative partitive*
 any the sugar-ELAT any
 ‘any of the sugar’

The data suggest that there is no uniform syntactic expression of partitive relations in Hungarian. On the one hand, partitive relations can be expressed by possessor constructions. Koptevskaja-Tamm (1998) shows that this is not unusual cross-linguistically. On the other hand, similarly to Turkish, where partitives are formed with an N head taking an ablative-marked dependent, (e.g. *süt-ten biraz* [milk-ABL a little] ‘a little of the milk’), Hungarian partitives are expressed with the help of oblique case-markers such as the postpositional *közül* ‘from among/between’ and the relative *-ból/ből* ‘from/out of’.⁶ To sum up, in Hungarian partitives are parasitic on existing constructions and therefore on existing grammatical functions.

2. Split and non-split partitives

Genitive partitives cannot be split, whereas *dative*, “*közül*” and *elative partitives* allow splitting of head and dependent. Compare (13) with (14), (15) and (16):

- (13) *[**A regények**]_{NP} elolvasta Péter [___ [**egyik-é-t**]_N]_{NP}.
 the novel.3PL.GEN read.3SG.PAST Peter one-3SG.POSS-ACC
 ‘Of the novels, Peter read one.’
- (14) [**A tej-nek**]_{NP} Anna megitta [___ a [**fel-é-t**]_N]_{NP}.
 the milk.3SG-DAT Anna drank.3SG.PAST the half-3SG.POSS-ACC
 ‘Of the milk, Anna drank half.’
- (15) [**A regények közül**]_{PP} Péter elolvasott [[**négy-et**]_N ___]_{NP}.
 the novel.3PL from among Peter read.3SG.PAST four-ACC
 ‘Of the novels, Peter read four.’
- (16) [**A cukor-ból**]_{NP} Anna tett a kávéjába [[**valamennyi-t**]_N ___]_{NP}.
 the sugar3SG-ELAT Anna put.3SG.PAST the coffee.3SG.POSS some-ACC
 ‘Of the sugar, Anna put in her coffee some.’

The example in (13) illustrates that intervening elements between head and complement in *genitive partitives* lead to ungrammaticality. In distinction to this, the examples in (14), (15) and (16) show that in the *dative*, “*közül*” and *elative partitives* complement and head do not need to be adjacent: the NP/PP dependents are displaced to a sentence-initial topic position, while the N heads remain in a post-verbal position. These examples illustrate extraction through a short path.

⁶ For the analysis of Turkish partitives refer to Kornfilt (1996).

Extraction of constituents of *dative*, “közül” and *relative partitives* through a long path is also grammatical. Compare the examples (17), (18) and (19) with those in (14), (15) and (16):

- (17) [A **tej-nek**]_{NP} úgy emlékszem, hogy Anna
the milk.3SG-DAT so think.1SG.PRES that Anna
- megitta [__ a [**fel-é-t**]_N]_{NP}.
drink.3SG.PAST the half-3SGPOSS-ACC
‘Of the milk, as far as I remember, Anna drank half.’
- (18) [A **regények közül**]_{PP} úgy emlékszem, hogy Péter
the novel.3PL from among so remember.1SG.PRES that Peter
- elolvasott [[**négy-et**]_N __]_{NP}.
read.3SG.PAST four-ACC
‘Of the novels, as far as I remember, Peter read four.’
- (19) [A **cukor-ból**]_{NP} úgy emlékszem, hogy Anna
the sugar3SG-ELAT so remember.1SG.PRES that Anna
- tett a kávéjába [[**valamennyi-t**]_N __]_{NP}.
put the coffee.3SG.POSS-into some-ACC
‘Of the sugar, as far as I remember, Anna put some in her coffee.’

In (17), (18), and (19) the partitive noun phrases are embedded in clausal complements, i.e. the sentential objects of the matrix verb. The PP/NP dependents are extracted to the sentence-initial topic position across the clausal complements. Therefore, these examples are instances of long-distance topicalization.

Hungarian split partitive noun phrases are reminiscent of German split NP topicalization (Kuhn 1998) and of discontinuous NP constituents in Walpiri (Bresnan 2001, Simpson 1991) and in Wambaya (Nordlinger 1998), but their distinctive property is that the split constituents do not agree either in case or number.

