Case and Agreement in Polish Predicates*

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In a recent paper, Bailyn and Citko (1999) propose an analysis of case marking of predicative phrases in Russian and, to a lesser extent, in Polish. The principles given in (1)–(2) below, which rely on the presence of the Pred(ication) functional head (Bowers 1993), constitute the pivotal part of that analysis.

- (1) **Universal C**: Pred⁰ has strong Case features (instrumental in Polish).
- (2) **Morphological Pred Rule**: Overt morphology in Pred⁰ absorbs Instrumental Case.

According to these principles, *za* in (3) below, being an overt realization of Pred^o, absorbs the instrumental strong Case features, so the only way for the predicative NP *student*- to receive case is to raise to a position in which it may agree in case with the NP being predicated of, namely, *go*.

(3) Uważam go za studenta / *studentem. I-consider \lim_{acc} as $\operatorname{student}_{acc}$ / $\operatorname{student}_{ins}$ 'I consider him (as) a $\operatorname{student}$.'

In brief, the accusative case on the predicative NP *studenta* is the result of agreement with the NP *go*.¹

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¹To be more precise, it is the result of the predicative NP raising to a position close enough to that of *go* so that both NPs may receive the accusative case from the same source.

The aim of the present paper is twofold. The first, relatively minor aim is to conclusively show that the accusative case on the predicative NP in examples such as (3) is assigned by the preposition za, rather than as a result of agreement with the higher NP. Since this conclusion seems irreconcilable with Bailyn and Citko's (1999) analysis, that analysis must be on the wrong track. The second, main aim is to resolve the clash between the common assumption that predicative NPs and APs receive their case via agreement (or are otherwise marked as instrumental), and the fact that predicative complements of prepositions such as za in (3) are assigned their case via 'non-predicative' case assignment mechanisms, probably by a rule which states that complements of prepositions are accusative (unless they are inherently case marked). More generally, the main aim of this paper is to delimit the boundaries of predicative case marking.

1 Apparent Overt Preds do Assign the Accusative

As mentioned above, Bailyn and Citko (1999) argue that *za* in (3) above is *not* a preposition, but rather an overt realization of Pred, absorbing the instrumental case and, hence, forcing the predicate to agree with its 'antecedent'. Similarly, the predicative AP in (4) is supposed to agree in case with its antecedent.

(4) Uważam go za zdolnego. I-consider \lim_{acc} as gifted_{acc} 'I consider him as gifted.'

There are, however, at least five good reasons why this analysis cannot be correct, reasons clearly showing that the case of the predicative complement of za is independent of the case of the NP being predicated of.

The first argument comes from considerations of the Genitive of Negation, a highly grammaticalized phenomenon in Polish (see, e.g., Przepiórkowski 1999, 2000 and references therein):

- (5) a. Nie uważam jej za studentkę / *studentki. Neg I-consider her_{gen} as student $_{acc}$ / student $_{gen}$ 'I don't consider her a student.'
 - b. Nie uważam jej za zdolną / *zdolnej. Neg I-consider her $_{gen}$ as gifted $_{acc}$ / gifted $_{gen}$ 'I don't consider her as gifted.'

As (4) shows, negating the verb causes the case shift on the complement of the verb only; the complement of the preposition is unaffected. If the case on the complement of the preposition were the result of agreement with the complement of the verb, both should occur in the genitive case, and there would be no source of accusative on *studentke / zdolnq* in (5).

The second argument is based on the somewhat idiosyncratic agreement facts involving numeral phrases. As discussed in detail in Przepiórkowski (1999), APs agreeing with accusative numeral phrases either agree with the accusative numeral or with the genitive NP, as illustrated in (6).

(6) Pięć kobiet było zdolnych / ?zdolne. $five_{acc}$ women $_{gen}$ was $gifted_{gen}$ / $gifted_{acc}$ 'Five women were gifted.'

