Polish politeness markers as a window into person-feature valuation

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Abstract

This paper presents novel evidence for Polish nominals being phases. The core of the argument comes from the interaction between the size of a nominal domain and the corresponding person-feature valuation. While an \( n \)-size nominal structure only exhibits feature valuation within the narrow-syntax module, the DP-size nominal structure exhibits interface feature interactions. Since interface interactions can only arise during spell-out, the corresponding nominal domain, i.e., DP, must be a phase and D must be a phase head that triggers spell-out. The empirical focus of this paper is on a syntactic variation in the domain of politeness markers in Polish (\textit{pan.M/ pani.F}).

1 Polish nominal politeness markers

The politeness marker \textit{pan.M/ pani.F}, i.e., the Polish equivalent of the English ‘Mr/ Sir/ gentleman’ and ‘Ms/ Madam/ lady,’ has a surprising syntactic distribution.\textsuperscript{1} The inflectional properties of this item point to \textit{pan.M/ pani.F} being a nominal. The item inflects for number, gender and case as other Polish nominals. In this guise, \textit{M/ pani.F} can be used as a regular head noun, i.e., as the head of a nominal argument, as in (1). In this example, the \textit{pani.F} head noun is modified by a demonstrative and the extended nominal projection can function as an antecedent of a referential pronoun.

(1)  Nie znam tej pani, ale wiem, że ona, tu nie pracuje.  
not know this lady, but know that she, here not work.3.SG  
‘I do not know this lady but I know she does not work here.’

However, the item can function as a nominal modifier as well. As seen in (2), it can modify nouns of profession, (2), and proper names, (3). As the example in (2) demonstrates, the

\textsuperscript{1}This paper solely concentrates on syntactic properties of this item, leaving aside the corresponding politeness interpretation. For a recent in-depth account of cross-linguistic expressions of politeness see Portner et al. 2019.
nominal modification use requires an adjacency between * pani.F* and the head noun, and the modifier must agree in number and gender with the head noun, (3).

(2) *ta * ( * pani) nasza ( * pani) wspaniała pani dyrektorka
* this.F.SG Ms.F.SG our.F.SG Ms.F.SG wonderful.F.SG Ms.F.SG headmaster.F.SG
kchnela
sneezed
‘this wonderful headmaster of ours/ Ms. Maria sneezed.’

(3) Pani Maria kchnела
Ms. Maria sneezed
‘Ms. Maria sneezed.’

(4) *pan Maria/ *pan dyrektorka
pan.M.SG Maria/ pan.M.SG headmaster.F.SG

To complete the list, *M/ pani.F* can also be used as a vocative, (5).

(5) Szanowny Panie!
respected Mr.VOCAT.M.SG
‘(Respected) Sir! . . . ’

Strikingly, * pani.M/ pani.F* as a structural subject triggers variable agreement. As we see in (6), the predicate can either ‘formally’ agree with the nominal, i.e., in 3rd person, or it ‘pragmatically’ agrees with the hearer, i.e., in 2nd person.

(6) a. (Szanowny Panie), ma pan_i papierosa?
respected Mr.VOCAT.M.SG have.3.M.SG Mr.NOM.M.SG cigarette.ACC
b. (Szanowny Panie), masz pan_i papierosa?
respected Mr.VOCAT.M.SG have.2.M.SG Mr.NOM.M.SG cigarette.ACC
‘Hey Mister, do you have a cigarette?’

This complex behavior of * pani.M/ pani.F* raises the following questions: (i) Does the varied distribution correspond to one or to more than one lexical representation stored in the mental lexicon? (ii) What mechanism underlies the variable predicate agreement? (iii) Why is the agreement variation restricted to person valuation, instead of affecting other φ-features (number and gender) as well?

The rest of the paper presents an argument that despite this syntactic variability, the sociolinguistic extension we observe in the proper politeness uses of *M/ pani.F*, i.e., the modifier and vocative uses, is strictly based on a regular nominal structure (as in (1)). In particular, we argue that the pattern provides evidence that a Polish nominal extended projection can contain a phase head, i.e., a head that triggers spell-out and gets licensed by the syntax-semantics interface (CI), and that the observed agreement variation follows from interface interactions of person features, i.e., the only φ-feature associated with a phase head.
## How to value a person feature

The example in (1) demonstrates that `pan.M/pani.F` can be the head of a regular nominal projection. This projection functions as a nominal argument and can be referred to by an anaphoric pronoun. Furthermore, such a nominal phrase can be coordinated with proper names, as in (7), and can be an answer to an individual-denoting *wh*-word, as in (8).

(7) [Ten Pan] jak i Jan kichneli
    this gentleman as and Jan sneezed
    ‘This gentleman and Jan sneezed.’

(8) Q: Kto kichnął?
    who sneezed?
    ‘Who sneezed?’
A: Ten Pan.
    this gentleman
    ‘This gentleman.’

The extended noun phrase thus behaves like any other argument noun phrase in Polish. Yet, in the light of recent syntactic theorizing on whether Slavic argument noun phrases are DPs (and phases), and whether the morphological presence of a demonstrative corresponds to a D projection (see, e.g., Bošković 2005; Bošković 2009; Despić 2011), the `pan.M/pani.F` one can sensibly ask whether (a) the nominal phrase in (1) is a DP, and (b) if it is a DP, whether it is a phase.

