

Lexicon or Information Structure?

- A case study for Hungarian

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Our aim: Examining the distribution of bare NPs in Hungarian constructions. The main question is: Does the occurrence of bare NPs in subject or object position of the sentence depend on any information of the Lexicon, or is it influenced by other kind of rules? Our paper is based on the results of Viszket (2004).

Applied model: LFG

The structure of the poster:

1. Definitions
2. Classifying NPs according to Alberti (1997); some problems with it
3. Definiteness Effect in Hungarian
4. Specificity Effect in Hungarian
5. Sentences expressingthetic and categorical judgments in Hungarian
6. Existential and habitual sentences in Hungarian
7. Lexical features introduced by us
8. Flowchart of possible Hungarian constructions with LFG annotations
9. Examples for the flowchart
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1. Definitions

Referentiality: According to Alberti (1997), Csatai (1999), Kenesei (1992) we consider an NP to be ‘referential’ if it can be the antecedent of a pronominal expression, that is, its referent can be referred to. We can distinguish three distinct categories of NPs from the viewpoint of the “degrees of referentiality”: referential, specific, definite (cf. Table 1)

- (1) Péter délelőtt levelet írt. *Hosszú volt (a levél).
Peter-Nom in-the-afternoon letter-Acc write-past-indef-3sg.
Long be-past-indef-3sg (the letter)..
'Peter was letter-writing in the morning. *It was a long one.'

Specificity: As defined by Enç (1991), an NP is specific if its referent is a subset of the referents which have been already introduced into the domain of the discourse.

- (2) Tegnap az osztály kirándulni volt. Egy gyerek talált egy
pénztárcát.
Yesterday the class-Nom to-make-an-excursion be-past-indef-
3sg. A child-nom find-past-indef-3sg a wallet-acc.
'Yesterday the class made an excursion. A child found a
wallet.'

In sentence (2) the NP *a child* is specific because its referent is a subset of a formerly introduced set (the *class* as a set), but the NP *a wallet* is non-specific, since there is no known set of wallets, of which this wallet could be a subset.

Bare NPs: Noun-headed phrases without any determiner. We consider NPs expanded with adjuncts or arguments (*érdekes könyv a puszta NP-kről* (*interesting book about the bare NPs*) as bare NPs as well, if they do not contain any determiner. Their use is quite restricted but they show other properties than the unexpanded bare NPs. That's why we call them ‘expanded bare NPs’ distinguishing them from (simple) ‘bare NPs’ or ‘plural bare NPs’ if this distinction is necessary.

Neutral sentence: We call a sentence neutral, if it can be the initial sentence of a discourse without any special informational background. These sentences show the neutral word order and intonation pattern of Hungarian sentences.

2. Classifying NPs according to Alberti (1997), and some problems with it

Alberti (1997) summarizes the different types of Hungarian NPs in the following table:

non-referential	referential	
non-specific	specific	
indefinite		definite
bare NP	<i>egy (a/an) determiner / plural bare NP</i>	<i>a(z) (the) determiner / proper noun</i>
mass noun (singular bare NP)		

Table 1: The different types of Hungarian NPs

The classification above contains the following statements:

- (i) Definite NPs are always referential and specific
- (ii) Indefinite NPs can be specific or non-specific, but they are always referential
- (iii) Among others (e.g. É. Kiss (1995), Maleczki (1995a)), Alberti (1997) assumes bare NPs to be non-specific and non-referential in Hungarian (they can be generic, so specific in other languages):

- (3) Péter egész nap levelet írt. *Aztán postára adta pro.
 Peter-nom in-the-afternoon letter-acc write-past-indef-3sg.
 Then to-post give-past-indef--3sg.
 'Peter was letter-writing all day. *Then he posted it.

A problem with this classification is that the referentiality of the NP is also influenced by the aspect of the sentence and the complements of that NP. An object argument can be referential if the aspect of the sentence is perfective and/or if that object is an expanded bare NP.