3. Constraints on long-distance dependencies of split partitives

Extraction is universally subject to constraints. Various constraints have been proposed on long-distance extraction, such as the *Subject Island Constraint*, the *Complex NP Constraint*, the *Adjunct Island Constraint*, the constraint imposed by *non-bridge verbs*, etc.⁷ The *Subject Island Constraint* does not hold for Hungarian, but extraction can be blocked by complex noun phrases, as well as by sentential adjuncts and non-bridge verbs (É.Kiss 2002). As examples of constraints

⁷ Cf. Chomsky (1986) and Ross (1967) for transformational analyses, and Kaplan and Zaenen (1989), Bresnan (2001), Dalrymple (2001), Falk (2001), and Kuhn (1998) for feature-based accounts.

on long-distance extraction from partitive noun phrases, sentential adjuncts and complement clauses of non-bridge verbs are examined in this section.

3.1 Sentential adjuncts

Cross-linguistically, there is no common agreement on how to group constraints on long-distance dependencies involving modifying adjuncts.⁸ In Hungarian, tensed and non-tensed adjunct clauses block long-distance movement (Kenesei *et al.* 1998, Komlósy 1994, É.Kiss 2002). This constraint can be extended to split partitive noun phrases, as illustrated by the examples in (20), (21), and (22):

- (20) ***[A barátai-nak]_{NP}** Péter nevetett amikor
 the friends.3SG.POSS-DAT Peter laugh.3SG.PAST when

[**__ a [fel-é-t]_N]_{NP}** bevásztották a csapatba.
 the half-3SG.POSS-ACC select.3PL.PAST the team
 ‘Of his friends, Peter laughed when half were selected for the team.’

- (21) ***[A barátai közül]_{PP}** Péter nevetett amikor
 the friends.3SG.POSS from among Peter laughed when

[**[kettő-t]_N __]_{NP}** bevásztottak a csapat-ba.
 two-ACC select.3PL.PAST the team-into
 ‘Of his friends, Peter laughed when two were selected for the team.’

- (22) ***[A cukor-ból]_{NP}** Péter nevetni szokott, amikor Emese
 the sugar-ELAT Peter laugh-INF used to when Emese

[**[két kanál-lal]_{NP} __]_{NP}** tesz a kávé-já-ba.
 two spoon-INS put.3SG.PRES the coffee-3SG.POSS-into
 ‘Of the sugar, Peter used to laugh when Emese puts two spoons into her coffee.’

In (20) and (21), the *dative* and the “közül” *partitives* are embedded in a tensed sentential adjunct, while in (22) the *relative partitive* is embedded in a non-tensed adjunct clause. Since the constituents of partitive noun phrases can be freely topicalized across complement clauses, the ungrammaticality of these examples is due to the modifying adjunct clauses.

Although sentential adjuncts block topicalization, phrasal adjuncts do not disallow it. Consider the split “közül” *partitive* illustrated in (23):

- (23) **[A két leghíresebb egyetem közül]_{PP}** Péter tanított
 the two most famous university from among Peter teach.3SG.PAST

⁸ Refer to Williams (1992), Chinque (1990), Hornstein and Weinberg (1995), and Dalrymple (2001) for different analyses of long-distance dependencies involving modifying adjuncts.

- (27) ***[A vendégek-nek]_{NP}** azt súgták, hogy Dávid
 the guest.3PL-DAT that whisper.3PL.PAST that David
- ismeri [___ a [fel-é-t]_N]_{NP}
 know.3SG.PRES the half-3SG.POSS-ACC
 ‘Of the guests, they whispered that David knows half.’
- (28) ***[A vendégek közül]_{PP}** azt súgták, hogy Dávid
 the guest.3PL from among that whisper.3PL.PAST that David
- ismer [[kettő-t]_N ___]_{NP}
 know.3SG.PRES two-ACC
 ‘Of the guests, they whispered that David knows two.’
- (29) ***[A tortá-ból]_{NP}** azt súgták, hogy Dávid [[két szelet-et]_{NP} ___]_{NP}
 the cake.3SG-ELAT that whisper.3PL.PAST that David two pieces-ACC
- fogyasztott el.
 eat.3SG.PAST up
 ‘Of the cake, they whispered that David ate up two pieces.’