In this paper we argue for the strong position, i.e., that these nominal phrases are indeed DPs. Our argumentation builds on the insight of Ritter (1995), Béjar and Rezac (2003), among others, that person features are merged as part of the D head. That is to say, we argue that any structure that contains a syntactically active person feature must be a DP. We take the argument a step further and argue that if such a person feature is part of the D head and if the D head is a phase head, then the person feature may become subject to interface licensing, specifically, it becomes the locus of CI (syntax-semantics interface) licensing; the logic being that only phase heads and their features can directly interact with the interfaces.

Our proposal remains agnostic as to whether Slavic, and specifically Polish, has overt determiners, and whether Polish has a Determiner head in the same sense as English or Italian. We do, however, make a claim that Polish nominal expressions are phases. I.e., in our proposal, D stands for a nominal phase head.\(^2\) The architecture we adopt preserves the Y model and exploits the inherent assumption that spell-out is a window for interface feature interaction with syntactic structure. Specifically, we hypothesize that phase heads are inherently endowed with the ability to license features that can interact with interface operations. The presented argument thus moves from morpho-syntactic properties as the primary toolkit for identifying phasehood to syntax-semantics properties as equally reliable.

\(^2\)This could even be a non fixed head, as in Bošković (2014).
diagnostics for phasehood and spell-out.

2.1 The derivational consequences of the person feature being on D

To appreciate the derivational consequences of the head being the locus of the person feature, it is useful to consider a simplified step-by-step derivation for the phrase *ten pan* ‘this gentleman’. First, the root $\sqrt{\text{PAN}}$ merges with $n$. For concreteness, we assume that $n$ is a bundle of unvalued number and valued gender (as in Kramer 2015), (9):

(9) $[n \, n_{[g: M, \text{num: } \square]} \, \sqrt{\text{PAN}}]$ 

In the next step, a Number head, with a valued number feature, merges with $n$ (Ritter, 1993; Borer, 2005):

(10) $[\text{Num} \, \text{Num}_{[\text{num}: s]} \, [n \, n_{[g: M, \text{num: } \square]} \, \sqrt{\text{PAN}}]]$

By agree, as matching and valuation (e.g., Chomsky 2000; Béjar and Rezac 2003), number on $n$ gets valued:

(11) $[\text{Num} \, \text{Num}_{[\text{num}: s]} \, [n \, n_{[g: M, \text{num: } s]} \, \sqrt{\text{PAN}}]]$

D gets merged as a bundle of unvalued $\phi$-features plus an unvalued person feature (Ritter, 1995; Béjar and Rezac, 2003):

(12) $[D \, D_{[\text{per: } \square, g: \square, \text{num: } \square]} \, [\text{Num} \, \text{Num}_{[\text{num: } s]} \, [n \, n_{[g: M, \text{num: } s]} \, \sqrt{\text{PAN}}]]]$ 

D triggers agree with Num and $n$, and, in turn, the unvalued number and gender feature on D gets matched and valued by the valued features on Num and $n$:

(13) $[D \, D_{[\text{per: } \square, \text{num: } s, g: M]} \, [\text{Num} \, \text{Num}_{[\text{num: } s]} \, [n \, n_{[g: M, \text{num: } s]} \, \sqrt{\text{PAN}}]]]$ 

The demonstrative gets merged in the specifier of D and its unvalued gender and number features get matched and valued by the D head’s gender and number features:

(14) $[D \, \text{Dem}_{[\text{num: } s, g: M]} \, [D \, D_{[\text{per: } \square, \text{num: } s, g: M]} \, [\text{Num} \, \text{Num}_{[\text{num: } s]} \, [n \, n_{[g: M, \text{num: } s]} \, \sqrt{\text{PAN}}]]]]$ 

The complete DP is spelled-out with a label (Chomsky 2013, 2015) that represents the DP in the next course of the derivation, e.g., as a goal of agree with T. The complete tree structure is given in (15).
Crucially, the person feature on D remains unvalued. The question is what the different modules, i.e., syntax, the syntax-morphology interface, and the syntax-semantics interface, will do with this unvalued narrow-syntax feature?

2.2 Unvalued person in syntax

We follow Béjar (2003) in that matched but unvalued syntactic features do not crash a derivation; instead, they are realized as a morphological default (cf. Preminger 2014 for a similar proposal). Consequently, a DP with an unvalued person feature can get spelled-out without any difficulties. The morphological default, i.e., 3rd person,\(^3\) does not manifest in the morphological realization of the DP itself but we see its reflexes in other morphological processes, such as in predicate agreement with the nominal. Irrespective of the ongoing debate about whether subject-predicate agreement involves narrow-syntax agree, or whether it is a post-syntactic process (see, e.g., Bobaljik 2008a), the result is the same. If agreement is based on agree in narrow syntax, the unvalued person feature of the predicate will match the unvalued person feature on the nominal. The morpho-syntactic interface will realize the unvalued person feature on the predicate as 3rd person. If agreement properties of the predicate are solely based on morphological mapping of narrow-syntax features, the predicate will also be morphologically realized as the morphological default, i.e., 3rd person. Thus, irrespective of which theoretical assumption we adopt, we expect the argument usage

\(^3\)See, e.g., Bobaljik (2008b) for an extensive argument why there is no valued 3rd person feature in morphology, and Kučerová (2019) for a discussion of person feature valuation in narrow syntax being distinct from feature valuation in morphology.
of *pan.M/ pani* to correlate with 3rd person agreement on an agreeing predicate. This is precisely what we’ve seen in (18-a), repeated below as (16).