- (4) János_i délre levelet_j írt, aztán (pro_ő)_i postára adta (pro_{azt})_j.
 John-nom by-noon letter-acc write-past-indef--3sg then (he)
 to-post give-past-def-3Sg (it).
 'John has wrote a letter in the morning, then he posted it.'

- (5) Péter_i hosszú, magyarázkodó levelet_j írt, aztán (pro_δ)_i postára adta (pro_{aszt})_j..
 Peter-nom long, apologizing letter-acc write-past-indef-3sg.
 Then (he) to-post give-past-def-3sg (it).
 'Peter wrote a long, apologizing letter, then he posted it.'

As the examples (4, 5) prove, the classification given in Table 1 is not useful for the description of some phenomena which is connected with the bare NPs. After presenting the relevant constructions we offer another analysis for the data (including examples (3-5)) working it out with the formalism of LFG.

3. Definiteness Effect:

Definiteness Effect (DE): As Szabolcsi (1986) pointed out, the so-called Definiteness Effect, described in connection with the English existential *be* by Milsark (1977), extends in Hungarian to a large set of predicates. These predicates do not allow a definite or specific indefinite subject (intransitive DE predicates) or a definite or specific indefinite object (transitive DE predicates):

- (6) *Az énekkar alakult.
 the choir form-past-indef-3sg
 '*The choir was formed.'

We suppose that the set of the DE predicates can be divided into three main classes regarding their semantic and grammatical properties. In our analysis we will make reference to these three classes (see Viszket (2004) about the claims of this classification):

- (i) Predicates whose arguments express some kind of measure
- (ii) Verb-stressed predicates which express some existential property of their arguments
- (iii) Thetic act verbs which are extended with some locative adverb.

A common property of these three classes is that DE is connected with the aspect of the sentence: a definite argument is allowed if the proposition has a progressive aspect reading (so DE is neutralized in this case), and it is prohibited (only non-specific arguments are allowed) with perfective reading (if the proposition consists of a DE predicate).

- (7) a. *Péter lopta a malacot.
Peter-nom steal-past-def-3sg the piglet-acc
'*Peter stole the piglet.'
- b. Péter lopott egy malacot / Péter malacot lopott.
Peter-Nom steal-past-indef-3sg a piglet-acc. / Peter-nom
piglet-acc stole.
'Peter stole a piglet.'
- c. *Péter lopta a malacot, amikor (hirtelen).
Peter-nom steal-past-def-3sg the piglet-acc
'*Peter was stealing the piglet, when (suddenly)...'

If the progressive interpretation is not available because of the semantic properties of the predicate, DE cannot be neutralized:

- (8) (a) *Péter bukkant az olajra, amikor...
Peter-nom strike-past-indef-3sg the oil-sublat, when
'*Peter was striking the oil, when...'
- (b) Péter olajra bukkant.
Peter-nom oil-sublat strike-past-indef-3sg.
'Peter stroke oil.'

4. Specificity Effect:

The concept of 'Specificity Effect' in the literature is based on É. Kiss (1995). She gives an informal definition for the phenomenon: "Just as there are predicates tolerating only a non-specific subject or object, there are also predicates requiring a specific subject (and object). Such are predicates expressing a mental or emotional state. (...) Non-Specificity Effect predicates turn into Specificity Effect predicates when supplied with a verbal prefix."

- (9) a. *János megírt levelet.
John-nom pref-write-past-indef-3sg letter-acc
- b. *János lányt szeret. (in neutral sense)
John-nom girl-acc like-pres-indef-3sg.
'John likes the girls.'

Actually, the object arguments of (9) can be non-specific:

- (10) a. János megírt valamilyen levelet.
 John-nom pref-write-past-indef-3sg some-kind-of letter-acc
 'John has written some letter.'
- b. János szeret valamilyen lányt..
 John-nom like-pres-indef-3sg some-kind-of girl-acc
 'John likes some girl.'