Bridge verbs in Hungarian are similar to those found in other languages. The group of bridge-verbs includes (i) modal predicates taking a subject or object clause ‘want’, *szeretne* ‘would like’, *kell* ‘need’, *szabad* ‘may’, *lehet* ‘is possible’, *nyilvánvaló* ‘is obvious’, *valószínű* ‘is likely’, etc.; (ii) verbs of saying and verbs denoting mental activities, such as *mond* ‘say’, *ígér* ‘promise’, *állít* ‘claim’, *gondol* ‘think’, *hisz* ‘believe’, etc. (É.Kiss 2002: 253).

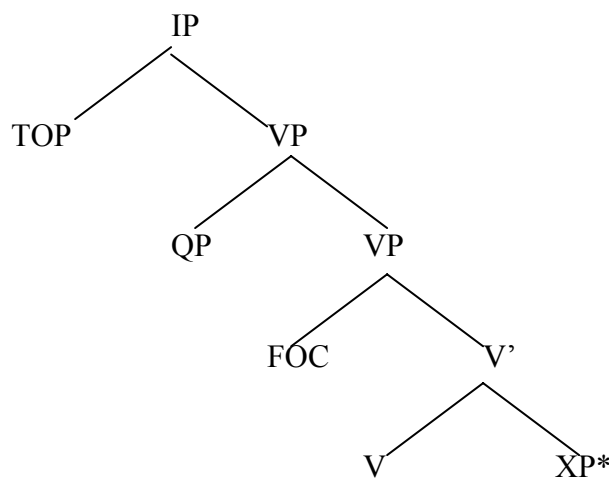
The Hungarian data has illustrated that long-distance dependencies of split partitive noun phrases are subject to at least two basic constraints, the *Sentential Adjunct Constraint* and the constraint imposed by *non-bridge verbs*: tensed and non-tensed sentential adjuncts and clausal complements which are not governed by bridge verbs clearly block extraction of constituents of partitive noun phrases.

4. The structure of the Hungarian pre-verbal periphery

Long-distance dependencies involve displacing a constituent from within a governable or non-governable grammatical function to a sentence-initial position associated with a particular discourse function. In Hungarian, different discourse functions are associated with different pre-verbal phrase structure positions. Constituents of split partitive noun phrases have to obey these syntactic restrictions.

Unlike post-verbal constituent order, the order of pre-verbal constituents is fixed. The immediate verb-adjacent position is reserved for FOCUSED constituents only.¹⁰ When other constituents occur pre-verbally, they are placed to the left of this verb-adjacent position. TOPICS occur initially and they are considered to be outside the predicate, since they cannot receive stronger stress than the first element of the predicate.¹¹ A set of items receives stronger stress than the predicate, and therefore, must be considered internal to the predicate. In transformational theory such items are placed in QP, which occurs between a postulated topic and focus phrase.¹² The tree in (30) illustrates the basic structure of the Hungarian clause: IP is used as the category label for the sentence and VP for the predicate; the verb V, is followed by one or more arguments or modifying adjuncts, and preceded by a number of hierarchically ordered discourse-marked constituents:

(30) GB analysis (É.Kiss 1994)



In LFG the c-structure of the Hungarian sentence can avoid any confusion between category and function: it can contain solely phrasal categories, such as NP, PP, etc. The grammatical function of these phrasal constituents is expressed in the f-structure. The discourse functions TOPIC and FOCUS are standard LFG discourse functions. QP is, however, a category rather than a function.

