Verbal periphrasis in Bulgarian

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Introduction

Bulgarian has a rich set of periphrastic constructions (Spencer, 2003), including a perfect (1a, 2b) and a renarrated (evidential) series, usually, (1c), but not always, (2c), syncretic with the perfect indicative.

(1)   a.   Ti   **si**   **pisala**   pisma do kmeta.
           you be.2SG.PRS write.L-PTCP.SG.F letters to mayor.DEF

           'You have written letters to the mayor'.   [perfect indic]

       b.   Ti   **pisa**   pisma do kmeta.
           you   write.2SG.AOR letters to mayor.DEF

           'You wrote letters to the mayor'.   [aorist indic]

       c.   Ti   **si**   **pisala**   pisma do kmeta   včera.
           you be.2SG.PRS write.L-PTCP.SG.F letters to mayor.DEF yesterday

           '(Reportedly) you wrote letters to the mayor yesterday.'   [renarr aor]

(2)   a.   Tja   **pisa/pišeše**   pisma do kmeta.
           she   write3SG.AOR/IMPF letters to mayor.DEF

           'She wrote/was writing letters to the mayor'.   [aor/impf indic]

       b.   Tja **e**   **pisala**   pisma do kmeta
           she be.3SG.PRS write.L-PTCP.SG.F letters to mayor.DEF

           'She has written letters to the mayor'.   [perfect indic]

       c.   Tja   **pišela**   pisma do kmeta
           she   write.IPFV.L-PTCP.SG.F letters to mayor.DEF

           '(Reportedly) she writes/was writing letters to the mayor.'   [renarr pres/impf]

We propose a construction-theoretic analysis within a modification of Stump's (2016) PFM2 model.

Previous Word-&-Paradigm accounts

Periphrases resemble realizational inflectional morphology in that it is typically impossible to assign a constant meaning or feature value to the parts (auxiliary/ancillary element or (inflected) lexical form). They are also often integrated into the synthetic inflectional paradigm: the renarrations in (1c, 2c) alternate with synthetic indication constructions (1a, 2a) (Sadler & Spencer, 2001; Ackerman & Stump, 2004). Previous word-and-paradigm accounts (e.g. Ackerman & Stump, 2004) integrate periphrasis into the morphology directly. In Bonami's (2015) analysis, morphological rules specify that the lexical word component in a periphrase must occur in the context of a particular ancillary element.

However, for Bonami & Webelhuth (2018) the periphrase is essentially the head (the auxiliary verb) subcategorising for the lexical element (e.g. a participle) via ARG-ST. In the sense that the whole of the periphrase is contained in the lexical entry of the auxiliary, and the lexical entry is listed, this account comes close to listing a construction. To deal with non-compositionality, many previous accounts distinguish two kinds of features, along the lines of

the m-/s-features of Sadler & Spencer (2001) or the CONTENT/FORM paradigm distinction in Stump (2016), e.g. Bonami & Webelhuth's (2018) HEAD/INFL attributes. However, there is no direct access to the mother node of the construction in the Bonami & Webelhuth (2018) account, so the features expressed holistically by the construction have to be HEAD features of the syntactic head of the periphrase. When percolated to the next syntactic level they effectively serve as constructional features.

Where the auxiliary is the syntactic head, as in the Czech past tense construction, nearly all of its HEAD properties, including its Lexemic Identifier (LID), are those of its complement, the lexical verb. Thus for Czech *nekoupil jsem* 'I didn't buy' this induces a near-complete HEAD/INFL feature mismatch on the auxiliary: [HEAD|LID: koupit, VFORM: pst, POL: neg, AGR: m,3,sg] vs [INFL|LID: pst_aux, VFORM: prs, POL: pos, AGR: m,3,sg]. However, since the auxiliary's HEAD|LID value is that of the lexical verb complement, this makes the false prediction that the aux cannot scope over conjoined verbs, as in *ten dopis jsem [napsal ale neposlal]* 'that letter AUX.1SG [wrote but NEG.sent]'. More generally, this account predicts that the features associated with the periphrase as a whole will originate on at least one of its components and that in many cases the head of a periphrase is morphomic, in that the features governing its syntactic behaviour and semantic interpretation are not the features that it inflects for. We argue that the features components of the periphrase inflect for may be important for determining their syntactic behaviour.