These sentences are ill-formed with bare NP arguments (as illustrated in (9)). The reason why there are no bare NP arguments here is not the non-specific property of these noun phrases. We claim that the problem with these sentences is the lack of a free verb modifier position, and this entails the prohibition on the bare NPs. This claim is also supported by the fact that bare NPs can occur if there is a focused element in the sentence, so the c-structure is something different.

- (11) a. János 'levelet írt meg.
 John-nom letter-acc write-past-indef-3sg prefix
 'It was a letter what John has written.'
- b. János 'lányt szeret.
 John-nom girl-acc like-pres-indef-3sg.
 'It is a girl whom John likes'

5. Sentences expressingthetic and categorical judgments in Hungarian

Categorical assertions: In these constructions the so-called comment part of the sentence asserts something about the topic which is expressed by a specific NP.

- (12) [TOPIC Péter] [COMMENT szereti Marit.]
 Peter-nom love-(pres)-def-3sg Mary-acc
 'Peter loves Mary.'

Thetic statements: There is no topic in the sentence, no referent who is the "logical subject" of the sentence.

- (13) [COMMENT Esik az eső.]
 fall-pres-3sg the rain-nom
 'It is raining.'

Maleczki (1998): If the subject is a non-specific NP, locative anchoring of the predicate is necessary.

- (14) a. Egy béka brekeg.
a frog-nom croak-pres-indef-3sg
'A frog croaks.'
- b. Egy béka brekeg a kertemben.
a frog-nom croak-pres-indef-3sg the garden-PossSg1-in
'A frog is croaking in my garden.'
- c. ?Egy béka brekeg éjszakánként.
a frog-nom croak-pres-indef-3sg nights-at
'A frog croaks every night.'

The NPs in (14a, c) can be interpreted only as specific (and/or generic). In (14b) the subject can be non-specific.

Non-specific subject NPs cannot get topic interpretation, because a topic must be specific.

Question: In which constructions can the subject position be filled with bare NPs to formthetic statements?

- (15) a. Béka brekeg a kertemben.
frog-nom croak-pres-indef-3sg the garden-PossSg1-in
'There is frog-croaking in my garden.'
- b. *Fiú horkol a szobámban.
boy-nom snore-pres-indef-3sg the room-PossSg1-in
'There is boy-snoring in my room.'

Our conclusion: Locative anchoring is not sufficient if the subject is a bare NP, atelic interpretation of the predicate and kind-referring interpretation of the bare NP are both required.

6. Existential and habitual sentences:

Existential sentences (the examples are cited from Alberti-Medve (2002)):

- (16) a. Ebben a városban vett öreg hajléktalan gazdag fiatal lányt feleségül.
this-in the city-in take-past-indef-3sg old waif-nom rich young girl-acc wife-as
'In this city it HAS happened that a/some waif married a rich young girl.'

It happend ever, that an old waif married a rich young girl in this city.

- b. *Ebben a városban vett öreg hajléktalan egy gazdag fiatal lányt feleségül.
this-in the city-in take-past-indef-3sg old waif-nom a rich young girl-acc wife-as
- c. Ebben a városban vette (már) öreg hajléktalan az ismerős gazdag fiatal lányt feleségül.
this-in the city-in take-past-def-3sg old waif-nom the familiar rich young girl-acc wife-as
'In this city it HAS happened that an old waif married the known rich young girl in this city.'

Sentences in (16) suggest that definite and bare NPs can occupy the argument positions of existential sentences, but this is impossible for indefinite (not bare) NPs.

Habitual sentences:

- (17) a. Péter gyakran ás egy gödröt.
Peter-nom often dig-pres-indef-3sg a hole-acc
'Peter often digs holes.'
- b. Péter gyakran ver meg egy lányt.
Peter-nom often beat-pres-indef-3sg prefix a girl-acc
'Peter often beats girls/a girl.'