¹⁰ Focus can be either lexical (inherent) or structural in Hungarian. The focus position can be filled by the following inherent focus items:

- (i) interrogative phrases (*ki* ‘who’, *mi* ‘what’);
- (ii) positive and negative focus phrases (e.g. inherent focus phrases such as *kevés* ‘few’ or *sok* ‘much’, phrases modified by the adverb *csak* ‘only’ or *nemcsak* ‘not only’);
- (iii) negative phrases (for instance, inherently negative quantifiers such as *kevés* ‘few, little’, inherently negative adverbs such as *ritkán* ‘seldom’ and *rosszul* ‘badly’, negated universal quantifiers *nem mindenki* ‘not everybody’, or negative concord items *senki* ‘no one/nobody’ and *semmi* ‘nothing/anything’).

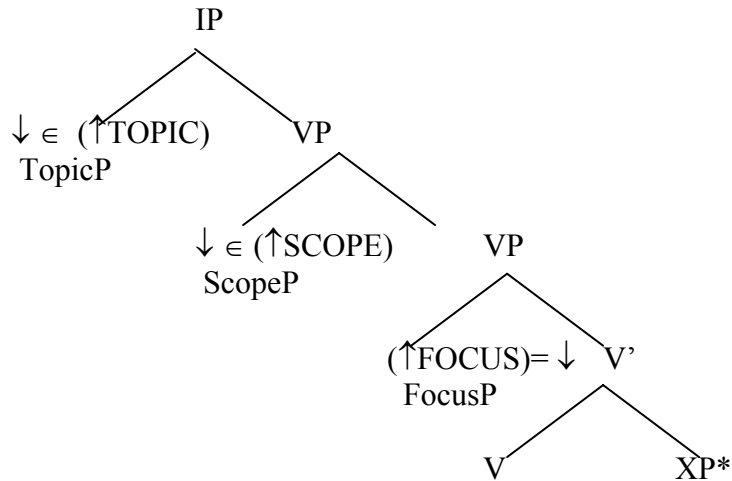
¹¹ Any arguments of the verb can be topicalized, as well as modifiers, adverbials, and predicates.

¹² The predicate-initial position between topic and focus is obligatorily reserved for the following items:

- (i) positive universal quantifiers *mindenki* ‘everyone’, *minden* ‘everything’, *mindig* ‘always’, phrases containing determiners *minden* ‘every’, *mindegyik* ‘each’, *mindkét* ‘both’, *összes* ‘all’, *legtöbb* ‘most’
- (ii) phrases containing additive particles such as *is* ‘also’, *még ... is* ‘even/also’ or certain adverbials of frequency, degree and manner, such as *állandóan* ‘constantly’, *rettentően* ‘terribly’, *gyorsan* ‘quickly’.
- (iii)

Therefore, a new function, which I name SCOPE, is needed in Hungarian for constituents that occur between TOPIC and FOCUS. The LFG representation of the pre-verbal periphery is given in (31):

(31) LFG analysis



In the tree in (31) the constituent structure meta-category abbreviations such as TopicP, ScopeP and FocusP are used for the general description of the phrase structure categories (e.g. NP, PP, etc.) of the sentence-initial discourse functions.¹³ The functional descriptions $\downarrow \in (\uparrow \text{TOPIC})$, $\downarrow \in (\uparrow \text{SCOPE})$, and $(\uparrow \text{FOCUS}) = \downarrow$ capture the discourse functions of the given categories.

Items that occur in SCOPE are typically universal quantifiers and a small group of adverbs (cf. footnote 13). These items can occur post-verbally or pre-verbally. If two of these items co-occur post-verbally, or one of them co-occurs with another scopal element, their order does not effect their scopal relations: regardless of their precedence, they have scope over each other. If one of the universal quantifiers and adverbs or another scopal element occurs in pre-verbal position, a post-verbal universal quantifier or adverb has to move to the pre-verbal position preceding that other scopal element, if it has scope over it. In other words, universal quantifiers and adverbs are placed to the verb-initial position for scope reasons. Therefore, the label SCOPE is adopted for the function that associates with the syntactic position hosting them. It is worth noticing that since *scope* is a semantic notion, the function SCOPE cannot be considered strictly as a discourse function; rather, it is a semantic function.

