20th International Lexical-Functional Grammar Conference

Waseda University, Tokyo, 18–20 July, 2015

On a realistic LFG treatment of the periphrastic IRREALIS MOOD in Hungarian

Tibor Laczkó

Department of English Linguistics
University of Debrecen

laczko.tibor@arts.unideb.hu
http://ieas.unideb.hu/laczko

1. Introduction

1.1. Introduction

Goals of the talk

1. to develop and implement an analysis of the **Hungarian periphrastic irrealis mood** in the framework of Lexical-Functional Grammar by

   - subscribing to the **paradigmatic** (= inferential-realizational) **view** of morphology/morphosyntax **and**

   - formally maintaining LFG's classical synthetic notion of a morphological word (= **one-word lexical entry strategy**)

2. to posit it in a **broader** cross-linguistic and cross-theoretical **context**

1.2. Introduction

Structure of the presentation

1. Introduction
2. The data
3. The challenge
4. The paradigmatic approach
5. Two analyses in LFG
6. Paradigms in HPSG
7. Conclusion

2. The data

2.1. The data

- Hungarian **conditional** verb forms (cf. *would see*) are **synthetic**

- **irrealis** verb forms (cf. *would have seen*) are systematically **analytic**: they use a two-word pattern

  - the first word is the conjugated past tense form of the lexical verb
  - the second word is the combination of one of the stems of the copula *van* 'be' (*vol-*) and the conditional marker (*-na*)

    V-**PAST**-AGREEMENT   **VOLNA**

→ formally, Hungarian encodes **irrealis** mood periphrastically via the combination of two words and two morphosyntactic features: **PAST** and **CONDITIONAL**

2.2. The data

the two singular & indefinite paradigms

conditional, indef.   **irrealis**, indef.
'would see'   'would have seen'

*lát-**né**-k*   *lát-t-am*   *vol-**na***
see-COND-1SG   see-PAST-1SG be-COND

*lát-**ná**-l*   *lát-t-ál*   *vol-**na***
see-COND-2SG   see-PAST-2SG be-COND

*lát-**na***   *lát-ott*   *vol-**na***
see-COND.3SG   see-PAST.3SG be-COND

volna is also a member of the **conditional** paradigm:

vol-**né**-k   be-COND-1SG

vol-**ná**-l   be-COND-2SG

vol-na   **be-COND.3SG**

earlier Hungarian had several analytic tense form complexes, e.g.:

(a) PRES&AGR + PAST
    megy-ek   *vala*
    go-PRES.1SG **VAL**A
    ca. 'I was going'

(b) PAST&AGR + PAST
    men-t-em   *vala/volt*
    go-PAST-1SG **VAL**A/**VOL**T
    ca. 'I had gone'

for Mari and Udmurt counterparts, see below

2.3. The data

- *volna* (even in the expression of irrealis mood) is an independent syntactic atom, see Bartos (2000)

(1) *%vár-t   is   volna*
    wait-PAST.3SG.INDEF too VOLNA
    'he would also have waited'

(2) *%vár-t-ál   csak volna*
    wait-PAST-2SG.INDEF only VOLNA
    'you would only have waited'

(3) *%vár-t-ál-e   volna?*
    wait-PAST-2SG.INDEF-QM   VOLNA
    'would you have waited?'

(4) *én megsüt-ött-em ∅, te   pedig   mege-tt-ed   volna*
    I   fry-PAST-1SG.DEF   you by.contrast   eat-PAST-2SG.DEF VOLNA
    'I would have fried (it) and you, in turn, would have eaten (it)'

3. The challenge

3.1. The challenge

- ideally, the two conditional **paradigms** (analytic vs. synthetic) should be treated in a uniform manner

    (1) *lát-t-am*   *vol-**na***   (2) *lát-**né**-k*

       see-PAST-1SG BE-**COND**   see-**COND**-1SG

       'I would have seen'   'I would see'

BUT:

- lexical forms are assumed to be synthetic (morphological) words in LFG

- in addition, this irrealis mood is **non-compositional**:

       PAST + COND → IRREALIS

       ↓

(formally, morpho-phonologically a genuine past tense morpheme, BUT not semantically/functionally: compatibility with present & future)

4. The paradigmatic approach

4.1. The paradigmatic approach

- **Matthews (1991)**
- **Vincent & Börjars (1996)**: LFG - a treatment of suppletion and **periphrasis** at *f-structure*, phenomena from Kashmiri, and comparative adjectives and adverbs in Latin and Romance **(compositional)**
- **Börjars et al. (1997)**
- **Ackerman & Webelhuth (1998)**
- **Ackerman & Stump (2004)**
- **Ackerman et al. (2011)**
- **Spencer (2001, 2003, 2006)**
- **Stump (2002, 2006)**
- **Bonami and Samvelian (2009)**:
  HPSG (Persian complex predicates)
- **Bonami & Webelhuth (2012)**:
  HPSG (English, German and French verbal complexes)

the programmatic development of the **inferential-realizational model**

4.2. The paradigmatic approach

Ackerman & Stump (2004: 115)

- A **lexeme** may be realized **synthetically** (as a single syntactic atom) or **periphrastically** (by two or more syntactic atoms co-occurring in a c-structure).

