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An Alternative Approach to Environmental Copula Constructions in Hungarian

1. Introduction

Consider the following sentence.

(1) *Nagyon hideg van (a konyhá-ban).*
    very   cold   is   the kitchen-INESS
    'It is very cold (in the kitchen).'

This example illustrates a special and productive copular construction type in Hungarian. It is most often referred to as "environmental copula construction". Its crucial properties are as follows. *(i)* In this use the copula is combined with an adjectival phrase. *(ii)* The sentence cannot contain an overt noun phrase subject (whether referential or expletive). *(iii)* There is an expressed or understood location.

2. On previous approaches

Kádár (2011) offers a critical overview of the salient previous treatments of this construction, which we briefly summarize below, and then she outlines her new proposal, also summarized below. In the talk we will argue against her analysis and present our alternative.

   Komlósy (1994) assumes that this construction, just like clauses with weather verbs, has no subject and the copula bears a default 3SG agreement marker. Kádár (2011) points out that, as mentioned by Komlósy himself, this assumption is problematic because the construction is compatible with matrix subject control predicates like *akar* 'want' and *tud* 'be able to'. She adds further considerations that we discuss in the talk.

   Tóth (2001) assumes that in this construction there is a covert quasi-argumental subject that has an atmospheric theta-role. Kádár (2011) argues against this assumption on the basis of the complexity of agreement phenomena involving auxiliaries and the inflected and uninflected versions of the infinitival form of the copula. In addition, if there is a covert subject about which the AP predicates then it is unusual that the copula is obligatory in present tense with a 3SG subject. We discuss these details in the talk.

   Viszket (2002) claims that the AP is the subject of the construction. Kádár (2011) subscribes to this view. She points out that there are two possible ways of implementing this approach. (i) We can assume that adjective → noun conversion takes place and the adjective-looking word is actually the noun head of the construction. (ii) We can assume that the subject noun phrase is headed by an abstract null noun that is modified by the adjective. Kádár opts for (i) without pointing out her motivations for this choice. In the talk we argue for (ii).

3. Our alternative analysis

We fully agree with Kádár's arguments against Komlósy's (1994) no subject and Tóth's (2001) covert quasi-argumental subject analyses and we also assume that the constituent under investigation has the noun phrase subject status in this construction. However, we claim that instead of Kádár's adjective → noun conversion the null noun head analysis is more appropriate on the following grounds.

   (A) As (1) illustrates, in this construction the adjective takes adverbial modification. Moreover, when it is used in its comparative form, it takes complementation characteristic of adjectives, see (2).

(2) *A tegnapi-nál   hideg-ebb van (a konyhá-ban).*
    the yesterday's-ADESS cold-er   is   the kitchen-INESS
    'It is colder than yesterday (in the kitchen).'

We think it is not feasible to assume that the adjective is converted into a noun but in such a way that it retains the syntactic behaviour of the input adjective, which is the essence of Kádár's approach. We present the details of our criticism of Kádár's arguments for conversion along these lines. (Needless to say, it is even much less feasible to assume that full APs exemplified in (1) and (2) are converted into nouns.) By contrast, assuming an empty noun head naturally explains the syntactic properties of the constituent.

   (B) In Hungarian there are "elliptical" noun phrases (without overt noun heads) containing head-final adjectives that bear nominal inflection (plural, possessive, case). See (3), which can be a response to the following question: 'Which bottles shall I put in the fridge?'

(3) *A nagyon hideg-ek-et.*
    the very   cold-PL-ACC
    'The very cold ones.'

We will show that the AP constituent in Type A and these elliptical noun phrases can be analysed in a basically similar fashion, mutatis mutandis.

Laczkó (2007), motivated by Butt et al.'s (1999) LFG treatment of English constructions like *the dentist's*, proposes the following analysis of the elliptical construction type exemplified in (3). The non-elliptical counterpart of (3) is given in (4).

(4)　*A　nagyon　hideg　üveg-ek-et.*
　　 the　very　　cold　　bottle-PL-ACC
　　 'The very cold bottles.'

As (4) shows, adjectives used attributively in non-elliptical noun phrases do not agree with the noun head they premodify for either number or case. By contrast, in the elliptical version illustrated in (3) the adjective (or, if there is more than one adjective in the phrase, the final adjective) bears the nominal inflectional elements normally carried by the (missing) noun head.

Laczkó (2007) uses the following phrase structure rules.