5. Long-distance dependencies of split partitives in LFG

Kaplan and Zaenen (1989) and Bresnan (2001) have argued that long-distance dependencies obey functional rather than phrase structure constraints. Both analyses show that long-distance dependencies can be straightforwardly accounted for in LFG by employing functional

¹³ For the role of meta-categories in syntactic description see Dalrymple (2001), Chapter 5.

uncertainty. Adopting this idea, I follow Kaplan and Zaenen (1989) in using outside-in functional uncertainty to model long-distance relations between the split constituents of partitive noun phrases in Hungarian.

5.1 *Phrase structure rules*

In LFG, constituent structure categories occur in the c-structure instead of functional categories. The permitted constituent structure categories for topic, scope and focus phrases are given in (32):

- (32) TopicP \equiv { NP, PP, AP, ADVP, CP, VP}
 ScopeP \equiv { NP, ADVP}
 FocusP \equiv { NP, PP, AP, ADVP, CP, VP}

As was mentioned in section 4, sentence-initial discourse-marked constituents are ordered in Hungarian. Therefore, the following phrase structure rules are needed to describe the hierarchical left-periphery of the Hungarian sentence:¹⁴

(33) *Phrase structure rules*

- (a) $IP \rightarrow \left(\begin{array}{c} \text{TopicP}^* \\ \downarrow \in (\uparrow \text{TOPIC}) \\ (\uparrow \text{TOPIC}) = (\uparrow \text{BODY BOTTOM}) \end{array} \right) \quad \begin{array}{c} \text{VP} \\ \uparrow = \downarrow \end{array}$
- (b) $VP \rightarrow \left(\begin{array}{c} \text{ScopeP}^* \\ \downarrow \in (\uparrow \text{SCOPE}) \\ (\uparrow \text{SCOPE}) = (\uparrow \text{BODY BOTTOM}) \end{array} \right) \left(\begin{array}{c} \text{FocusP} \\ (\uparrow \text{FOCUS}) = \downarrow \\ (\uparrow \text{FOCUS}) = (\uparrow \text{BODY BOTTOM}) \end{array} \right) \quad \begin{array}{c} \text{V}' \\ \uparrow = \downarrow \end{array}$

Besides capturing the order of the discourse-marked phrases, the rules in (33a) and (33b) state that topic, scope and focus phrases (TopicP, ScopeP, and FocusP) are linked to the appropriate discourse functions, namely TOPIC, SCOPE, and FOCUS by the functional equations $\downarrow \in (\uparrow \text{TOPIC})$, $\downarrow \in (\uparrow \text{SCOPE})$, and $(\uparrow \text{FOCUS}) = \downarrow$. That the discourse functions are identical to some grammatical function is indicated by the outside-in functional uncertainty equations $(\uparrow \text{TOPIC}) = (\uparrow \text{BODY BOTTOM})$, $(\uparrow \text{SCOPE}) = (\uparrow \text{BODY BOTTOM})$, $(\uparrow \text{FOCUS}) = (\uparrow \text{BODY BOTTOM})$ (Kaplan and Zaenen 1989).

¹⁴ The *Kleene star operator* indicates that more than one TOPIC or SCOPE phrase can occur sentence-initially. The parenthesis mark the optional occurrence of the sentence-initial discourse-marked phrases.

5.2 Grammatical functions of the discourse-marked phrase

In long-distance dependencies, sentence-initial discourse functions have to be bound to certain within-clause positions. This is ensured by the *Extended Coherence Condition* (Zaenen 1980). For Hungarian the following modified version of this condition is relevant:

(34) ***Extended Coherence Condition:***

TOPIC, SCOPE and FOCUS must be linked to the semantic argument structure of the sentence in which they occur, either by functionally or by anaphorically binding an argument.

In the case of long-distance dependencies of split partitive noun phrases, TOPIC, SCOPE or FOCUS are related to their within-clause grammatical function functionally, rather than anaphorically.