Examples above show that in these sentences the object NP can be interpreted only as specific. The sentences are ill-formed with non-

specific objects, but they are acceptable with bare NP arguments again as in the examples of (16).

We can conclude that the existential or habitual property of an assertion can influence the degree of specificity of the arguments. In these constructions the bare NP can be dislocated from the verb, so it does not have to fill the position of a verb modifier.

- (18) Péter gyakran ás a kertben gödröt.
Peter-nom often dig-pres-indef-3sg the garden-in hole-acc
'Peter often digs a hole in the garden.'

It seems that there are secondary predicates in these constructions (which gives existential or habitual interpretation for the proposition), which allow specific or bare (non specific, non-referential) NPs in the proposition that fill the argument position in them. So either the referent in these propositions is an identifiable entity or there is no referent at all.

When the proposition is an argument of a secondary predicate like these, the behaviour of the bare NPs is similar to the "normal" NP arguments: they are not required to fill the position of verb modifier.

7. Proposed lexical features to describe the referentiality of an NP:

In the Lexicon the functional characterization of each NP contains a ((↑SPEC) = -) feature. In LFG an attribute of an item can occur between brackets: the value (specificity in this case) is not specified while the brackets are closed.

Determiners have three features: DEF = +/-, SPEC = +/- and a nonVM feature.

The DEF and SPEC attributes always have a particular value: strong determiners: (↑DEF) = +, (↑SPEC) = +, weak determiners: (↑DEF) = - and (↑SPEC) = + or (↑SPEC) = -.

(↑nonVM) = + expresses that the NP is not obligatorily in a verb modifier position.

An NP can contain adjuncts and other complements only if a SPEC attribute gets some value. It means that the particular NP has a determiner or the brackets of its SPEC attribute are somehow open. The brackets can be open without adding any complement to the NP as well,