- The **contentive information** associated with a **periphrase** is **not determined by** the contentive information associated with its individual, syntactically independent parts through the mediation of **unification** principles defined on syntactic structures; rather, the contentive information associated with a periphrase is specified morpholexically. That is, *syntactic principles of constituency and linearity determine the distribution of a periphrase's individual parts, but not the functional information which that periphrase expresses.*

[emphasis mine, TL]

4.3. The paradigmatic approach

Ackerman & Stump (2004: 116, Fn. 8)

- Minimally, within LFG the **possibility of multi-word lexical items requires modifying the conventions used for annotating c-structure expressions associated with single-word lexical items** so that appropriate lexical information will produce well-formed f-structures. We **leave these sorts of implementational issues to another forum** in favor of developing general arguments for the morphological status of periphrasis.

[emphasis mine, TL]

4.4. The paradigmatic approach

Ackerman & Stump (2004: 142)

one of the sufficient (but not necessary) criteria for the identification of periphrases: **noncompositionality**

- *If the morphosyntactic property set associated with an analytic combination C is not the composition of the property sets associated with its parts, then is a periphrase.*

second past realization in Eastern dialects of Mari (Cheremis)	
AFFIRMATIVE	NEGATIVE
kol-en-am die-PAST-1SG 'I died'	*kol-en o-m-əl* die-GER be-1SG-NOT 'I didn't die'
ordinary synthetic form	**gerund** + **negated** and **conjugated** **present** tense **copula** = **second past**

4.5. The paradigmatic approach

Ackerman & Stump (2004: 146)

Udmurt: imperfective past tense	
FUTURE	IMPERFECTIVE PAST
mïno 'I will go' *mïnod* 'you will go' *mïnoz* '(s)he will go'	*mïno val* 'I used to go (long ago)' *mïnod val* 'you used to go (long ago)' *mïnoz val* '(s)he used to go (long ago)'
	future-tense form (**inflected** for subject agreement) + **invariant past** form *val* of the **copula** = **imperfective past** tense

cf. Hungarian:

  PAST & AGR + COND → IRREALIS
† PRES & AGR + PAST → PAST CONTINUOUS
† PAST & AGR + PAST → PAST PERFECT

5. Two LFG analyses

5.1. Two LFG analyses

general considerations

❑   Lexical Integrity Principle (Bresnan 1982) →
   both theoretical and implementational aspects

   •   theoretical: the classical view

   •   implementational: the architecture of XLE

❑   one (morphological) word = one synthetic form = one
   lexical item = one syntactic atom

5.2. Two LFG analyses

(A) a morpheme-based solution: a classical LFG treatment

(1) *látt**á**l*, V 'see <(↑SUBJ) (↑OBJ)>'
    (↑SUBJ PERS)= 2
    (↑SUBJ NUM)= SG
    (↑OBJ DEF)= –
    (↑TENSE)= PAST
    { (↑MOOD)= INDICATIVE
    |(↑MOOD) $=_C$ CONDITIONAL
      (↑PRT FORM) $=_C$ VOLNA }.

(2) *volna*, PRT
    (↑PRT FORM) = VOLNA
    (↑TENSE)$=_C$ PAST
    (↑MOOD)= CONDITIONAL.

implemented in XLE in **Laczkó & Rákosi (2008-2013)**:
past + conditional = irrealis (face values)

associated with the **+Past** *tag of XLE's morphological analyzer*

the major problem:
- semantically (functionally): ~past
→ inappropriate f-structure

5.3. Two LFG analyses

(A) a morpheme-based solution: XLE implementation

Te lát-t-ál   volna két   lány-t.
you see-PAST-2SG.INDEF VOLNA two   girl-ACC
'You would have seen two girls.'

5.4. Two LFG analyses

B) a realization-based solution (1)

motivation: the treatment of certain **particle-verb constructions** in Laczkó (2013) (⇔ Forst et al. (2010) and Laczkó & Rákosi (2011))

(1)   *ki*   PRT XLE
                (($\uparrow$ DIR) = out)
                ($\uparrow$PRT-FORM)= ki
                ($\uparrow$CHECK _PRT-VERB) =c +.

(2)   *mászik* V XLE
                ($\uparrow$PRED)= 'crawl-out < ($\uparrow$SUBJ) ($\uparrow$OBL) >'
                ($\uparrow$CHECK _PRT-VERB) = +
                ($\uparrow$PRT-FORM)=c ki
                ($\uparrow$ DIR) =c out.