Kaplan and Zaenen (1989) argue that the grammatical functions of the within-clause phrase are constrained: some grammatical functions can be related to discourse functions, whereas others cannot. This idea is also applicable to Hungarian: for instance, since arguments and modifiers can be freely topicalised, among others, the grammatical functions SUBJ, OBJ, COMP and ADJ can be related to the discourse function TOPIC. Also, *dative*, “*közül*” and *elative partitives* allow long-distance extraction of their complements to a sentence-initial topic position (refer back to examples (17), (18) and (19)). In the *dative partitive*, the complement is associated with the grammatical function SUBJ, whereas in the “*közül*” and *elative partitives* the complements are linked to the grammatical functions $OBL_{közül}$, and OBL_{ELAT} , which are variants of OBL_{θ} . Thus, OBL_{θ} can associate with TOPIC as well. *Genitive partitives*, which cannot be split, disallow any kind of extraction of their complement, NCOMP: in such NPs head and complement must be adjacent to each other (cf. example (13)). By disallowing the grammatical function NCOMP to associate with the grammatical function TOPIC, the ungrammaticality of (13) can be straightforwardly accounted for. That is, the inseparability of *genitive partitives* then follows from a constraint on the within-clause grammatical functions (i.e. on the BOTTOM of the dependency path), formulated in (35):

$$(35) \quad (\uparrow\text{TOPIC}) = (\uparrow\text{GF-NCOMP})$$

In (35) the annotation $(\uparrow\text{GF-NCOMP})$ states that any grammatical function except NCOMP can be associated with TOPIC. GF stands for all possible grammatical functions, and formally can be represented as a disjunction of such categories: $\text{GF} \equiv \{\text{SUBJ} \mid \text{OBJ} \mid \text{OBL}_{\theta} \mid \text{COMP} \mid \text{NCOMP} \mid \text{ADJ}\}$. Since *genitive partitives* and genitive possessor noun phrases are syntactically identical, they behave in the same way with regard to extraction. The constraint in (35) simultaneously

accounts for genitive possessor noun phrases which are also inseparable.¹⁵

5.3 Constraining the grammatical functions on the path

In section 3, it has been demonstrated that long-distance dependencies involving a position inside a tensed or a non-tensed sentential adjunct are ruled out in Hungarian (refer back to long-distance topicalization of complements of partitive NPs in (20), (21), and (22)). In LFG the island constraints are accounted for by constraining the grammatical functions permitted on the path (i.e. constraining the BODY of the dependency). For sentential adjunct clauses, the constraint can be stated in the following way: the path to the within-clause function of the discourse-marked constituents may not include the grammatical function ADJ. However, phrasal adjuncts need to be excluded from this constraint (cf. example in (23)). The grammatical function of both sentential and phrasal adjuncts is the same; therefore, in the f-structure the same attribute is used, namely ADJ. What is constrained then is a particular value that clausal adjuncts have, but phrasal adjuncts lack. The formal description involves a general constraint supplemented by an off-path constraint, which can be illustrated as follows:

$$(36) \quad (\uparrow \text{TOPIC}) = (\uparrow \text{ADJ} \quad \text{GF-NCOMP} \quad \neg(\rightarrow \text{TENSE}))$$

The inside-out functional uncertainty expression $(\uparrow \text{TOPIC}) = (\uparrow \text{ADJ} \quad \text{GF-NCOMP})$ states that TOPIC can be connected to any grammatical function besides NCOMP within an adjunct. The off-path constraint $\neg(\rightarrow \text{TENSE})$ ensures that the grammatical function ADJ does not contain the attribute TENSE, since tense is a property of clauses rather than phrases. This off-path constraint is unavoidable, since the statement that any kinds of adjuncts allow long-distance dependencies is

¹⁵ Similarly to genitive partitives, genitive possessors cannot be split; dative partitives and dative possessor NPs allow splitting of head and complement. Genitive and dative possessor NPs are illustrated in (i) and (ii) respectively:

Genitive Possessor NP

- (i) ***[A** **kisfiú**]_{NCOMP} valószínű,
 the little boy.3SG.GEN is likely
- hogy megtalálták [_ [**bicikli-jé -t**]_N]_{NP}
 that found.3PL.PAST bike-3SG.POSS-ACC
 ‘The boy’s, it is likely that they found bike.’