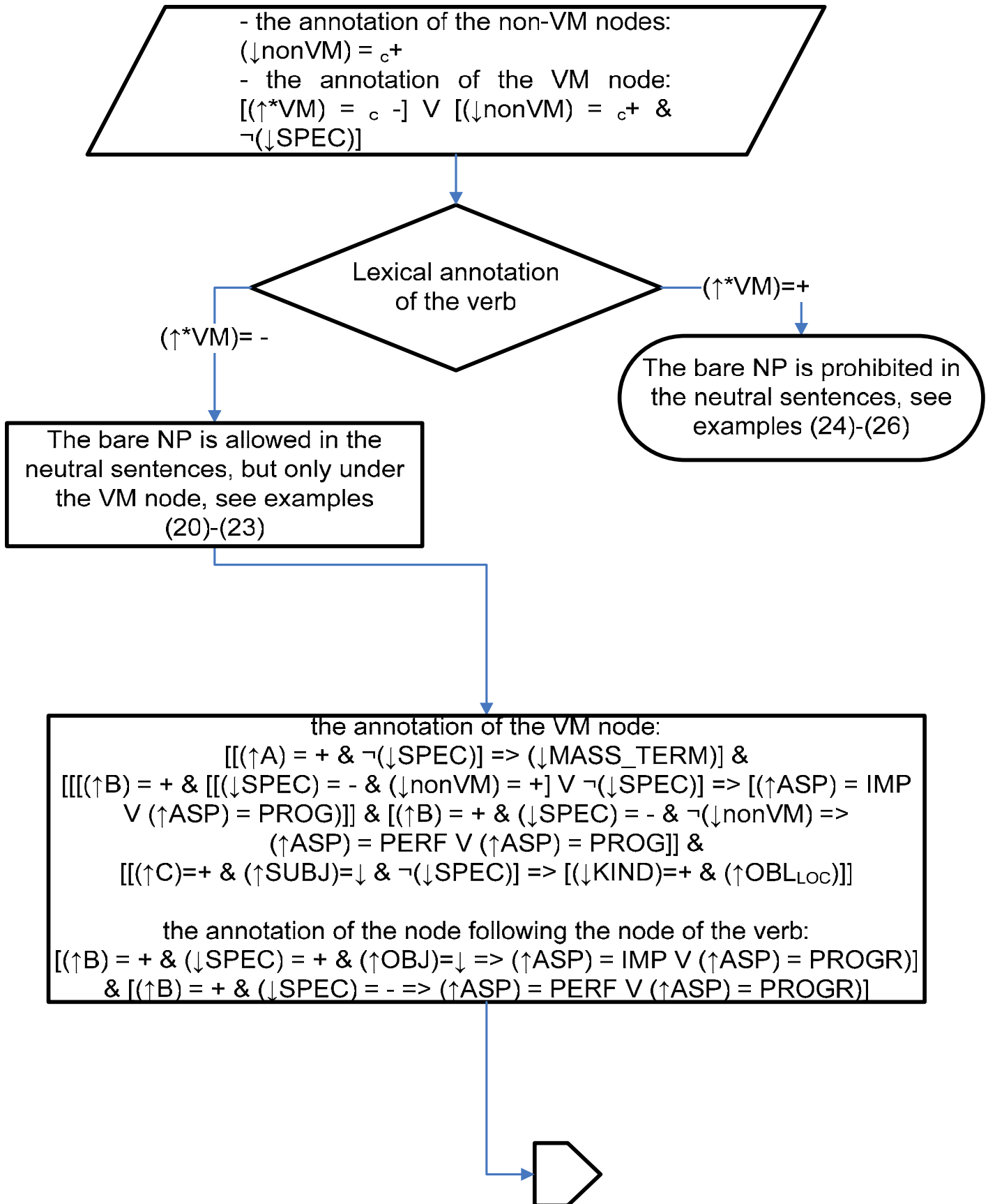
in this case the SPEC attribute of the NP gets a value ($(\downarrow\text{SPEC}) = -$) “in its own right”.

