Some of the major steps towards a comprehensive LFG analysis of partitivity in Hungarian

1. Introduction

So far, partitivity in Hungarian has received relatively little attention in generative frameworks, including LFG. In the talk I will give a critical overview of the only LFG account that I am aware of (Chisarik 2002), and then I will propose a detailed analysis that will hopefully serve as a basis for the development of a comprehensive LFG analysis of partitivity in Hungarian.

2. On partitivity across languages

Capitalizing on his own database, covering 138 languages, Seržant (2021) offers a typological overview of partitives. He uses the following definitions (and examples).

(A) True-partitive

"A true-partitive relation obtains when there is a subset-superset relationship between two sets (with mass nouns: two portions) of the same kind" (2021: 885). The interpretation of the superset must be definite specific. "Partitives are grammatical constructions that may be used to encode the true partitive relation without relying on contextual inferences. Partitives obligatorily encode (i) a quantifier and (ii) the restrictor. […] In a true-partitive relation, the *quantifier* corresponds to the subset and the *restrictor* to the superset" (2021: 886).

(1) *Yesterday I had **a cup of the tea that you made for me**.*

(B) Pseudo-partitive

"A pseudo-partitive construction […] is a partitive construction with no specific superset in the restrictor" (2021: 893).

(2) *Yesterday I had **a cup of tea**.*

True-partitives imply proportional quantification, see (1), while pseudo-partitives express plain quantification, see (2).

As regards the syntactic expression of partitives in the database, Seržant distinguishes two syntactic types: (i) NP-internal encoding (adpositions and possessive indexes) (ii) pronominal encoding (partitive pronouns and quantifiers). As for the morphological marking of the partitive relation, he identifies five types: (i) possessive (ii) separative (iii) unmarked (iv) locative (v) unclear. In the next section, I will show that Hungarian employs the NP-internal syntactic encoding strategy and the possessive and separative types of morphological encoding.

Seržant also points out that in a considerable number of languages exhibiting the NP-internal pattern the partitive NP constituent can be split, yielding a looser instance of syntactic integration. This is possible in English as well (2021: 898-899):

(3) a. *some of these students* b. *Of the students, at least ten were drunk.*

As I will show in the next section, split partitives can be found in Hungarian, too.

3. Chisarik's (2002) LFG analysis

Chisarik (2002: 97) identifies the following types of partitive constructions.[1]

(A) Possessive Partitives

i. *a csészé-k fel-e* [genitive partitive][2]
the cup-PL.GEN half-POSS.3SG
'half of the cups'

ii. *a csészé-k-nek a fel-e* [dative partitive]
the cup-PL.DAT the half-POSS.3SG
'half of the cups'

(B) Oblique Partitives

i. *négy a csészé-k közül* ["közül" partitive]
four the cup-PL from.among
'four of the cups'

ii. *bármennyi a teá-ból* [elative partitive]
any.amount the tea-ELAT
'any one of the cups'

She assumes that in all the four types exemplified in (Ai,ii) and (Bi,ii) there is a noun head (*fél* 'half', *négy* 'four', *bármennyi* 'any (amount of)') and the possessors in (Ai) and (Aii), the *közül* PP in (Bi) and the elative

[1] For presentational purposes, the examples are mine.

[2] On the basis of Payne and Chisarik (2001), she assumes that the morphologically unmarked possessor bears genitive case in (Ai), hence her term: "genitive partitive" (by contrast, in the overwhelming majority of analyses in a whole range theoretical frameworks the unmarked possessor is in nominative case).

NP in (Bii) are the dependents of these heads, i.e. all these heads are analyzed as argument-taking nominal predicates. The general problem is that these elements are typically and naturally used as adjunct modifiers (without an a-structure) of NP heads, e.g. *négy alma* 'four apples', *bármennyi tea* 'any amount of tea'. This means that the lexical forms of all these potential partitive heads would need to be "doubled", i.e. all these forms would need to contain an argument-taking predicate option, in addition to their potentially having the N lexical category label. These issues are not at all addressed in Chisarik (2002). Consider my example in (4a). On the basis of the information available in her paper, Chisarik would assign the structure in (4b) to the partitive constituent. She herself does not give any lexical form representation in the paper, so (4c) shows what I think she would assume.