Given this quirky behavior, and assuming that the case marking of the predicative complement of za is a result of agreement with the object of the verb, one should expect this predicative complement to similarly occur either in the accusative or in the genitive case when the object of the verb is such a numeral phrase. (7) below shows that this expectation is not fulfilled, again against the predictions of Bailyn and Citko's (1999) analysis.

(7) Uważam tych pięć kobiet za bardzo zdolne / I-consider these $_{gen}$ five $_{acc}$ women $_{gen}$ as very gifted $_{acc}$ / *zdolnych. gifted $_{gen}$

'I consider these five women as very gifted.'

The logic of the third argument is similar to that of the previous two arguments. If the case marking on the predicative complement of *za* stems from agreement with the accusative object, then, once the object is raised to subject position in a passive construction and is marked as nominative, the predicative complement should also be marked as nominative. Again, this prediction is false:

(8) Ona jest uważana za studentkę / *studentka / zdolną / she_{nom} is considered as student_{acc} / student_{nom} / gifted_{acc} / *zdolna. gifted_{nom}
'She is considered (as) a student / gifted.'

It should be noted that, in the transformational set of assumptions which Bailyn and Citko (1999) adopt, there is no covert (phonologically empty) accusative NP in (8) that the predicate could agree with; passive morphology is assumed to absorb the accusative case.

The fourth argument is an argument of uniformity: in Polish, there are constructions which differ from (3)–(4) in that the predicative complement of a preposition predicates of the subject of a verb, instead of the object:

(9) Janek uchodził za studenta / *student / zdolnego / $John_{nom}$ was-taken as $student_{acc}$ / $student_{nom}$ / $gifted_{acc}$ / *zdolny. $gifted_{nom}$

'John was taken as a student / gifted.'

Another similar verb is *wyglądać na* 'look like, appear to be'. These constructions should probably be analyzed on par with (3)–(4). If so, then, according to a natural extension of the analysis argued against here, the predicative complement of the preposition should agree with the nominative subject, contrary to (9).

The final argument comes from the observation that the verb *uważać* may occur with an infinitival VP instead of an accusative object, cf. (10).

(10) Kto uważa za właściwe nadal spierać się za who_{nom} considers as appropriate_{acc} still disagree_{inf} Refl with mną?

'Who considers it appropriate to still disagree with me?'

This argument is similar to that from passive constructions: Although there is no accusative NP that the predicative complement of *za* could agree with, that complement still occurs in the accusative case.

In summary, the analysis of za + predicative NP/AP which posits that the predicative NP/AP receives its case via agreement cannot be maintained.

2 An Alternative Analysis of *Uważać Za*

Constructions such as *uważać za*, *brać za*, *uchodzić za*, *wyglądać na*, etc., are interesting because they violate what seems to be an often assumed generalization, namely:²

(11) Case Assignment and Case Agreement (imprecise):

- case-bearing (i.e., nominal or adjectival) predicative phrases receive their case either via agreement with their antecedents or via the 'instrumental of predication' rule;
- case-bearing **non-predicative** phrases receive their case via general case assignment rules (e.g., 'accusative of prepositional complement', 'nominative of sentential subjects', 'genitive of negation', etc.), or idiosyncratically (so-called inherent or lexical case, e.g., *pomagać* 'help' + dative).

²Here I ignore case agreement between attributive APs and the noun they modify, as well as semantic case assignment.

Contrary to this generalization, the predicative argument of the preposition za in, for example, (3) receives its case via the 'non-predicative' rule which states that (structural) arguments of prepositions are accusative.³

So where is the dividing line between 'predicative' case marking (via agreement or instrumental) and 'non-predicative' case marking? The hypothesis which I would like to defend here is:

(12) Case Assignment and Case Agreement (alternative):

- case-bearing phrases whose **subject is raised to the immediately higher (i.e., selecting) head (if there is one)** receive the predicative (agreeing / instrumental) case;
- **other** case-bearing phrases receive case via general syntactic rules or idiosyncratically (but cf. fn. 2).

