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Clitic Climbing and Tense Auxiliaries in Polish and Romance

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Abstract

The aim of this paper is to compare the behaviour of Polish and Romance pronominal clitics in tense auxiliary constructions and to account for Polish facts. First, we present the system of Polish auxiliaries, briefly comparing it to Romance. Then, we discuss clitic climbing (CC), the phenomenon well-known in Romance. We contrast Polish CC with CC in Italian and French. Finally, we present a formal analysis of Polish CC. Our analysis is coached within the framework of HPSG (Head-driven Phrase Structure Grammar, (Pollard & Sag, 1987; Pollard & Sag, 1994)), which has been also used to account for CC in Romance. We follow (Borsley, 1999) in treating Polish auxiliaries as syntactic items. However, we do not find his argumentation strong enough to motivate the adaptation of the analysis proposed for French auxiliaries, (Abeillé & Godard, 1994), to Polish. We account for CC in Polish assuming that clitics can be realised independently of non-clitic arguments. Such an approach correctly explains optionality of CC in Polish without specifying what the constituent structure of auxiliary constructions looks like.

1. Tense Auxiliaries

As argued in (Borsley & Rivero, 1994), past tense, (1a), and conditional verbs, (1b), are formed with an auxiliary as well:

(1) a. Ty **widział -eś** ten film. ‘You saw this film.’
you seen AUX.2sg this film

b. Ty **widział -byś** ten film. ‘You would see this film.’
you seen AUX-COND.2sg this book

Although *(e)ś* and *byś* in (1) look like verbal inflection, they can be detached from the verb and occur on (almost) any other preceding word,[1] (2) (see (Booij & Rubach, 1987) or (Spencer, 1991, ch.9) for more examples).

[1] Transitive prepositions and the verbal negative marker *nie* ‘not’ are the exceptions discussed in (Borsley & Rivero, 1994).

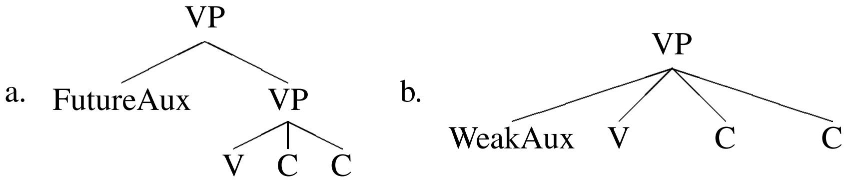
(2) a. Ty **-ś** **widział** ten film. ‘You saw this film.’
you AUX.2sg seen this film

b. Ty **byś** **widział** ten film. ‘You would see this film.’
you AUX-COND.2sg seen this film

The behaviour of‘floating inflections’ illustrated in (1) and (2), has been often discussed in the literature, e.g., (Mikoś & Moravcsik, 1986), (Booij & Rubach, 1987), (Rappaport, 1988), (Spencer, 1991), (Borsley & Rivero, 1994), (Borsley, 1999). We follow here (Borsley & Rivero, 1994) and (Borsley, 1999) and treat boldfaced forms in (1) and (2) as consisting of a weak auxiliary (a clitic) and a participle. We adopt the analysis of (Borsley, 1999) of verb forms in (1) and treat them as morphological compounds (complex verbs). We also follow (Borsley, 1999) and assume that weak auxiliaries are syntactic items. However, our analysis of auxiliary constructions, such as in (2), will be different.

(Borsley, 1999) represents weak auxiliaries as (subject-raising) syntactic verbs which subcategorize for a participle, similarly to the future auxiliary. He argues, however, that the future and weak auxiliaries should have different complementations. The former takes a VP complement (a traditional hierarchical structure results, (3a)) while the latter form a complex (syntactic) predicate with the participle. Hence, weak auxiliaries subcategorize for a verbal complement (a participle) as well as its complements, which results in a flat syntactic structure, (3b) (similarly to French and Italian tense auxiliary constructions, cf. (Abeillé & Godard, 1994) and (Monachesi, 1997a), respectively).

(3)



Such an analysis, however, makes incorrect predictions with respect to CC.

2. Clitic Climbing

CC is a cross-linguistical phenomenon associated with certain verbal environments. In certain verbal contexts, a pronominal clitic can be realised on a verb different from that it semantically belongs to, e.g., (4).

(4) Będę go oglądał jutro. ‘I’ll be watching it tomorrow.’
will.be.1sg him_{cl} seen tomorrow

In (4), the clitic *go* ‘him’ originates as an argument of the verb *oglądał* but is realised on the auxiliary rather than locally.

In Polish, unlike, e.g., in Romance, CC to tense auxiliaries is optional. As illustrated in (5), the argument clitic need not be realised on the future auxiliary and can remain ‘downstairs’.

(5) Będę oglądał go jutro. ‘I’ll be watching it tomorrow.’
will.be.1sg watched it_{cl} tomorrow

The behaviour of Polish pronominal clitics with weak auxiliaries is analogous: clitics are facultatively realised on the auxiliary, cf. (6).

(6) a. Często -ś go widywał przedtem. 'You saw it/him often before.'
often AUX.2sg it$_{cl}$ seen before

b. Często -ś widywał go przedtem.