(3)   *fejez* V *
                ($\uparrow$PRED)= 'express <($\uparrow$SUBJ) ($\uparrow$OBJ)>'
                ($\uparrow$CHECK _PRT-VERB) = +
 fej-ez   ($\uparrow$PRT-FORM)=c ki.
 head-Vsuf

> **ki # *mászik***
> out # crawl
> 'crawl out (of sg)'
>
> **ki # fej-ez**
> out # head-Vsuf
> 'express'

5.5. Two LFG analyses

B) a realization-based solution (2)

(1) *látt**ál***, V 'see <(↑SUBJ) (↑OBJ)>'
    (↑SUBJ PERS)= 2
    (↑SUBJ NUM)= SG
    (↑OBJ DEF)= −
    { (↑TENSE)= PAST
      (↑MOOD)= INDICATIVE
    | (↑MOOD)= IRREALIS
      (↑CHECK _PRT-VERB)= +
      (↑PRT FORM)=$_C$ VOLNA }.

(2) *volna*, PRT
    (↑PRT FORM)= VOLNA
    (↑CHECK _PRT-VERB)=$_C$ +.

all the specifications of the given **paradigmatic slot** are encoded in the lexical verb's entry

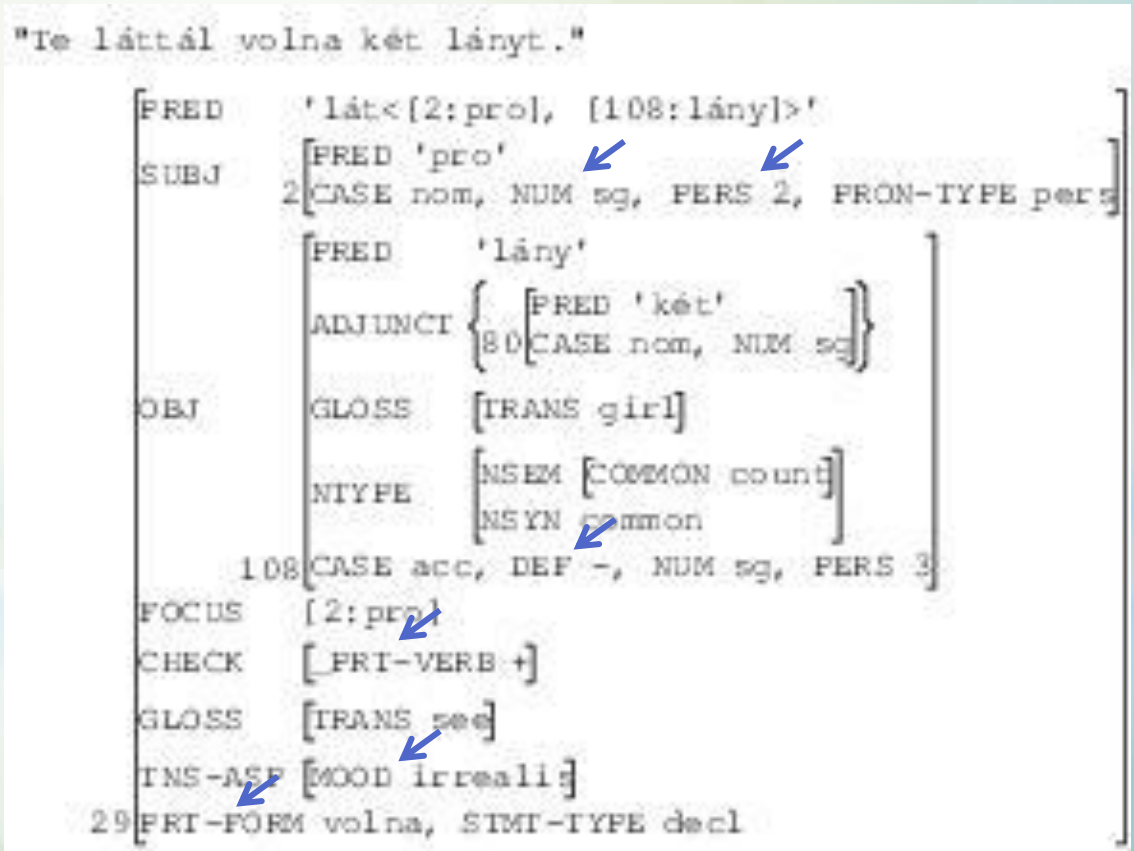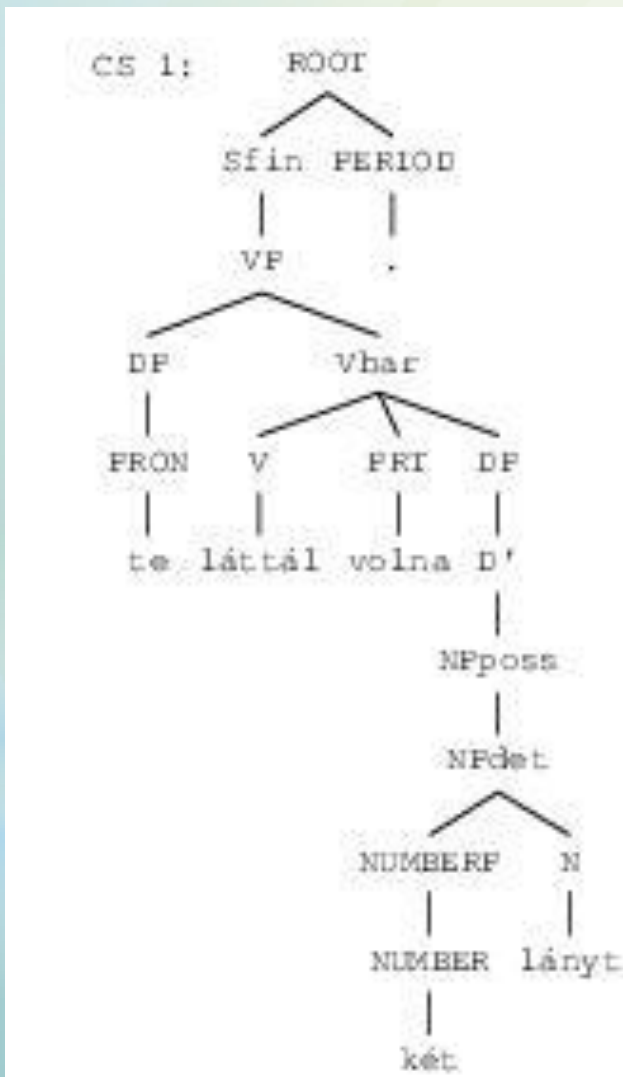*associated with the **+Past** tag of the morphological analyzer*