Since the categories of 'predicative phrases' and 'phrases whose subject is raised to the immediately higher head (if there is one)' are to a large extent co-extensive, (11) and (12) make similar predictions. However, as I will argue below, they differ for predicative complements of prepositions.

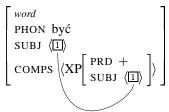
In the remainder of this section, I will assume Head-driven Phrase Structure Grammar (HPSG; Pollard and Sag 1994) as the framework in which to substantiate hypothesis (12).

2.1 Basic Cases

Copula. According to the standard HPSG assumptions, the copula can be schematically described as in (13).

³That structural arguments of prepositions are accusative was suggested, e.g., by Franks (1995).

(13) The predicative copula $by\dot{c}$ (schematic and simplified):



According to this description, the copula $by\acute{c}$ takes two arguments, the subject and a complement, the complement must be a predicative phrase (i.e., [PRD +]), and the (unrealized) subject of this predicative complement must be identical to (structure-shared with or token-identical with in the HPSG parlance) the subject of the copula. This identity is represented by the two occurrences of the variable ' \square ' and it corresponds to raising in transformational grammars.

For example, the constituent structure of (14) is schematically shown in Figure 1.⁴

(14) Janek jest w domu. John is at home

In Figure 1, the subject (here, *Janek*) of a predicative argument (here, *w domu*) of the copula is raised to (or rather, is structure-shared with) the subject of the copula, i.e., 'to the immediately higher head'. Thus, according to the hypothesis (12), the predicative argument is case marked either via agreement with the subject or with the instrumental case (cf. (15) for both possibilities, and also (6) above for the former possibility),⁵ if it bears case at all (in (14) it does not).

⁴The attributes SUBJ and COMPS indicate the *remaining* combinatory potential of a word or phrase so, for example, although they are both non-empty on the copula *jest*, COMPS is empty (saturated) on the VP *jest w domu*, and both are saturated (but still present) on the whole sentence *Janek jest w domu*.

⁵Of course, there are additional constraints on when exactly 'predicative' case marking can be realized by case agreement, and when by the instrumental of predication. I have nothing to say about such constraints here, but see Przepiórkowski (1999) for some considerations.

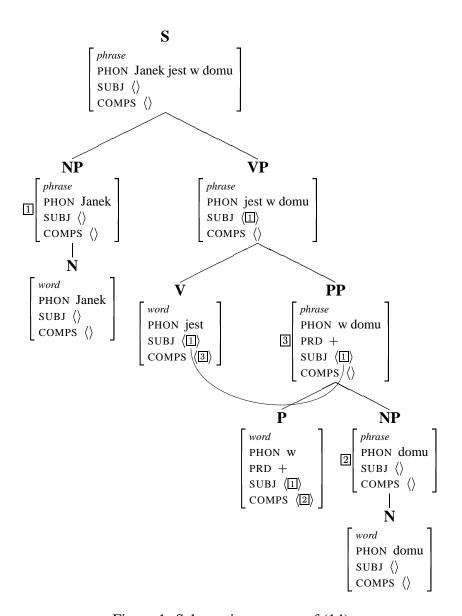


Figure 1: Schematic structure of (14)

- (15) a. Jesteś zwykły dureń! you are $mere_{nom}$ fool $_{nom}$
 - b. Jesteś zwykłym durniem! you are $mere_{ins}$ fool $_{ins}$

Other Verbs with Predicative Arguments. Cases such as, for example, (16), involving a different verb than the copula, are fully analogous to the copula cases; the instrumental case on the predicative NP corresponds to the instrumental of predication rule, while the accusative and genitive cases stem from case agreement with the numeral phrase. (17) is a schematic description of wydawać się, to be compared with (13) above.

(16) Wiele studentek wydawało się ?szczęśliwymi / many acc students gen seemed Refl happy ins / szczęśliwych / ?szczęśliwe.

happy gen / happy acc

(17)
$$\begin{bmatrix} word \\ PHON & wydawać się \\ SUBJ & \langle \boxed{1} \rangle \\ COMPS & \langle XP \begin{bmatrix} PRD & + \\ SUBJ & \langle \boxed{1} \rangle \end{bmatrix} \rangle \end{bmatrix}$$

Adjunct Predicates. Consider example (18).