(7) a. Chętnie bym go obejrzał jutro.
willingly AUX-COND.1sg it$_{cl}$ seen tomorrow
'I would like to see it tomorrow.'

b. Chętnie bym obejrzał go jutro.

Also if there are several clitics, they occur on the auxiliary only optionally, cf. (8). It seems, however, that in auxiliary constructions all clitics must be realised on the same verb, cf. (8c–d). Properties of CC in the conditional and future auxiliary constructions are analogous.

(8) a. Bardzo -ś przestraszył się go wczoraj.
very AUX.2sg feared self$_{cl}$ him$_{cl}$ yesterday
'He frightened you very much yesterday.'

b. Bardzo -ś się go przestraszył wczoraj.

c. ?? Bardzo -ś się przestraszył go wczoraj.

d. * Bardzo -ś go przestraszył się wczoraj.

Polish pronominal clitics are syntactic items. They do not form a prosodic word with the host, (Rappaport, 1988), can be elided, do not have a fixed position in a sentence and are promiscuous, (Spencer, 1991, ch.9). Therefore, if we adopt Borsley's (1999) analysis of auxiliaries, CC in the future tense constructions, (3a), shouldn't be possible (complements are not raised to the auxiliary). According to (3b), all clitics should occur on weak auxiliaries rather than on the participle. As (4)–(8) show, these expectations are not born out: all types of auxiliaries trigger CC only optionally.

The main argument put forward in(Borsley, 1999) for two structures given in (3), is the contrast in (9).

(9) a. * Widział książkę -ś/ byś. 'You saw/would see the book.'
seen book AUX.2sg COND-AUX.2sg

b. Widział książkę będziesz. 'You will see the book.'
seen book will.be.2sg

This contrast apparently shows that in (9a), unlike in (9b), there is no constituent to be preposed. Since Polish is a 'free' word order language and various permutations are possible, it is not clear whether the participle does form a constituent with its complement in (9b). Other traditional constituency tests, e.g., coordination or pronominalization, do not distinguish the complementation of weak and future auxiliaries. Moreover, contrasts similar to (9) are also observed in the behaviour of pronominal clitics:

(10) Zaprosimy jutro jego/ *go na kolację. ‘We will invite him for dinner
will-invite-we tomorrow him him_{cl} on dinner
tomorrow.’

The contrast in (10) cannot be explained analogously to (9). The pronominal clitic is not a head while the sequence *zaprosimy jutro* ‘we will invite tomorrow’ does not form a constituent. Instead, we attribute contrasts in (9) and (10) to a restriction on linear positions of Polish clitics. We exclude the ungrammaticality of (9a) by a linear precedence constraint.

3. HPSG Analysis

We follow (Sag, 1997), Bouma et al. (1997), (Miller & Sag, 1997) and Abeillé et al. (1998) and split the *synsem* type into *canonical* and *non-canonical* subtypes. As said above, we treat weak auxiliaries (following (Borsley, 1999)) and pronominal clitics as syntactic items. Since Polish clitics correspond to *sign*s, we represent them via a *clitic* type, a subtype of *canonical*. We further split *clitic* into *pron-cl* and *aux-cl* for pronominal and auxiliary clitics, respectively, cf. (11).[2]

(11)

- *synsem*
  - *non-canonical*
  - *canonical*
    - *non-clitic*
    - *clitic*
      - *pron-cl*
      - *aux-cl*

We represent Polish pronominal clitics on the COMPS list, i.e., the list of complements which are combined with the head in the syntax. Apart from the reflexive clitic, which is always introduced lexically, see (Kupść, 1999), personal clitics and other NPs can be used interchangeably. Since the value of COMPS is specified as a list of *synsem*s, both *clitic*s and *non-clitic* elements can occur here. These are syntactic principles and ID schemata which remove pronominal clitics from COMPS, rather than lexical mechanisms as in the analyses of Romance in (Monachesi, 1995; Monachesi, 1997b; Monachesi, 1997a), (Miller & Sag, 1997), Abeillé et al. (1998).

In order to account for CC, we assume that realisation of (syntactic) pronominal clitics can be independent of realisation of non-clitics.[3] Since there are no strong arguments in favour of two distinct complementations in (3), we assume that all auxiliary constructions have the same type of syntactic structure. We assume the following subcategorization frame for all auxiliaries:

(12)
$$\begin{bmatrix} \text{HEAD} & \text{verb}[\text{AUX}+] \\ \text{SUBJ} & \boxed{1} \\ \text{COMPS} & \left\langle \begin{bmatrix} \text{HEAD} & \textit{verb}[\text{VFORM } \textit{part}] \\ \text{SUBJ} & \boxed{1} \\ \text{COMPS} & \boxed{2} \end{bmatrix} \right\rangle \oplus \boxed{2} \end{bmatrix}$$

[2] Both subtypes of *clitic* can be further split. For example, *pron-cl* can be divided into *ana-cl* and *p-cl* in order to distinguish the reflexive clitic (*ana-cl*) from personal clitics, cf. (Kupść, 1999). Analogously, *past-aux* and *cond-aux* can be distinguished, cf. (Borsley, 1999). Since these subtypes are inessential here, we omit them for clarity.