Dative Possessor NP

- (ii) **[A** **kisfiú-nak**]_{SUBJ} valószínű,
 the little boy.3SG-DAT is likely
- hogy megtalálták [_ **a** [**bicikli-jé -t**]_N]_{NP}
 that found.3PL.PAST the bike-3SG.POSS-ACC
 ‘The boy’s, it is likely that they found the bike.’

false. Although clausal and phrasal adjuncts differ c-structurally, it is more lucrative to formulate the adjunct island constraint f-structurally, because phrasal adjuncts can have a large variety of syntactic forms, all of which would need to be included as exceptions to the constraint. The vital characteristic of any phrase is the lack of tense (unless the phrase is verbal). Excluding the attribute TENSE from the grammatical function ADJ on the path can straightforwardly and economically capture the adjunct effects on long-distance dependencies in Hungarian.

5.4 *Off-path constraints*

Besides sentential adjuncts, non-bridge verbs also block long-distance dependencies in Hungarian. Recall (27), (28), (29) illustrating topicalization of NP/PP complements across the non-bridge verb *súg* ‘whisper’. The distinction between bridge verbs and non-bridge verbs does not affect the within-clause grammatical function of the displaced constituent. In other words, the path to the inside of the clause remains invariable. As pointed out by Dalrymple (2001), there is no reason to assume that the grammatical function of the complements of these verbs differ, if syntactically they are the same. To account for the behaviour of non-bridge verbs therefore, following Dalrymple (2001), I assume an f-structure attribute LDD with the value $-$, which is lexically specified by a non-bridge verb as appearing in its sentential complement (COMP). F-structures containing such attributes cannot participate in long distance dependencies. To put it differently, a sentential complement (COMP) of a non-bridge verb has the feature LDD the value of which is minus. Bridge verbs lack this feature. The path in a long-distance dependency may not pass through an f-structure containing this feature. In formal terms, this requirement is stated as an off-path constraint, as illustrated in (37):

$$(37) \quad (\uparrow\text{TOPIC}) = (\uparrow\text{COMP} \quad \text{GF-NCOMP}) \\ (\rightarrow\text{LDD} \neq -)$$

The expression in (37) captures the notion that the TOPIC is connected to a grammatical function other than NCOMP which is embedded in a sentential complement. The off-path constraint $(\rightarrow\text{LDD} \neq -)$ ensures that the f-structure of COMP does not contain the attribute LDD with the value minus.

5.5 *Hungarian TOPIC/SCOPE/FOCUS path*

Besides TOPIC, heads/complements of split partitives as well as other sentence-initial constituents can be related to SCOPE and FOCUS. The path between SCOPE/FOCUS and their within-clause functions is subject to the same constraints as the topic path for the following reasons: (i) scope and focus phrases also involve movement to a pre-verbal discourse-marked position, (ii) the displaced constituent passes through the same path as topicalization. Therefore, taking into consideration the set of functional constraints outlined in sections 5.2, 5.3, and 5.4, the general TOPIC/SCOPE/FOCUS path for Hungarian can be formally characterised in the following way:

(38) *Hungarian TOPIC/SCOPE/FOCUS path*

$$\left\{ \begin{array}{l} \text{COMP} \mid \text{OBJ} \mid \text{SUBJ} \\ (\rightarrow\text{LDD} \neq -) \end{array} \right\}^* \quad \left\{ \begin{array}{l} (\text{ADJ} \in) \\ \neg(\rightarrow\text{TENSE}) \end{array} \right\} \quad \text{GF-NCOMP}$$

This description allows the within-clause grammatical function other than NCOMP to be arbitrarily deeply embedded inside an infinite number of properly constrained COMP, OBJ or SUBJ functions, and optionally to appear as a member of a set of phrasal ADJ set of such a function. The *Kleene star operator* allows any number of COMP, OBJ or SUBJ attributes on the path. The off-path constraint $(\rightarrow\text{LDD} \neq -)$ ensures that the within-clause function of the TOPIC does not involve a non-bridge verb, while the off-path constraint $\neg(\rightarrow\text{TENSE})$ ensures that the ADJ does not contain any tense (that it is phrasal, rather than clausal).