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

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

(5a) is the rule for headed noun phrases. The adjuncts of the head must not bear case and number marking. (5b) is the elliptical rule. The last constituent (whether it is an adjectival phrase or a number phrase) having the adjunct function carries nominal inflection for the entire noun phrase, and, crucially, a PRED feature with a 'pro' value is introduced. Laczkó claims that this 'pro' yields two possible interpretations. (i) In an appropriate linguistic context or speech situation it has a function similar to that of *one* in English, compare the Hungarian example in (3) with its English translation. This is the standard elliptical use of the construction. (ii) In a non-elliptical use the interpretation is "pro-arb", i.e. the 'pro' has the [+human] semantic feature (which is roughly comparable to English examples like *the rich*).

We propose that the relevant constituent in the environmental copular constructions exemplified in (1) be analysed along these lines. Its special property is that, thanks to the specific role of 'pro', the subject noun phrase receives an atmospheric/environmental interpretation (the interpretation Tóth 2001 associates with her covert quasi-argumental subject, see above). Consider our analysis of (2) in (6) and (7) on page 3. This example simultaneously presents our analysis of Hungarian environmental copula constructions and the treatment of Hungarian elliptical noun phrases, both in the spirit of Laczkó's (2007) approach.

In Hungarian there are five major types of copula constructions: attribution/classification, identity, location, existence, and possession (for a discussion and an overview of generative analyses of Hungarian and English copula constructions, see Laczkó (2021)). In the talk we argue that this construction under investigation belongs to the location type, in which the copula is treated as a two-place predicate with a subject and a locative argument.
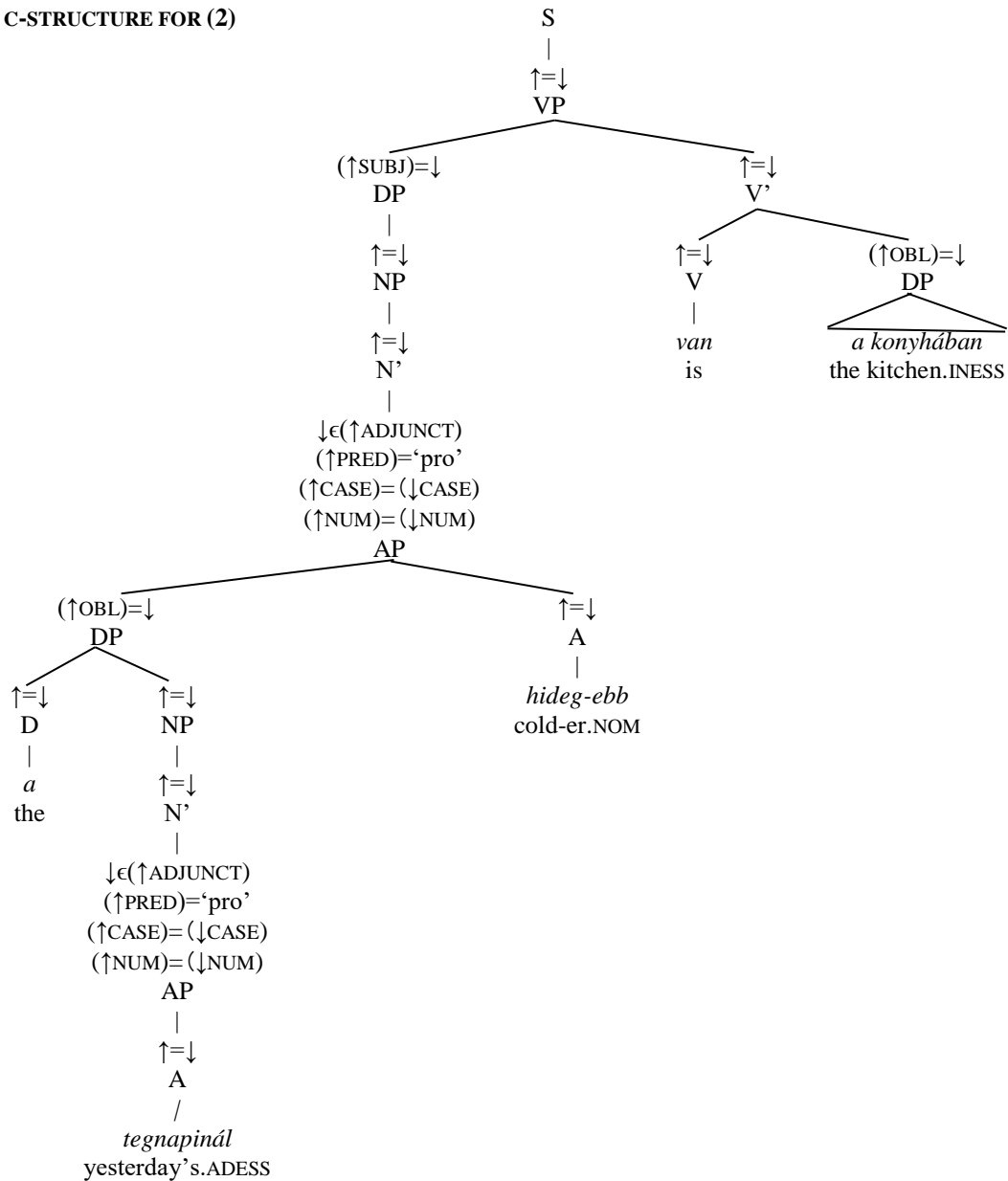
4. Conclusion

