

On the Tense-less Future in Polish

The issue There are two ways of expressing future tense in Polish: (i) by using the present tense form of a perfective verb (1a) or (ii) by using the so-called future auxiliary *będzie* + *l*-(past) participle (or infinitive) of an imperfective verb (1b). These examples suggest that there is no designated morphological element which by itself encodes the category of future tense. In many languages modal elements are used to compensate for the missing future tense category. However, as evidenced by (1) this is not the case in Polish.

Our claim is that “future time” in Polish (and North Slavic in general) is expressed only through aspectual distinctions rather than through real tense morphology.

Starting point As for (1b), a surprising fact is the aspectual mismatch between the perfective form of the auxiliary and the imperfective form of the lexical verb. A potential way of accounting for this might be Julien’s (2001) proposal that periphrastic tenses are biclausal, i.e., they contain two VPs, headed by the main verb and by the auxiliary respectively, and two extended projections, one over each VP, with every clause containing two temporal heads: a higher T(Past) and a lower T(Future). This would imply that in (1b) *będzie* is T(Future) and the *l*-participle is T(Past). However, there are at least two facts showing that (1b) is monoclausal. First, given that sentence negation in Polish is below TP but above the verbal projection (see Błaszczak 2001) and given that it licenses negative pronouns and Genitive of Negation (cf. (2)), it can be demonstrated that the lower position of negation in (3b) does not represent sentence negation. In this respect, “future construction” in (1b) clearly differs from biclausal constructions, such as control (and also (deontic) modal) constructions; cf. the contrast between (3) and (4). Second, *będzie* must be low in the clausal structure as, when it is used with a modal verb, only the root and not the epistemic interpretation of the modal is available; cf. (5). Given Hacquard’s (2006) analysis in (6), this would speak for a position of *będzie* below TP.

Proposal Diachronic facts indicate that *będzie* belongs to the paradigm of the perfective aspect of the Old Church Slavonic verb *byti* ‘to be’ (van Schooneveld 1951). Synchronically, it has the same distribution as other perfective verbs; e.g., it can be used with *zanim nie*, lit. ‘before not’ or *dopóki nie* ‘until’; cf. (7). Hence, it can be argued that perfective/imperfective morphological oppositions demonstrated by the majority of verbs in Polish is also realized in the case of the verb ‘be’; cf. (8). The *l*-participle cannot be T(Past), as it can be used both in “future”, “past” as well as conditional and subjunctive sentences (cf. (9)), so it must be tenseless. Consequently, we suggest that the *l*-participle is a “dependent verbal form” in the sense of Giannakidou (2009): it might be taken to contain a dependent (referentially deficient) event time variable which – unlike a free variable – cannot be interpreted deictically but rather, it needs to be licensed by an antecedent. We argue that *będzie* serves the function of the antecedent in “future constructions”, as in (9a). As for the past construction in (9b) and conditional/subjunctive constructions in (9c,d), the antecedent function is fulfilled by a null Past Auxiliary in the former (see Dornisch 1997) and the modal particle *by* in the latter case (see Giannakidou 2009). How do we obtain the future meaning of the aspectual forms in (1) compositionally? Let’s focus on the periphrastic form in (1b). The *l*-participle is projected as the head of V where it introduces a referentially deficient event time variable which is licensed by the perfective aspectual form *będzie* projected in AspP. We assume that the perfective aspectual form existentially quantifies over an event variable and maps a predicate of events onto a predicate of times by locating the temporal trace of the event $\tau(e)$ within the evaluation time given by the Tense operator (see Kratzer 2005). Additionally, we assume that Aspect takes a world argument which is explicitly represented in syntax and which needs to be bound by the closest modal binder available according to strict locality conditions (see Hacquard 2006). We assume that this world variable is bound by the temporal/modal operator All_b (see Copley 2002), which heads TP and whose semantic contribution is that of locating a proposition q (and consequently the event time in q) at t after now in all relevant possible world w .

Additional advantages of our proposal This approach allows us to further explain why it is possible to use the future constructions in Polish to express an atemporal meaning (epistemic habituality; cf. (10)) and epistemic modality in (11). In these contexts, the world variable introduced by Aspect is bound not by the temporal/modal operator All_b , but by the epistemic habitual operator Hab_{epist} in (10) and by the epistemic modal operator in (11), which are both projected in ModP above TP.

- (1) a. *zje* 'eat.prs.perf.3sg' (≈ 'He/she will eat / will have eaten.')
- b. *będzie jadł / jeść* 'be.prs.perf.3sg eat.prt.impf.sg.m / eat.inf.impf' (≈ 'He/she will eat / will be eating.')
- (2) a. *Przeczyta gazetę.* read.prs.perf.3sg newspaper.ACC (≈ 'He/she will read a newspaper.')
- b. *Nie przeczyta gazety / niczego* / * *gazetę.* / * *nic.* / * *newspaper.ACC* / * *nothing* (≈ 'He/she will not read a newspaper.' / 'He/She will not read anything.')
- (3) a. *Nie będzie czytał gazety / niczego.* NEG be.prs.perf.3sg read.prt.impf.sg.m newspaper.GEN / nothing (≈ 'He/she will not be reading a newspaper / anything.')
- b. **Będzie nie czytał gazety / niczego.* be.prs.perf.3sg NEG read.prt.impf.sg.m newspaper.GEN / nothing
- (4) a. *Nauczyciel pozwolił Janowi nie czytać żadnej książki.* teacher allowed Jan.DAT NEG read.inf [no book].GEN 'The teacher allowed Jan not to read any book.'
- b. *Jan może jutro nie czytać żadnej książki.* Jan can tomorrow NEG read.inf [no book].GEN 'Jan is allowed not to read any book tomorrow.'
- (5) *Xiu będzie musiała zagrać dla cesarza. deontic must*
Xiu be.prs.perf.3sg must.prt.impf.sg.f play.inf.perf for emperor.
- (6) TP > AspP > ModP > VP (root subject/situation oriented modality)
ModP > TP > AspP > VP (epistemic speaker-oriented modality)
- (7) *Nie zadzwonię do nikogo,*
NEG phone.prs.perf.1sg to noone
*zanim nie ^{OK} będę w domu / zanim nie ^{OK} napiszę/*piszę tego listu.*
before NEG be.prs.perf.1sg at home / before NEG write.prs.perf./*impf.1sg this letter
'I won't call anyone before I get home / before I have written this letter.'
- (8) a. *pisze vs. napisze* write.prs.impf.3sg write.prs.perf.3sg
's/he writes/is writing' 's/he will write'
- b. *jest vs. będzie* be.prs.impf.3sg be.prs.perf.3sg
's/he is' 's/he will be'
- (9) a. *będzie jadł* 'be.prs.perf.3sg eat.prt.impf.sg.m' (≈ 'He will be eating.' / 'He will eat.')
- b. *jadł* 'eat.prt.impf.3sg.m' (≈ 'He ate. / 'He was eating.')
- c. *jadłby* 'eat.prt.impf.3sg.m + COND' (≈ 'He would eat.')
- d. *Maria chce, żeby on więcej jadł.* Mary wants that+SUBJ he more eat.prt.impf.3sg.m
(≈ 'Mary wants that he eat more.' / 'Mary wants him to eat more.')
- (10) *Jan pomoże ci w potrzebie.* John help.prs.perf.3sg you.dat in need
'John will certainly help you in hard times.'
- (11) How much is 2 + 2,5? *To będzie 4,5.* 'This will be 4.5.' ('This must be 4.5.')

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