(4) a. *Eltörtem* ***négy-et*** ***a*** ***csészé-k*** ***közül***.
broke.1SG four-ACC the cup-PL from.among
'I broke four of the cups.'

b. [[*négyet*]$_{N}$ [*a* *csészék* *közül*]$_{PP}$]$_{NP}$
four.ACC the cup.PL from.among
'four of the cups'

c. *négy*, N (↑PRED)= 'four <(↑OBL$_{közül}$)>'

I do not find this "conversion to argument-taking predicate approach" well motivated and feasible and in section 4 I will propose an entirely different (and much more detailed) analysis.

Chisarik (2002) points out that the constructions under investigation allow extraction, i.e. split partitives are also grammatical, except for the genitive partitive, which does not tolerate splitting. Consider (5).

(5) ***A*** ***csészé-k*** ***közül*** *is* *eltörtem* ***négy-et***.
the cup-PL from.among also broke.1SG four-ACC
'Even of the cups I broke four.'

I believe that there are the following two major problems with Chisarik's approach as presented in her paper. (A) The title of the paper is *Partitive noun phrases in Hungarian*. Despite this fact she provides a descriptive overview of the four basic types with examples on two and a half pages and outlines in prose the gist of her analysis in just two paragraphs. The rest of the paper is devoted to the analysis of split partitives; thus, the title is rather misleading. (B) As regards her analysis of split partitives, she assumes that it is always what she considers to be the complement of the partitive noun head that is involved in an extraction configuration and this constituent always occupies a preverbal DF position, as in (5). In the talk I will show that this is a very incomplete picture and analysis, because (i) such a constituent can also show up in postverbal positions (ii) "the rest" (i.e. the other part) of a split partitive can also fill a preverbal DF position.

4. Towards a new and comprehensive LFG analysis

Let us take a look at (4a) from section 3, repeated here as (6) for convenience, exemplifying a true-partitive construction in Seržant's (2021) typological classification, see section 2. Recall from section 3 that in Chisarik's un(der)developed LFG analysis the numeral has the N (noun head) status, and it takes the "közül"-PP as its OBL argument.

(6) *Eltörtem* ***négy-et*** ***a*** ***csészé-k*** ***közül***.
broke.1SG four-ACC the cup-PL from.among
'I broke four of the cups.'

In the talk I will propose an alternative LFG treatment of this basic partitive construction type. Its crucial ingredients are as follows. (i) The numeral has its usual NUMBER category label, and it is an adjunct modifier of an LFG-style pro head. (ii) The PP is not a complement; instead, it is an adjunct modifier of the NP headed by the pro element. The function of the PP adjunct is to provide a linguistic context for the interpretation of the pro-headed NP. (iii) This analysis is based on Laczkó's (2007) treatment[3] of the Hungarian "elliptical" construction type exemplified in (7a) and (8a) – the non-elliptical counterparts are given in (7b) and (8b).

(7) [Context: *Mely csészéket tegyem a dobozba?* 'Which cups shall I put in the box?']

a. *A* *nagyon* *szép-**ek-et***.
the very nice-PL-ACC
'The very nice ones.'

b. *A* *nagyon* *szép* *csészé-**k-et***.
the very nice cup-PL-ACC
'The very nice cups.'

(8) [Context: *Hány csészét tegyek a dobozba?* 'How many cups shall I put in the box?']

a. *Négy-**et***.
four-ACC
'Four.'

b. *Négy* *csészé-**t***.
four cup-ACC
'Four cups.'

[3] Laczkó's (2007) approach was motivated by Butt et al.'s (1999) LFG treatment of English constructions like *the dentist's*.

As these examples show, in these "elliptical" (headless) NPs a final constituent can be either an AP, see (7a) or a NUMBERP, see (8a). In Hungarian, adjectives and numerals used attributively in non-elliptical noun phrases do not agree with the noun head they premodify for either number or case, see *szép* 'nice' in (7b) and *négy* 'four' in (8b). In the elliptical version the head of the AP (or, if there is more than one AP in the phrase, the head of the final AP) or the head of the sequence final NUMBERP bears the nominal inflectional elements normally carried by the (missing) noun head, see (7a) and (8a). Laczkó's main argument against an A→N conversion analysis of elliptical constructions is that the element in question receives adverbial modification, see (7a), which is characteristic of adjectives and not nouns. Laczkó (2007: 330) employs the following functionally annotated phrase-structure rules.