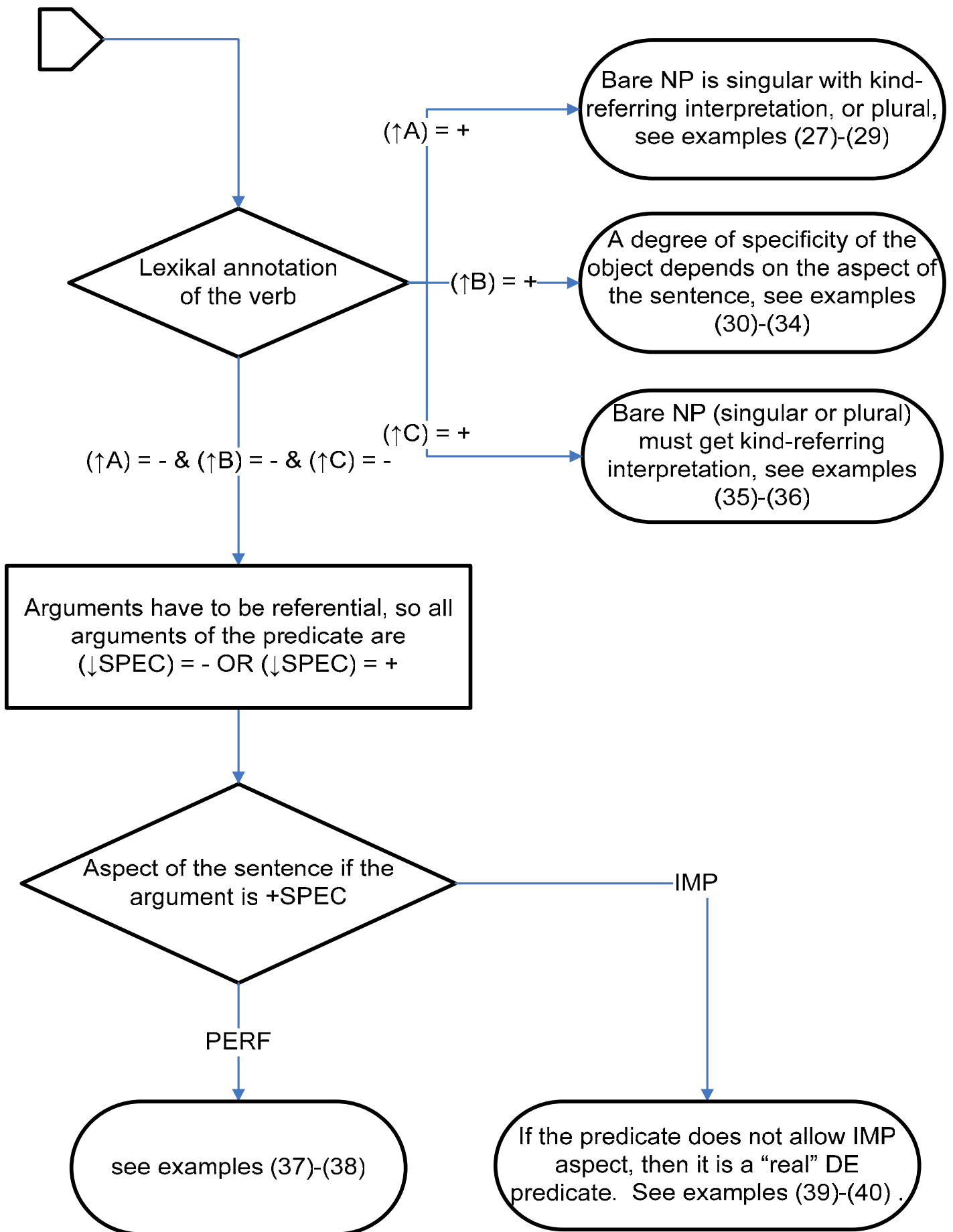
The following examples illustrate the statements above (NPs are arguments in the examples to make the distinction of their features more plausible):

- (19) a. levelet írt ($(\uparrow\text{SPEC}) = -$)
letter-acc write-past-indef-3sg
- b. levelet írt ($\uparrow\text{SPEC}) = -$
letter-acc write-past-indef-3sg
- c. hosszú levelet írt az édesanyjának ($\uparrow\text{SPEC}) = -$
long letter-acc write-past-indef-3sg the mother-PossSg3-to
- d. leveleket írt (az édesanyjának) ($\uparrow\text{SPEC}) = -$, $?(\uparrow\text{nonVM}) = +$
letter-pl-acc write-past-indef-3sg the mother-PossSg3-to
- e. egy levelet írt ($\uparrow\text{DEF}) = -$, ($\uparrow\text{SPEC}) = -$, ($\uparrow\text{nonVM}) = +$
a letter-acc write-past-indef-3sg
- f. egy levelet írt ($\uparrow\text{DEF}) = -$, ($\uparrow\text{SPEC}) = +$, ($\uparrow\text{nonVM}) = +$
a letter-acc write-past-indef-3sg
- g. írt egy levelet ($\uparrow\text{DEF}) = -$, ($\uparrow\text{SPEC}) = -$, ($\uparrow\text{nonVM}) = +$
write-past-indef-3sg a letter-acc
- h. írt egy levelet ($\uparrow\text{DEF}) = -$, ($\uparrow\text{SPEC}) = +$, ($\uparrow\text{nonVM}) = +$
write-past-indef-3sg a letter-acc
- i. írta a levelet ($\uparrow\text{DEF}) = +$, ($\uparrow\text{SPEC}) = +$, ($\uparrow\text{nonVM}) = +$
write-past-def-3sg the letter-acc

The NP can occupy the verb modifier position if it does not contain any determiner. Referentiality of the NP is an independent property: if the NP is a bare NP, it does not entail that it is non-referential. There is no different feature for referentiality: if there is no accessible value for specificity (the SPEC attribute remains between closed brackets), the (bare) NP is non-referential: it cannot be referred to, modified by adjuncts, or coordinated. Some nouns can get kind-referring interpretation depending on the knowledge of the speaker. For some speakers *wife* or *elf* can be kind-referring nouns, but this interpretation may not be accessible for others.