(18) Lubiłem Janka trzeźwego / trzeźwym. liked_{1.sg.masc} John_{acc} sober_{acc} / sober_{ins} 'I liked John (when he was) sober.'

There is a body of work within HPSG arguing for treating (at least some) adjuncts as arguments, at least from the point of view of argument / constituent structure.⁶ Adopting this approach, *lubić*, as used

⁶See, for example, Miller (1992), van Noord and Bouma (1994), Przepiórkowski (1997, 1999) and Bouma et al. (1999), and references therein.

in (18), can be schematically represented as in (19).

(19)
$$\begin{bmatrix} word \\ PHON & lubić \\ SUBJ & \langle NP \rangle \\ COMPS & \langle \boxed{INP, XP} \begin{bmatrix} PRD & + \\ SUBJ & \langle \boxed{I} \rangle \end{bmatrix} \rangle \end{bmatrix}$$

Thus, here again the subject of the predicate is structure-shared with ('raised to') an argument position (here, object) of the immediately higher head.

Verb-less Predicative Constructions. The constructions above reflect the 'whose subject is raised to the immediately higher (i.e., selecting) head' part of the first clause of hypothesis (12). The environments exemplified below reflect the '(if there is one)' part.

- (20) Wałęsa prezydentem! (Zwariować można!) Wałęsa_{nom} president_{ins} go-crazy_{inf} may_{impers}
- (21) On głupiec. / Starość nie radość. / Ja biedak, a he_{nom} fool $_{nom}$ / old age_{nom} not joy_{nom} / I_{nom} pauper $_{nom}$ and ty pan. (Klemensiewicz 1937,p. 105) you_{nom} master $_{nom}$
- (22) Szofer, stary blondyn w siatkowej koszulce, chauffeur_{nom} old_{nom} blonde_{nom} in laced shirt (wysiadł sprawdzić motor.) (Pisarkowa 1965,p. 123) (got out to check the engine)

'The chauffeur, an old blonde in a laced shirt, got out to check the engine.'

I assume that constructions such as (20)–(22) above do not involve any empty copula, and that their constituent structure is as represented schematically in Figure 2. Since there is no higher (selecting) head, the predicate in (20)–(22) is subject to the first clause

of (12) and may be case-marked either via agreement with its subject (as in (21)-(22)) or via the instrumental of predication rule (as in (20)).

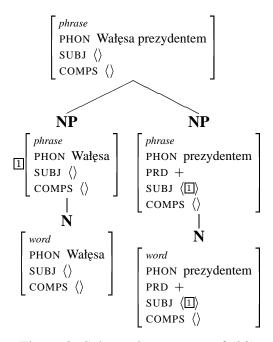


Figure 2: Schematic structure of (20)

No Raising. The most typical situation where the 'otherwise' clause of hypothesis (12) comes into play, i.e., where there is no raising to the immediately higher head, is when there is no raising at all. For example, in (23), all case-bearing elements are full NPs, which receive case via general case assignment rules (assign nominative to the subject, assign accusative to the object (of a non-negated verb), assign dative to the benefactive NP, etc.).

(23) Janek dał Marysi kwiaty. John_{nom} gave Mary_{dat} flowers_{acc}

The schematic HPSG structure of (23) is shown in Figure 3.

2.2 Long Raising in Uważać Za

I claim that predicative phrases in constructions such as uważać za also satisfy the second clause of hypothesis (12), but not because they do not involve raising at all, but rather because they involve long raising over the immediately higher head (i.e., across za) straight to the second higher head (i.e., to uważać).