(9) a. N' → XP* ↓∈(↑ADJUNCT) ¬(↓CASE) ¬(↓NUM) ¬(↓POSS) N ↑=↓

b. N' → XP* ↓∈(↑ADJUNCT) ¬(↓CASE) ¬(↓NUM) {NUMBERP | AP} ↓∈(↑ADJUNCT) (↑PRED)= 'pro' (↑CASE)=(↓CASE) (↑NUM)=(↓NUM)

(9a) is the rule for headed NPs. It encodes that adjectival and numeral adjuncts premodifying the noun head must not be inflected. (9b) is the rule for headless NPs. It encodes that (the head of) the final (or only) NUMBERP or AP constituent must be inflected. In addition, it introduces an LFG-style pro functional head for the NP. The main claim is that the reference of these "pro-headed, elliptical" noun phrases can be identified by the help of either the linguistic (textual) or situational context. (7a) and (8a) exemplify the former. Capitalizing on this approach, here I propose that (6) should be analyzed along the same lines: *négy-et* [four-ACC] is an inflected head of a NUMBERP in an elliptical NP and the "közül"-PP adjunct, which is either right-adjoined to the NP or separated from this NP, provides the linguistic context for the interpretation of the pro-head. Strictly speaking, the pro-head is not a fully referential pro element; rather it has a "substitutional" function similar to that of *one* in English, see (7a) and its English translation.[4]

My general approach to partitivity in Hungarian (and possibly in several other languages as well) is as follows. I assume that in this language there are no specific partitive constructions either syntactically or morphologically. Instead, there are several syntactic and/or morphological configurations that receive a proper partitive interpretation thanks to one (or even two) of the elements they contain, because the semantics of these elements is (at least optionally) partitive. Consequently, for me the typological-descriptive terms generally used (true-partitives, pseudo-partitives, etc.) are just partially useful labels that only cover part of a wider range of configurations with a genuine partitive meaning. Consider the following examples.

(10) *négy-et a csészé-k közül*
four-ACC the cup-PL from.among
'four of the cups'

(11) *a csészé-k 50 százaléká-t*
the cup-PL 50 percent-ACC
'50 percent of the cups'

(12) *bármelyik-et a csészé-k közül*
any.one-ACC the cup-PL from.among
'any one of the cups'

In (10) it is the "közül"-PP, expressing the superset, that provides the basis for the partitive interpretation. In (11) *százalék* 'percent', expressing the subset, is responsible for the partitive interpretation: a certain percent is always a proper part of the whole (100 percent). In Hungarian *-ik*-suffixed words are inherently partitive: *egy-ik* [one-IK 'one of x.PL'], *bármely-ik* [any-IK 'any one of x.PL], etc. thus, (12) contains two elements with partitive semantics: *bármelyik*, expressing the subset, and the "közül"-PP, expressing the superset.

I assume that the "partitive semantics" contribution of the relevant elements must be encoded in their lexical forms. For instance, the postposition *közül* and the elative case-marker *-ból/-ből* must be optionally specified as contributing the "partitivity" semantic feature, and adjectives like *bármelyik* must be obligatorily specified so. One possible way of doing this would be to use a type-feature: e.g. *közül*, P …(↑ P-TYPE) = partitive or *bármelyik*, A … …(↑ A-TYPE) = partitive. This feature then could trigger the necessary annotations to properly feed semantics. I will present further details in the talk.

References

Chisarik, Erika. 2002. Partitive noun phrases in Hungarian. In: Miriam Butt & Tracy Holloway King (eds.): *Proceedings of the LFG02 Conference.* Stanford, CA: CSLI Publications, 96-115. **Laczkó, Tibor. 2007.** On elliptical noun phrases in Hungarian. In: Miriam Butt & Tracy Holloway King (eds.): *Proceedings of the LFG07 Conference.* Stanford, CA: CSLI Publications, 323-342. **Payne, John & Chisarik, Erika. 2001.** The so-called "nominative" possessor construction: A new genitive? Paper presented at the 5 International Conference on the Structure of Hungarian, Budapest, 24-26 May 2001. **Seržant, Ilja A. 2021.** Typology of partitives. *Linguistics* 59(4), 881-947.

[4] For further details, see Laczkó (2007), whose analysis I adopt here.