In the talk we develop an LFG analysis of environmental copula constructions in Hungarian. We agree with Kádár (2011) in that these constructions are not subjectless (contra Komlósy 1994) and they do not contain a covert quasi-argumental subject (contra Tóth 2001). However, we argue against Kádár's (2011) adjective → noun conversion analysis and propose an elliptical noun phrase account in the spirit of Laczkó (2007).

References

Butt, Miriam, Tracy Holloway King, Maria-Eugenia Nino & Frederique Segond. 1999. *A Grammar Writer's Cookbook.* Stanford: CSLI Publications.

Kádár, Edit. 2011. Environmental copula constructions in Hungarian. *Acta Linguistica Hungarica* 58(4), 417–447.

Komlósy, András 1994. Complements and adjuncts. In: Katalin É. Kiss & Ferenc Kiefer (eds): *The Syntactic Structure of Hungarian* (*Syntax and Semantics* 27. Academic Press, New York, 91–178.

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.

Laczkó, Tibor. 2021. *Lexicalising Clausal Syntax: The Interaction of Syntax, the Lexicon and Information Structure in Hungarian.* Amsterdam: John Benjamins.

Tóth, Ildikó 2001. Impersonal constructions and null expletives. In: István Kenesei (ed.): *Argument Structure in Hungarian*. Akadémiai Kiadó, Budapest, 51–78.

Viszket, Anita 2002. Az argumentumazonosítás alapelvei [Basic principles of argument identification]. In: Márta Maleczki (ed.): *A mai magyar nyelv leírásának újabb módszerei V* [New methods in the description of Hungarian 5]. Szegedi Tudományegyetem, Szeged, 151–67.

(6)   **C-STRUCTURE FOR (2)**

$$
\begin{array}{c}
S \\
| \\
\uparrow=\downarrow \\
VP
\end{array}
$$

- $(\uparrow\text{SUBJ})=\downarrow$ — DP
  - $\uparrow=\downarrow$ — NP
    - $\uparrow=\downarrow$ — N'
      - $\downarrow\epsilon(\uparrow\text{ADJUNCT})$
        $(\uparrow\text{PRED})=\text{'pro'}$
        $(\uparrow\text{CASE})=(\downarrow\text{CASE})$
        $(\uparrow\text{NUM})=(\downarrow\text{NUM})$ — AP
        - $(\uparrow\text{OBL})=\downarrow$ — DP
          - $\uparrow=\downarrow$ — D
            - *a*
              the
          - $\uparrow=\downarrow$ — NP
            - $\uparrow=\downarrow$ — N'
              - $\downarrow\epsilon(\uparrow\text{ADJUNCT})$
                $(\uparrow\text{PRED})=\text{'pro'}$
                $(\uparrow\text{CASE})=(\downarrow\text{CASE})$
                $(\uparrow\text{NUM})=(\downarrow\text{NUM})$ — AP
                - $\uparrow=\downarrow$ — A
                  - *tegnapinál*
                    yesterday's.ADESS
        - $\uparrow=\downarrow$ — A
          - *hideg-ebb*
            cold-er.NOM
- $\uparrow=\downarrow$ — V'
  - $\uparrow=\downarrow$ — V
    - *van*
      is
  - $(\uparrow\text{OBL})=\downarrow$ — DP
    - *a konyhában*
      the kitchen.INESS

(7)   **F-STRUCTURE FOR (2)**

$$
\begin{bmatrix}
\text{PRED} & \text{'BE <SUBJ,OBL>'} \\
\text{TENSE} & \text{PRES} \\
\text{SUBJ} & \begin{bmatrix}
\text{PRED} & \text{'pro'} \\
\text{PERS} & 3 \\
\text{NUM} & \text{SG} \\
\text{CASE} & \text{NOM} \\
\text{ADJUNCT} & \left\{\begin{bmatrix}
\text{PRED} & \text{'COLDER <OBL>'} \\
\text{OBL} & \begin{bmatrix}
\text{PRED} & \text{'pro'} \\
\text{CASE} & \text{ADESS} \\
\text{ADJUNCT} & \{[\text{PRED} \quad \text{'YESTERDAY'S'}]\}
\end{bmatrix}
\end{bmatrix}\right\}
\end{bmatrix} \\
\text{OBL} & \text{"IN THE KITCHEN"}
\end{bmatrix}
$$