it only has a form feature

cf. the treatment of PVCs, in Forst et al. (2010), Laczkó & Rákosi (2011), Laczkó (2013)

5.6. Two LFG analyses

B) a realization-based solution (3): XLE implementation

Te lát-t-ál   volna két   lány-t.
you see-PAST-2SG.INDEF VOLNA two   girl-ACC
'You would have seen two girls.'

5.7. Two LFG analyses

the phrase structure issue

❑ the crucial assumption:

- **preverbs** of particle-verb constructions
- *volna*
- *is* ('also')
- *csak* ('only')
- *-e* (yes-no question marker)

belong to the non-projecting category PRT (cf. Toivonen (2001))

$$V^0$$

V^0 PRT

V^0 PRT
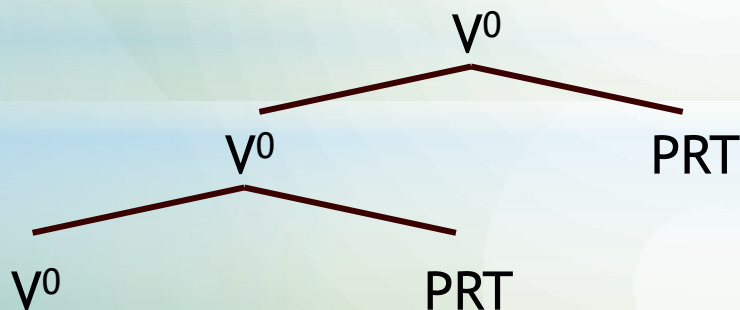
6. Paradigms in HPSG

6.1. Paradigms in HPSG

Bonami and Samvelian (2009)
    – on Persian complex predicates

Bonami & Webelhuth (2012)
    – on English, German and French verbal complexes

6.2. Paradigms in HPSG

Bonami & Webelhuth (2012)