Our account

We argue that no existing analyses take non-compositionality fully into account. It is especially problematic to assume that the features associated with the periphrase as a whole originate on one of its elements: no part of the periphrase in (1c) expresses the feature 'renarrated' or, indeed, 'aorist'. We argue therefore that periphrastic constructions should permit direct reference to the features associated with the construction as a whole (suspending the usual mechanism of bottom-up HEAD feature percolation for such constructions). We assume the existence in the grammar of special, periphrastic constructions, which themselves have HEAD/INFL features (see Figure 2). We then allow top-down mapping of constructional HEAD/INFL features to the HEAD/INFL features of the elements of the construction. We assume that the INFL features such constructions express are regulated by the syntax-morphology interface, so the paradigm function can map features directly to the INFL features on the construction level:

(3) $\text{PF}(<\text{L}, \sigma: \{\text{TNS-ASP: perf}\}>) = (<\text{C}_{perf-cxt}, \sigma>)$

This ensures that periphrastic constructions are integrated into the (form) paradigms of lexemes.

We interpret the INFL attribute of Bonami (2015), Bonami & Webelhuth (2018) as a set of m/FORM features, by default identical to a set of (syntactically visible) HEAD features. To account for the syncretism of periphrastic constructions we noted in the beginning, we assume that a mechanism along the lines of the property mapping function **pm** of Stump (2016) maps INFL to HEAD features on the constructional level too, see also Figure 2:

(4) $\text{pm}(<\text{C}_{perf-cxt}, \sigma: \{\text{TNS-ASP: aor, MOOD: renar}\}>) =$
       $(<\text{C}_{perf-cxt}, \tau: \{\text{TNS-ASP: perf, MOOD: indic}\}>)$

Our analysis enjoys a number of advantages:

1. Assuming that the distinctions encoded periphrastically are expressed on the constructional level obviates the need to consider the inflectional information expressed by the elements of the periphrase irrelevant to syntax. At the same time none of the components of the periphrase need be tasked with adopting the constructional features as their own.

2. The construction can encode various syntactic relationships, including shared argument structure, where necessary. However, the status of the construction as an exponent of certain constructional features is not dependent on lexical selection (much less 'reverse selection', Bonami 2015) and headedness.

3. Since the main featural mismatches are between the top-level construction and the *default* interpretation of its component words, not between HEAD INFL features, we do not encounter the problem earlier earlier accounts face with coordinated verbs.

$$
\text{HEAD } \sigma : \begin{bmatrix} \text{LID} & \boxed{1} \\ \text{TNS-ASP} & \text{PRF} \\ \text{AGR} & \begin{bmatrix} \text{AGR1} & \boxed{2}\{\text{P:2, N:sg}\} \\ \text{AGR2} & \boxed{3}\{\text{G:f, N:sg}\} \end{bmatrix} \\ \text{MOOD:} & \text{indic} \end{bmatrix}
$$

$$
\text{INFL } \tau : \begin{bmatrix} \text{LID} & \boxed{1} \\ \text{TNS-ASP} & \text{PRF} \\ \text{AGR} & \begin{bmatrix} \text{AGR1} & \boxed{2}\{\text{P:2, N:sg}\} \\ \text{AGR2} & \boxed{3}\{\text{G:f, N:sg}\} \end{bmatrix} \\ \text{MOOD:} & \text{indic} \end{bmatrix}
$$