8. Flowchart of possible Hungarian constructions with LFG annotations





9. Examples for the flowchart:

The bare NP can occupy only a verb modifier position preceding the verb.

(20) *Péter vett könyvet.
Peter-nom buy-past-indef-3sg book-acc

(21) Péter vett egy könyvet.
Peter-nom buy-past-indef-3sg a book-acc
'Peter has bought a book.'

This condition is not valid if the proposition is an argument of a secondary predicate:

(22) Péter gyakran vesz könyvet.
Peter-nom often buy-pres-indef-3sg book-acc
'Peter often buys books.'

(23) Péter vett már könyvet.
Peter-nom buy-past-indef-3sg already book-acc
'Peter has bought a book already.'

A bare NP is not allowed if there is no free verb modifier position in the sentence:

(24) *Péter megvett könyvet.
Peter-nom pref-buy-past-indef-3sg book-acc

(25) *Péter könyvet megvett.
Peter-nom book-acc pref-buy-past-indef-3sg

(26) *Péter szeret lányt.
Peter-nom love-pres-indef-3sg girl-acc

The singular bare NP is interpreted as a mass noun if it is an argument of some type (+A) of verbs:

(27) ???Van könyv a polcon.
be-pres-3sg book-nom the shelf-on
'There is some book on the shelf.'

(28) Van víz a pohárban.
be-pres-3sg water-nom the glass-in
'There is water in the glass.'

(29) Vannak könyvek a polcon.
be-pres-3pl book-pl-nom the shelf-on
'There are books on the shelf.'

The specificity of the object argument is influenced by the aspectual properties of the sentence, if the object NP is an argument of some type (+B) of verbs:

(30) Péter egy levelet írt.
Peter-nom a letter-Acc write-past-indef-3sg
'Peter was writing a letter.'

(31)-(32) Péter levelet írt.
Peter-nom letter-acc write-past-indef-3sg
'Peter was letter-writing.'
'Peter has written a letter.'

(33) Péter írta a levelet.
Peter-nom write-past-def-3sg the letter-acc
'Peter was writing the letter.'

(34) Péter írt egy levelet.
Peter-nom write-past-indef-3sg a letter-acc
'Peter has written a letter.'

The bare NP is interpreted as a kind-referring NP if it is an argument of some type (+C) of verbs (a locative adverb is also required):

(35) Tündér táncol a tavon.
elf-nom dance-pres-indef-3sg the lake-on
'There is elf-dancing on the lake.'

(36) *Asszony táncol a konyhában.
woman-nom dance-pres-indef-3sg the kitchen-in

There are some predicates which construct a perfective sentence with a +SPEC object:

- (37) Péter megírta a levelet.
Peter-nom pref-write-past-def-3sg the letter-acc
'Peter has written the letter.'
- (38) Péter megtalálta a tollat.
Peter-nom pref-find-past-def-3sg the pen-acc
'Peter has found the pen.'

There are some predicates which construct a progressive sentence with a +SPEC object, and if it is not possible because of the verb meaning, their object argument cannot be specific:

- (39) Péter írta a levelet.
Peter-nom write-past-def-3sg the letter-acc
'Peter was writing the letter.'
- (40) *Péter találta a tollat.
Peter-nom find-past-def-3sg the pen-acc
'*Peter was finding the pen.'

This document is available at:

<http://lingua.btk.pte.hu/LIS.pdf>

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