In particular, I claim that (3) (repeated below) has the structure as in Figure 4 and *not* the structure in Figure 5.⁷

(3) Uważam go za studenta / *studentem. I-consider \lim_{acc} as student_{acc} / student_{ins}

The assumption that Figure 4 presents the right structure for (3) explains the origin of the accusative case on the predicative complement of the preposition: the subject of this predicative complement is not raised to the immediately higher (selecting) head za, but rather to a still higher head uważam. This, however, means that, although the complement of the preposition is a predicative phrase, the second clause of hypothesis (12) applies, and this complement is assigned case in a 'non-predicative' way, probably via the rule 'assign accusative to structural complements of prepositions'.

2.3 Arguments for Long Raising in Uważać Za

Are there independent empirical arguments for the structure in Figure 4 and against that in Figure 5? This question is roughly equivalent to the following question: Are there arguments for the claim that za as used in (3) is a 1-argument preposition, as in Figure 4, in contrast to predicative (e.g., locational or temporal) 2-argument prepositions? There are at least two such arguments.

 $^{^{7}}$ I assume that the *pro*-dropped subject does not appear on the SUBJ list, but instead appears on the ARG-ST list, not shown or discussed here.

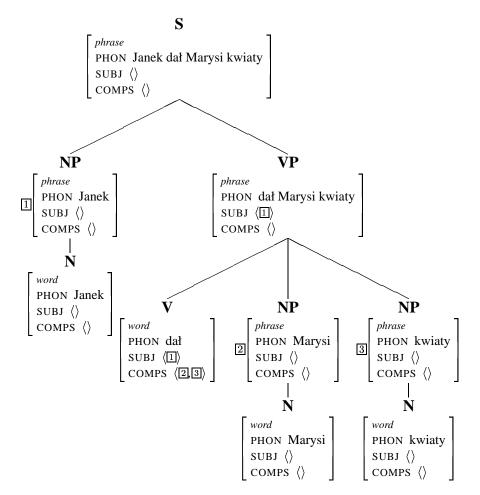


Figure 3: Schematic structure of (23)

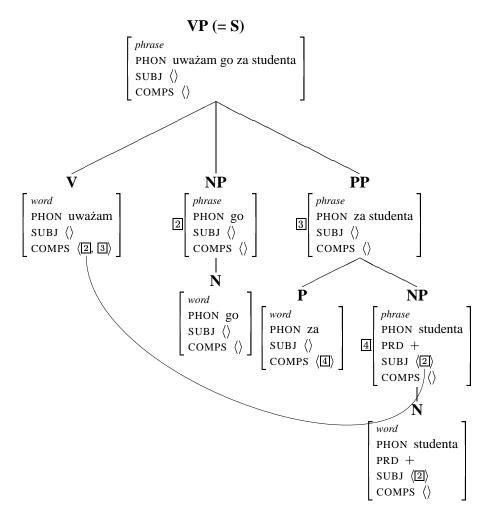


Figure 4: The structure of (3)

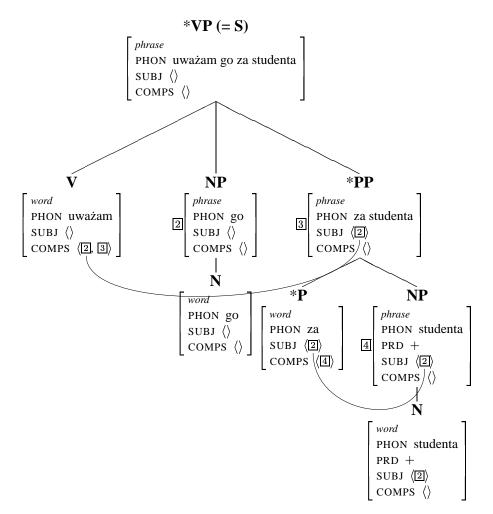


Figure 5: *Not* the structure of (3)

Subjects of Prepositions and Binding. There is a binding contrast between 2-argument prepositions, such as predicative prepositions (e.g., locational), cf. (24), and 1-argument 'case marking' prepositions, cf. (25):

- (24) Nie można przecież położyć książki, na sobie; samej / na Neg may but lay book_{fem} on Self Emph_{fem} / on niej; samej. her Emph
 'But it is impossible to lay a book on itself.'
- (25) Mówiłem jej_i o sobie $_{*i}$ samej / o niej $_i$ samej. $talk_{1.sg.masc}$ her about Self Emph / about her Emph 'I talked to her about herself.'