$$
\begin{bmatrix} \text{HEAD} & \boxed{5} \\ \text{INFL} \boxed{5} & \sigma! \begin{bmatrix} \text{LID} & \boxed{4}\,\text{be} \\ \text{TNS-ASP} & \boxed{5}\,\text{PRS} \\ \text{AGR1:} & \boxed{2} \end{bmatrix} \end{bmatrix}
\qquad
\begin{bmatrix} \text{HEAD} & \boxed{6} \\ \text{INFL} \boxed{6} & \sigma! \begin{bmatrix} \text{LID} & \boxed{1}\,\text{write} \\ \text{AGR2:} & \boxed{3} \\ \text{VFORM} & \text{l-form-pfv} \end{bmatrix} \end{bmatrix}
$$
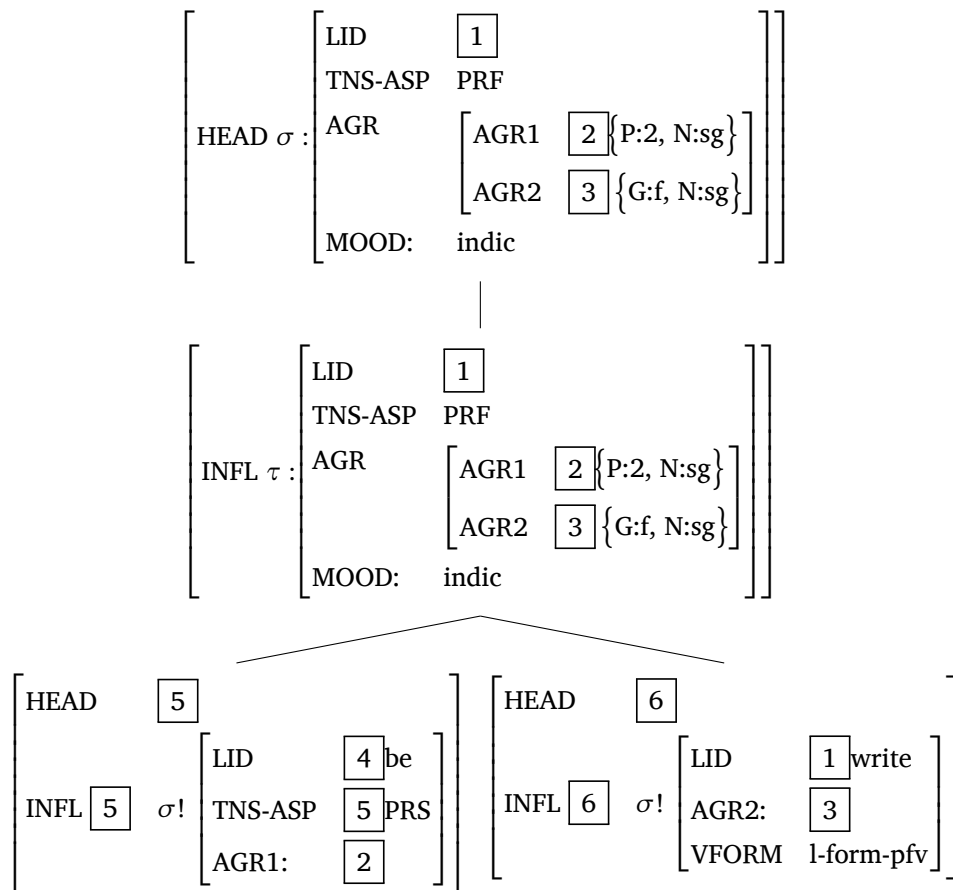
Figure 1: Bulgarian: 'you (2SG.F) wrote (Perfect)'

$$
\left[
\begin{array}{l}
\text{HEAD } \sigma :
\left[
\begin{array}{ll}
\text{LID} & \boxed{1} \\
\text{TNS-ASP} & \text{AOR} \\
\text{AGR} &
\left[
\begin{array}{ll}
\text{AGR1} & \boxed{2}\{\text{P:2, N:sg}\} \\
\text{AGR2} & \boxed{3}\{\text{G:f, N:sg}\}
\end{array}
\right] \\
\text{MOOD:} & \text{renarr}
\end{array}
\right]
\end{array}
\right]
$$