$$
\begin{bmatrix} lexeme \\ SYN \begin{bmatrix} CAT \begin{bmatrix} LID & \boxed{1} \end{bmatrix} \end{bmatrix} \end{bmatrix} \mapsto \begin{bmatrix} word \\ PH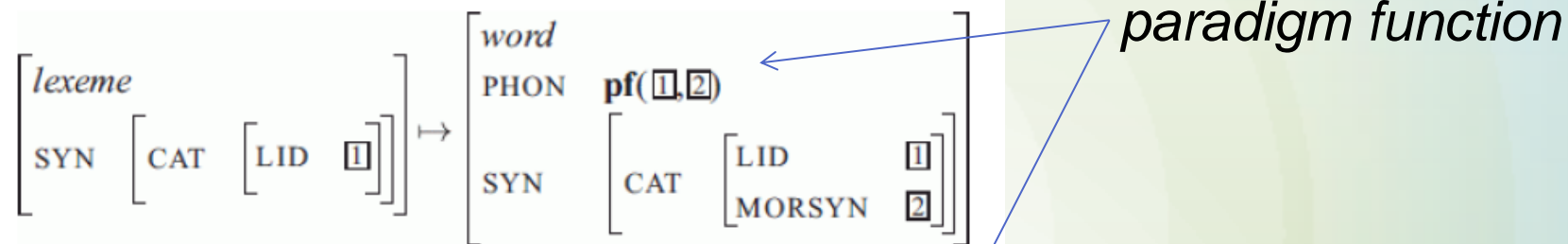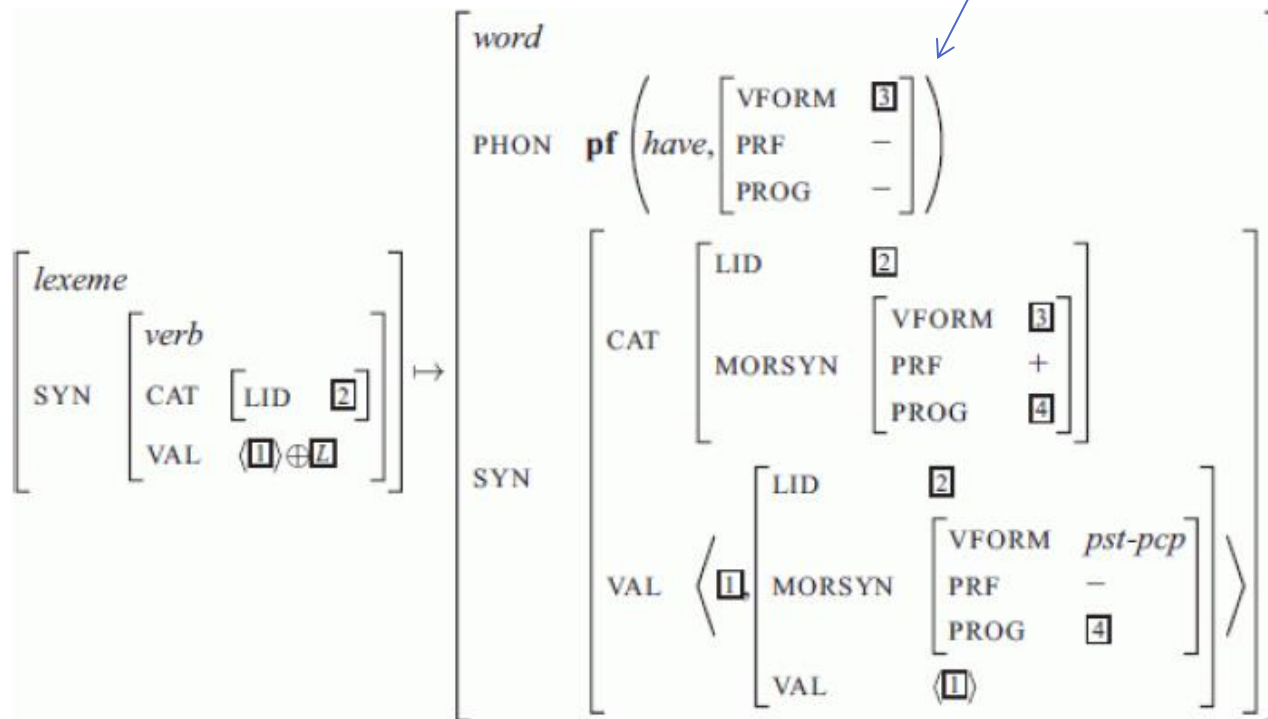ON & \textbf{pf}(\boxed{1},\boxed{2}) \\ SYN \begin{bmatrix} CAT \begin{bmatrix} LID & \boxed{1} \\ MORSYN & \boxed{2} \end{bmatrix} \end{bmatrix} \end{bmatrix}
$$

paradigm function

(37) The perfect periphrase in English

$$
\begin{bmatrix} lexeme \\ SYN \begin{bmatrix} verb \\ CAT \begin{bmatrix} LID & \boxed{2} \end{bmatrix} \\ VAL & \langle \boxed{1} \rangle \oplus \boxed{7} \end{bmatrix} \end{bmatrix} \mapsto
\begin{bmatrix} word \\
PHON & \textbf{pf} \left(have, \begin{bmatrix} VFORM & \boxed{3} \\ PRF & - \\ PROG & - \end{bmatrix} \right) \\
SYN & \begin{bmatrix} CAT \begin{bmatrix} LID & \boxed{2} \\ MORSYN & \begin{bmatrix} VFORM & \boxed{3} \\ PRF & + \\ PROG & \boxed{4} \end{bmatrix} \end{bmatrix} \\
VAL & \left\langle \boxed{1}, \begin{bmatrix} LID & \boxed{2} \\ MORSYN & \begin{bmatrix} VFORM & pst\text{-}pcp \\ PRF & - \\ PROG & \boxed{4} \end{bmatrix} \\ VAL & \langle \boxed{1} \rangle \end{bmatrix} \right\rangle \end{bmatrix}
\end{bmatrix}
$$