5.6 *An Example*

Let us apply the general rules to a specific long-distance dependency between the constituents of a partitive noun phrase. Consider the following topicalization of the PP complement from the “közül” partitive:

- (39) [A **betörő-k** **közül**]_{PP} mondták, hogy
the burglar-3PL from among say.3PL.PAST that
- Péter felismert [[kettő-t]_N ___]_{NP}.
Peter recognize.3SG.PAST two-ACC
‘Of the burglars, they said that Peter recognized two.’

Taking into consideration the phrase structure rules, the constraint on syntactic categories, and the functional constraints on the path, we can formally account for the example in (39) as follows:

(40) IP \rightarrow PP VP
 $\downarrow \in (\uparrow\text{TOPIC})$ $\uparrow=\downarrow$
 $(\uparrow\text{TOPIC}) = (\uparrow\text{COMP} \text{ OBL}_{\text{közül}})$
 $(\rightarrow\text{LDD} \neq -)$

The c-structure and f-structure of the split partitive of (39) is given in (41):

The rule in (41) shows that the topicalized phrase has the syntactic category PP and it is the sister of VP. The phrase structure rule correctly illustrates that the topicalized PP is outside the predicate. The annotation $\downarrow \in (\uparrow\text{TOPIC})$ captures the claim that PP belongs to a set of possible topicalizable phrases. The functional uncertainty equation $(\uparrow\text{TOPIC}) = (\uparrow\text{COMP OBL}_{\text{közül}})$ represents the topic path, namely that the TOPIC is associated with the grammatical function $\text{OBL}_{\text{közül}}$ which is embedded into COMP. In other words, the $\text{OBL}_{\text{közül}}$ occurs deep within the embedded subordinate clause that functions as the complement of the matrix verb. The off-path constraint under COMP ensures that COMP does not contain the attribute-value pair $\langle\text{LDD -}\rangle$. The f-structure correctly reflects the grammatical functions: it is complete and coherent and does not violate any constraint. The f-structure of the TOPIC is associated with the grammatical function $\text{OBL}_{\text{közül}}$, which is embedded in the sentential complement of the matrix verb. The f-structure of COMP does not contain the attribute-value pair $\langle\text{LDD -}\rangle$. Therefore, the long-distance dependency between the split $\text{OBL}_{\text{közül}}$ complement and its head in this case is grammatical.¹⁶

6. Concluding remarks

In this paper, it has been shown that there are four basic types of partitive construction in Hungarian: *genitive*, *dative*, “*közül*”, and *relative*. In distinction to *genitive partitives*, *dative*, “*közül*” and *relative partitives* allow splitting of head and dependent. Split partitive noun phrases show diagnostics of long-distance dependencies: they are subject to the *Adjunct Island Constraint* and to the constraint imposed by *non-bridge verbs*. I have proposed an analysis of split partitive noun phrases in purely functional terms. By excluding NCOMP from the within-clause grammatical functions that can be associated with the various discourse functions, the inability of *genitive partitives* to split is accounted for straightforwardly. What is more, the explanation for the inseparability of genitive possessors from their head also follows from this constraint. The *Adjunct Island Constraint* has been captured by formalizing a functional constraint that excludes the attribute TENSE from the f-structure of adjuncts. This ensures that extraction is only allowed from adjunct phrases. The behaviour of non-bridge verbs was accounted for by a functional constraint ensuring that the f-structure of their complements does not contain the attribute-value pair $\langle\text{LDD} = -\rangle$. Finally, I have defined a general long-distance path for Hungarian. Further research is required to look into the behaviour of other long-distance dependencies in Hungarian, for instance WH-question and relative clauses, in order to reveal whether a unified functional account of them can be achieved.

¹⁶ In (41) another instance of a topicalized constituent also occurs, namely that of the subject of the embedded clause. The specially modified version of the general topicalization rule is given in (i):

$$(i) \quad \begin{array}{lll} \text{IP} \rightarrow & \text{NP} & \text{VP} \\ & \downarrow \in (\uparrow\text{TOPIC}) & \uparrow = \downarrow \\ & (\uparrow\text{TOPIC}) = (\uparrow\text{SUBJ}) & \end{array}$$

The NP occurs as the topic of the embedded clause and it is outside the VP predicate. The topicalized NP constituent is related to the grammatical function SUBJ: the external argument of the verb.

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