$$
\left[
\begin{array}{l}
\text{INFL } \tau :
\left[
\begin{array}{ll}
\text{LID} & \boxed{1} \\
\text{TNS-ASP} & \text{PRF} \\
\text{AGR} &
\left[
\begin{array}{ll}
\text{AGR1} & \boxed{2}\{\text{P:2, N:sg}\} \\
\text{AGR2} & \boxed{3}\{\text{G:f, N:sg}\}
\end{array}
\right] \\
\text{MOOD:} & \text{indic}
\end{array}
\right]
\end{array}
\right]
$$

$$
\left[
\begin{array}{l}
\text{HEAD} \quad \boxed{5} \\
\text{INFL } \boxed{5} \; \sigma!
\left[
\begin{array}{ll}
\text{LID} & \boxed{4}\,\text{be} \\
\text{TNS-ASP} & \boxed{5}\,\text{PRS} \\
\text{AGR1:} & \boxed{2}
\end{array}
\right]
\end{array}
\right]
\qquad
\left[
\begin{array}{l}
\text{HEAD} \quad \boxed{6} \\
\text{INFL } \boxed{6} \; \sigma!
\left[
\begin{array}{ll}
\text{LID} & \boxed{1}\,\text{write} \\
\text{AGR2:} & \boxed{3} \\
\text{VFORM} & \text{l-form-pfv}
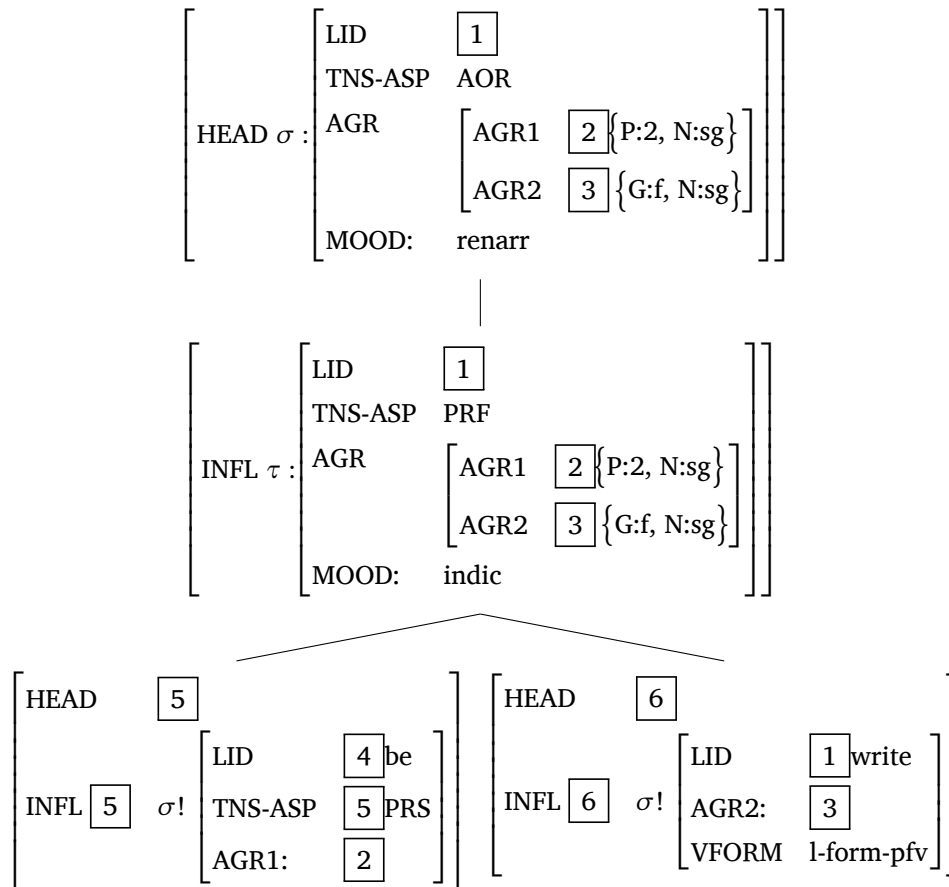\end{array}
\right]
\end{array}
\right]
$$

Figure 2: Bulgarian: 'you (2SG.F) wrote (Renarrated aorist)'

References

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