6.3. Paradigms in HPSG

- "the perfect word constructs its phonology in an unusual way: instead of feeding the **pf** (•) function with its own LID, it provides the LID of LEAVE instead"   [my emphasis]
- cf. my FORM feature
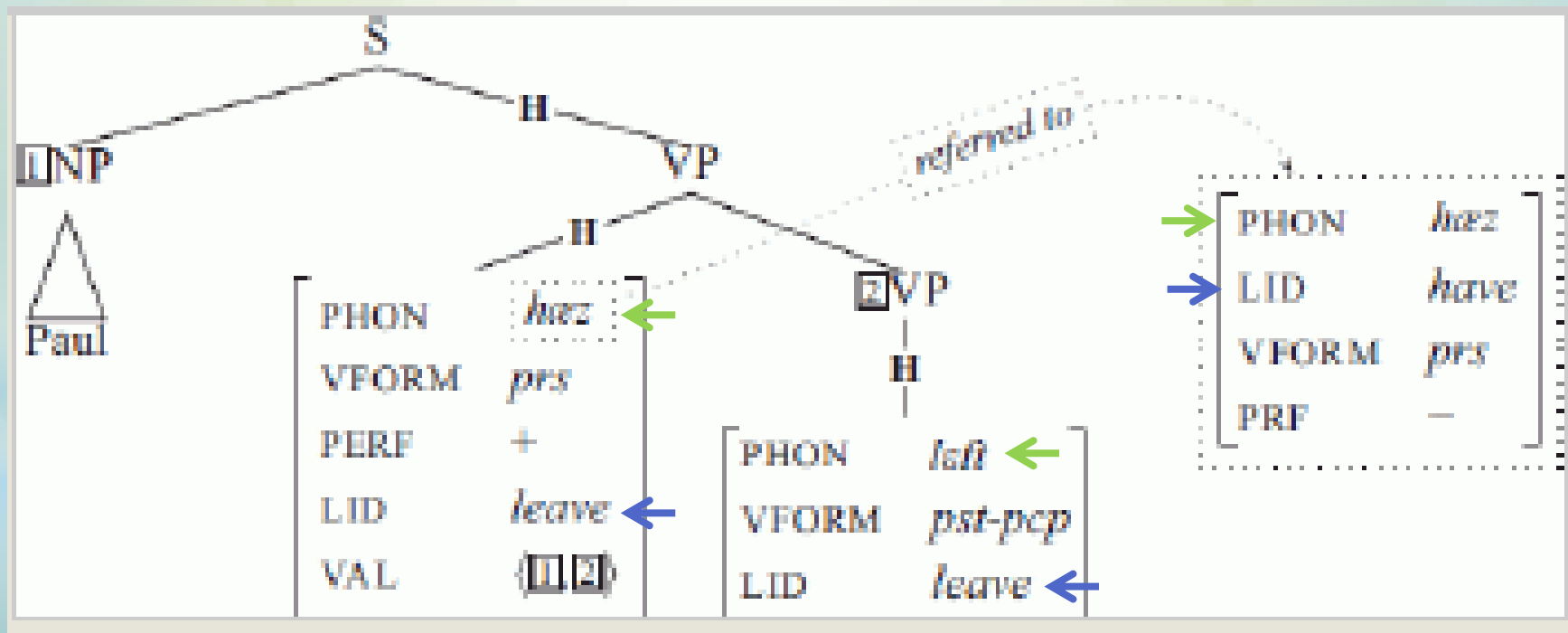
Paul has left.

*Paul **has** a book.*

7. Conclusion

7.1. Conclusion

1. This analysis spells out the **inferential-realizational approach to periphrasis** advocated by Ackerman & Webelhuth (1998) and Ackerman et al. (2011), among others, in an LFG framework *in this particular inflectional domain*.

2. It leaves a basic aspect of the widely accepted, *classical view* of lexical encoding in LFG intact: by using an appropriate *checking and cross-referencing* mechanism in the relevant lexical forms, it can *avoid* recourse to *multiple word lexical entries*, which would pose rather severe problems for LFG's general morphological assumptions as well as for implementation. For a discussion, see Laczkó & Rákosi (2011, 2013).

3. The devices can be argued to be *motivated* and justified independently, again, see Laczkó & Rákosi (2011, 2013) for the treatment of *derivational processes* in the case of non-compositional **PVCs**, and Laczkó (2013) for both compositional and non-compositional PVCs.

7.2. Conclusion

4. This analysis is part of my larger project of developing an LFG proposal for treating several categories as ***non-projecting words***, in the (modified) sense of Toivonen (2001), or ***minor categories***, in the sense of Dalrymple (2001).

   - so far: preverbs, now: *volna*, later: *nem* 'not', *is* 'also', *-e* 'QM', *csak* 'only', etc.

5. Butt et al. (2004), Frank & Zaenen (2004), etc. − m-structure

6. Dalrymple (2015, talk at LFG15, day 2)

Acknowledgements

The author gratefully acknowledges that this talk has been supported in part by

References (1)

Ackerman, Farrell & Webelhuth, Gert. 1998. *A Theory of Predicates*. Stanford: CSLI Publications.

Ackerman, Farrell and Stump, Gregory T. 2004. Paradigms and periphrastic expression. *Projecting Morphology*, ed. by Louisa Sadler and Andrew Spencer, 111–57. Stanford: CSLI Publications.

Ackerman, Farrell, Stump, Gregory T. & Webelhuth, Gert. 2011. Lexicalism, periphrasis, and implicative morphology. In Robert D. Borsley & Kersti Börjars eds. *Non-Transformational Syntax: Formal and Explicit Models of Grammar*. Oxford: Blackwell. 325-358.

Ackerman, Farrell. 1987. *Miscreant morphemes: phrasal predicates in Ugric.* PhD-disszertáció, UC Berkeley.