Although the judgments in (24) are not very clear, the contrast between binding across a predicative preposition (24) and across a 'case marking' preposition (25) is clear: since in Polish only subjects can be binders, binding by the object in (25) is impossible, while binding by the object (24) is apparently acceptable, but only because the object controls the subject of the predicative preposition, which is the actual binder.

Now, the preposition za in (3) clearly patterns with the 'case marking' prepositions, such as o in (25), and not with predicative prepositions such as na in (24).

(26) (Nie pomyliłem się,) uważałem go_i za (I didn't make a mistake,) considered_{1.sg.masc} him_{acc} for siebie_{*i} samego / za niego_i samego. himself Emph / for him Emph '(I didn't make a mistake,) I really considered him for himself.'

This is the first argument that za, as used in (3), is a 1-argument preposition.

PP[za] is not *Predicative*. All prepositions seem to be partitioned into two classes: the class of 2-argument predicative prepositions and the class of 1-argument 'case-marking' prepositions. If so, then classifying *za* as a 2-argument preposition would amount to classifying it as a predicative preposition. In that case, the whole phrase *za studenta* in (3) would be predicative.

But there are good arguments that the PP 'za + NP/AP' cannot be predicative; if it were predicative, it should be able to appear in other predicative environments, especially in those environments which do not posit particular constraints on the categorial makeup of the predicative phrase, such the complement of the copula, or exclamations. (27)–(28) show that this prediction is false:

- (27) Janek jest szczery / prezydentem / w domu... / *za John_{nom} is sincere_{nom} / president_{ins} / at home... / as szczerego. sincere

 'John is sincere / the president / at home... / *as sincere.'
- (28) Janek szczery! / Wałęsa prezydentem! / Krokodyl w klatce! John sincere_{nom} / Wałęsa president_{ins} / crocodile in cage / Obiad o dziesiątej! / *Janek za szczerego! (Też pomysł!) / dinner at ten / John as sincere also idea 'John (being) sincere! / Wałęsa (as) the president! / A crocodile in a cage! / Dinner at 10! / *John as sincere! (What an idea!)'

Although the copula in (27) could, in principle, impose an idiosyncratic constraint to the effect that its complement cannot be marked with za, such a constraint would violate the otherwise overwhelming generalization that the copula may combine with any predicative complement. Moreover, it is not clear that such a constraint could be imposed in (28), where there is no overt copula and no obvious reason to posit a phonologically empty one.

Thus, the PP 'za + NP/AP' should not be analyzed as predicative and, hence, za should not be analyzed as a 2-argument preposition.

3 Summary

In this paper, I have critically examined the pivotal claim of Bailyn and Citko's (1999) analysis, namely, that Polish constructions such as *uważać za* involve a predicative NP/AP which receives its case via agreement with its antecedent (the phrase being predicated of). I have given five empirical arguments against this claim and I have suggested that the predicative complement of the preposition is casemarked in a regular 'non-predicative' way.

More generally, I have re-examined the dichotomy between case marking of predicative phrases and case marking of non-predicative phrases and I have proposed that it is not precisely predicative APs/NPs that are 'predicatively' case marked (i.e., that agree in case with their antecedent or are marked with instrumental case), but rather those APs/NPs, whose subject is raised to (structure-shared with) the immediately higher head. I have shown that this hypothesis explains the whole range of facts, including the troublesome *uważać za* construction.

Although I have illustrated this hypothesis with HPSG structures, I have not attempted to provide a complete HPSG analysis of predicative case assignment here. Such an attempt is made in Przepiórkowski (1999), which presents in greater technical detail the analysis only sketched here.

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