[3] (Kupść, 1999) makes a similar assumption in order to account for ‘haplology’ of the Polish (syntactic) reflexive clitic *się* ‘self’.

Unlike in (Borsley, 1999), the value of the participle's COMPS list, i.e., $\boxed{2}$, is underspecified. This allows us to encode the fact that pronominal clitics can raise independently of non-clitic complements. Assuming that auxiliary constructions have a hierarchical structure, i.e., an auxiliary subcategorizes for a VP, we replace the Immediate Dominance Schema of (Pollard & Sag, 1994) which combines a lexical head and complements with (13):

(13) $$phrase \rightarrow \left[\begin{array}{ll} \text{SYNSEM}|\text{LOC}|\text{CAT}|\text{VAL}|\text{COMPS} & \textit{list(pron-cl)} \\ \text{DTRS} & \left[\begin{array}{ll} \multicolumn{2}{l}{\textit{head-comp-struc}} \\ \text{HEAD-DTR} & \textit{word} \\ \text{COMP-DTRS} & \textit{list(sign)} \end{array}\right] \end{array}\right]$$

This constraint licenses phrases which may have a certain number of clitics unrealised. Such a phrase is necessary to account of CC in a hierarchical structure, i.e., if an auxiliary combines with a VP which has unrealised clitics, e.g., (4). Observe that *list(pron-cl)* is any list of *pron-cl* elements. In particular, this list can be empty if all pronominal clitics (if there are any) are realised, i.e., [COMPS⟨⟩] as in the traditional schema of (Pollard & Sag, 1994). Hence, local realisation of clitics in a hierarchical structure is also accounted for, e.g., (5). The constraint on *clause*s will ensure saturation of all (clitic and non-clitic) complements within a clause:

(14) $$clause \rightarrow \left[\begin{array}{ll} \text{SYNSEM}|\text{LOC}|\text{CAT}|\text{VAL}|\text{COMPS} & \langle\rangle \end{array}\right]$$

As shown in (8), in auxiliary constructions all clitics must be realised on the same verb (an auxiliary or a participle). We obtain this by the following lexical constraint:[4]

(15) $$\left(\left[\begin{array}{l} \textit{word} \\ \text{HEAD} \textit{verb}[\text{AUX}+] \vee [\text{VFORM } \textit{part}] \\ \text{COMPS} \text{list}\left(\left[\begin{array}{l} \textit{arg} \\ \text{ARG} \textit{non-cl} \end{array}\right] \right) \bigcirc \boxed{1} \end{array}\right] \right.$$
$$\left. \&\text{member}\left(\left[\begin{array}{ll} \multicolumn{2}{l}{\textit{arg}} \\ \text{ARG} & \textit{pron-cl} \\ \text{REAL} & + \end{array}\right], \boxed{1}\text{list}\left(\left[\begin{array}{l} \textit{arg} \\ \text{ARG} \textit{pron-cl} \end{array}\right] \right) \right) \right) \rightarrow \boxed{1}\text{list}\left(\left[\begin{array}{ll} \multicolumn{2}{l}{\textit{arg}} \\ \text{ARG} & \textit{pron-cl} \\ \text{REAL} & + \end{array}\right] \right)$$

Finally, the following LP constraint excludes incorrect positions of weak auxiliaries such as (9a).

(16) $$\left(\left[\begin{array}{ll} \multicolumn{2}{l}{\textit{dom\_obj}} \\ \text{SS} & \left[\begin{array}{ll} \multicolumn{2}{l}{\textit{aux-cl}} \\ \text{HEAD} & \text{verb} \\ \text{COMPS} & \boxed{1} \end{array}\right] \end{array}\right] \prec \left[\begin{array}{ll} \multicolumn{2}{l}{\textit{dom\_obj}} \\ \text{SS} & \boxed{2}\left[\begin{array}{ll} \multicolumn{2}{l}{\textit{non-clitic}} \\ \text{HEAD} & \textit{verb}\left[\text{VFORM } \textit{part}\right] \end{array}\right] \end{array}\right] \right) \& \text{ member}(\boxed{2},\boxed{1})$$

This constraint differs from that proposed in (Borsley, 1999). Instead of requiring a lexical participle verb to be ordered with respect to *any* auxiliary, (16) refers only to weak auxiliaries (*aux-cl*) and does not require the participle to be lexical. Note that (16) is formulated in terms of *dom_obj*s (objects used to encode linear order in HPSG, cf. (Kathol, 1995)) and does not refer to syntactic constituents directly. Due to such a representation of linear order, the syntactic structure of auxiliary constructions is in principle inessential for (16).

[4]We use *arg* rather than *synsem*s here in order to distinguish realised ([REAL+]) from unrealised ([REAL−]) arguments, cf. (Przepiórkowski, 1998). The relation '◯' is used to 'shuffle' elements of several lists preserving order between members of original lists, as in shuffling a deck of cards, cf. (Reape, 1992). The 'member' relation is a usual list membership relation.

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