Ackerman, Farrell. 2003. Lexeme derivation and multi-word predicates in Hungarian. *Acta Linguistica Hungarica* 50: 7-32.

Alsina, Alex. 1992. On the argument structure of causatives. *Linguistic Inquiry* 23: 517-555.

Bartos, Huba. 2000. Az inflexiós jelenségek szintaktikai háttere [The syntactic background of inflectional phenomena]. In: Kiefer, F. (ed.) *Strukturális magyar nyelvtan 3. Morfológia* [Structural Hungarian grammar 3. Morphology]. Budapest: Akadémiai Kiadó, 653-762.

33

References (2)

Bonami, Olivier and Webelhuth, Gert. 2012. The phrase-structural diversity of periphrasis: A lexicalist account. In: Chumakina, Marina and Corbett, Greville. (2012) *Periphrasis.* Oxford: Oxford University Press/British Academy. Series: Proceedings of the British Academy.

Bonami, Olivier and Samvelian, Pollet. 2009. Inflectional periphrasis in Persian. In: Müller, Stefan (ed.) *Proceedings of the 16th International Conference on Head-Driven Phrase Structure Grammar.* Georg-August-Universität Göttingen, Germany. Stanford: CSLI Publications, 26-46.

Börjars, Kersti, Vincent, Nigel, and Chapman, Carol. 1997. Paradigms, periphrases and pronominal inflection: a feature-based account. *Yearbook of Morphology 1996*, ed. by Geert Booij and Jaap van Marle, 155–80. Dordrecht: Kluwer.

Bresnan, Joan. 2001. *Lexical-Functional Syntax*. Oxford: Blackwell.

Bresnan, Joan. ed. 1982. *The Mental Representation of Grammatical Relations*. Cambridge, MA: MIT Press.

Butt, Miriam, King,Tracy Holloway, Nino, Maria-Eugenia & Segond, Frederique. 1999. *A Grammar Writer's Cookbook*. *CSLI Lecture Notes 95*. Stanford: CSLI Publications.

References (3)

Butt, Miriam, Niño, María-Eugenia and Segond, Frédérique. 2004. Multilingual processing of auxiliaries within LFG. In: Sadler, Louisa and Spencer, Andrew (eds.) *Projecting Morphology.* Stanford: CSLI Publications, 11-22.

Butt, Miriam. 2003. The light verb jungle. *Harvard Working Papers in Linguistics* 9: 1-49.

Dalrymple, Mary. 2001. *Lexical Functional Grammar*. New York: Academic Press.

Forst, Martin, King, Tracy H. & Laczkó, Tibor. 2010. Particle verbs in computational LFGs: Issues from English, German, and Hungarian. In Miriam Butt & Tracy H. King. eds. *Proceedings of the LFG '10 Conference*. Ottawa: Carleton University. On-line publication: CSLI Publications.

Frank, Anette and Zaenen, Annie. 2004. Tense in LFG: Syntax and morphology. In: Sadler, Louisa and Spencer, Andrew (eds.) *Projecting Morphology.* Stanford: CSLI Publications, 23-65.

Laczkó, Tibor & Rákosi, György. 2008-2013. *HunGram. An XLE implementation of an LFG syntax of Hungarian.* University of Debrecen.

References (4)

Laczkó, Tibor & Rákosi, György. 2011. On particularly predicative particles in Hungarian. In: Butt, Miriam – King, Tracy H. eds. *Proceedings of the LFG '11Conference*. Hong Kong: Hong Kong University. On-line publication. CSLI Publications, ISSN 1098-6782. 299-319.

Laczkó, Tibor & Rákosi, György. 2013. Remarks on a novel LFG approach to spatial particle verb constructions in Hungarian. In Brandtler, Johan, Molnár, Valéria & Platzak, Christer. eds. *Approaches to Hungarian. Volume 13: Papers from the 2011 Lund Conference*. Amsterdam: John Benjamins. 149-177.

Laczkó, Tibor. 2013. Hungarian particle verbs revisited: Representational, derivational and implementational issues from an LFG perspective. In Butt, Miriam & King, Tracy Holloway. eds. *The Proceedings of the LFG13 Conference*. Debrecen: University of Debrecen. On-line publication: CSLI Publications, ISSN 1098-6782. 377-397.

Laczkó, Tibor. 2014. On verbs, auxiliaries and Hungarian sentence structure in Lexical-Functional Grammar. *Argumentum* 10. Debrecen: Debreceni Egyetemi Kiadó, 421-438.

References (5)

Spencer, Andrew. 2001. The Word-and-Paradigm approach to morphosyntax. *Transactions of the Philological Society* 99. 279–313.

Spencer, Andrew. 2003. Periphrastic paradigms in Bulgarian. *Syntactic Structures and Morphological Information*, ed. by Uwe Junghanns and Luka Szucsich, 249–82. Berlin: Mouton de Gruyter.

Spencer, Andrew. 2006. Periphrasis. *The Encyclopedia of Language and Linguistics*. (2nd edn), ed. by Keith Brown, 287–94. Oxford: Elsevier.

Stump, Gregory T. 2002. Morphological and syntactic paradigms: Arguments for a theory of paradigm linkage. *Yearbook of Morphology 2001*, ed. by Geert Booij and Jaap van Marle. Dordrecht: Kluwer Academic Press.

Stump, Gregory T. 2006. Heteroclisis and paradigm linkage. *Language* 82. 279–322.

Toivonen, Ida. 2001. *The Phrase Structure of Non-Projecting Words*. Ph.D. dissertation, Stanford University.

Vincent, Nigel and Börjars, Kersti. 1996. Suppletion and syntactic theory. In *Proceedings of the first LFG conference*.

Appendix

(1) *fog-ok*   *me-nni*
   will-1SG go-INF
   'I will go'

- 'will' is inflected for (subject-verb) agreement, and it is V ($\Leftrightarrow$ I or PRT), see Laczkó (2014)
- both elements are Vs and they are co-heads $\rightarrow$ the FORM constraint wouldn't work here ($\Leftrightarrow$ *volna*)

(2) $menni_1$, V 'GO < ($\uparrow$ SUBJ) ($\uparrow$ OBL) >'
   ($\uparrow$ SUBJ NUM)=c sg
   ($\uparrow$ SUBJ PERS)=c 1
   ($\uparrow$ TENSE)=c FUT
   ($\uparrow$ DEF)=c –

- the TENSE constraint requires the presence of (always finite) *fog* 'will'
- the specifications of the entire paradigmatic slot are encoded in the lexical form of the infinitive; however, here by dint of constraining equations

4.6. The paradigmatic approach

- in all these cases a form of the copula is involved
- Hungarian, Udmurt: the copula form is invariant and the lexical verb is conjugated
- Mari: the lexical verb form is invariant and the copula is conjugated
- there are also instances when the encoding of agreement is done jointy by the two elements (person vs. number)
- the two elements are non-compositional AND there is (possibly unpredictable) variation in the locus of encoding conjugation

→ motivation for a paradigmatic approach

4.7. The paradigmatic approach

Taxonomy of lexicalist approaches (Ackerman et al. 2011)		Lexical modification	Morpholexical inflection	Unary expression
Classical LFG **(A)**	Bresnan	YES	YES	YES
Some recent LFG views **(B)**	Alsina, Bresnan, Butt	NO	YES	YES
Realization-based lexicalism **(C)**	Ackerman, Ackerman et al.	**YES** [yes]	**YES** [yes]	**NO** [yes];[yes]

(A) Bresnan (1982)

[here]

(B) Alsina (1992), Bresnan (2001), Butt (2003), partially (PVCs): Forst et al. (2010), Laczkó & Rákosi (2011, 2013)

(C) Ackerman (1987, 2003), Ackerman & Webelhuth (1998), Ackerman et al. (2011), Laczkó (2013)

4.8. The paradigmatic approach

(C)   Ackerman (1987, 2003)
          Ackerman, Stump & Webelhuth (2011:16)

- Only **morphological** and not syntactic **rules** can associate **morphosyntactic content** with a **lexeme's realizations** (= the principle of morpholexical inflection).

- **the paradigmatic view, TL: OK**

- **Lexemes** tend to be expressed by single **synthetic word** forms but can also be expressed by **combinations of words** ⇔ **(B)** (cf. the classical notion of a *morphological word*).

- **TL − aim here: to reconcile the paradigmatic view with the classical notion of a(n obligatorily synthetic) lexical form**

4.9. The paradigmatic approach

Ackerman (2003) on Hungarian particle-verb constructions (PVCs):

Morphological Expression (Ackerman & Webelhuth 1998)

Synthetic realization principle

- Where the realization w of <L,δ> is a synthetic member of category X, w may be inserted as the head of XP.

Periphrastic realization principle

- Where the realization $w_1 w_2$ of <L,δ> is periphrastic and w_1 and w_2 belong to the respective categories X and Y, w_1 and w_2 may be inserted as the heads of the respective nodes X(P) and Y(P).

- [δ = either ***morphosyntactic*** or ***derivational*** properties]

PROGRAMMATIC FOR HUNGARIAN PVCS AND LFG → THEORETICAL AND IMPLEMENTATIONAL CHALLENGES FOR LFG

LFG-XLE solutions: Forst et al. (2010), Laczkó & Rákosi (2011), Laczkó (2013)

7.2. Conclusion

4. This analysis is part of my larger project of developing an LFG proposal for treating several categories as **non-projecting words**, in the (modified) sense of Toivonen (2001), or **minor categories**, in the sense of Dalrymple (2001).

- so far: preverbs, now: *volna*, later: *nem* 'not', *is* 'also', *-e* 'QM', *csak* 'only', etc.

5. The construction type shown in (1) requires an entirely different treatment.

(1) *fog-ok   me-nni*
     will-1SG go-INF
     'I will go'

- 'will' is
  - inflected for (subject—verb) agreement
  - of category V (and not Infl or PRT), see Laczkó (2014)