(16) (Szanowny Panie), ma pan_{i} papierosa?

*Hey Mister, do you have a cigarette?*

The lack of person valuation does not cause any issues at the syntax-semantics interface either. We argue that in such a case, the syntax-semantics interface treats the unvalued person feature as [−participant]. Since the person feature has not been valued, the syntax-semantics interface cannot assign the interpretation directly. Instead, following the logic of Sauerland (2003) and Heim (2008), we argue that the [−participant] interpretation arises as implicated presupposition.4

We have just derived all the relevant properties of the argument use of *pan.M/ pani.F*, as in (1). However, the proposed derivation is far from innocuous. We have demonstrated that all relevant modules of the grammar can trivially deal with the person feature being unvalued. However, since the demonstrated behavior critically relies on default morphological realizations and default semantic derivation, we would have obtained exactly the same result if the extended nominal projection did not contain any person feature at all. Let us quickly review this possible counterargument.

Let’s say, for the sake of the argument, that the structure of interest is not a DP but it is an nP (or NumP), and the demonstrative is attached as an adjunct to nP/NumP (see, e.g., Despić 2011 for an argument in this direction). The corresponding structure of *ten pan ‘this gentleman’* would be as in (17).

(17) Num
    [num:S]

    Dem
    [g:M, num:S]

    Num
    [num:S]

    Num
    [num:S]

    n
    [g:M, num:S]

    n
    [g:M, num:S]

Such a nominal would get spelled-out without any difficulty (Polish nominal morphology does not have a designated morphological realization of the person feature). A predicate agreement could only be based on a failed agree, but since failed agree is a theoretically

4I.e., in the absence of a specified [+participant] value, the comprehender reasons that the argument DP must correspond to a [−participant].
possible option (Béjar, 2003; Preminger, 2014), the structure would still converge and the predicate would get realized as the corresponding morphological default, i.e., 3rd person. The argument extends to the CI interface, although one might have to employ some form of a type-shift mechanism to obtain an individual-like interpretation from the nP/NumP nominal projection.5,6

In short, while the facts considered so far are compatible with a person feature being part of the representation of ten pan ‘this gentleman,’ i.e., this type of nominal being a DP, the argument is not conclusive. If the person feature doesn’t do anything, we cannot tell whether it is unvalued or entirely missing.7 Next subsection turns to the more interesting case, that is, to the case when we start seeing effects of the syntax-semantics interface. We argue that these CI interface effects confirm that the structure must be a DP.

2.3 Valued person at the CI interface

As we discussed in section 1, the argument use of pan.M/pani.F comes with unexpected predicate agreement properties. While typically the person feature of an agreeing predicate is uniquely determined by the person feature of the corresponding nominal, the argument use of pan.M/pani.F allows for variable agreement, as in (6), repeated below as (18).

(18) a. (Szanowny Panie,), ma pan, papierosa?
   respected Mr.VOCAT.M.SG have.3.M.SG Mr.NOM.M.SG cigarette.ACC
   ‘Hey Mister, do you have a cigarette?’
   b. (Szanowny Panie,), masz pan, papierosa?
   respected Mr.VOCAT.M.SG have.2.M.SG Mr.NOM.M.SG cigarette.ACC

The question is what the structural underpinning of the 2nd person agreement is. We argue that the 2nd person agreement results from a semantic enrichment of the unvalued person feature at the label of the pan.M/pani.F nominal. Specifically, we argue that the enrichment arises when the nominal – a DP – is transferred to the syntax-semantics interface as part of spell-out of the DP phase.

We follow recent literature on person (e.g., Ritter and Wiltshko 2014; Pancheva and Zubizarreta 2018), arguing that person features require special CI-interface licensing where person on a phase head is anchored to an event participant ([+participant]/[±speaker]). That is, if there is a person feature in the phase label, such a person feature must be licensed by the syntax-semantics interface. Kučerová (2018) argues that the licensing procedure is part of mapping the narrow-syntax representation of person onto a semantic index. Technically, a semantic index is an ordered pair of person and a random numeral that allows

5See, e.g., Winter (2000).
6By extension, this reasoning implies that if Slavic 3rd person nominal phrases are smaller than DPs, at least 1st and 2nd person pronouns must still be DPs.
7See, e.g., the argumentation in Ormazabal and Romero (1998); Nevins (2007); Lochbihler and Oxford (2015) that exactly for this reason isolates effects of person in marked environments. Cf. Kučerová (2019) for an argument why narrow-syntax feature values cannot be induced solely from morphological realizations.
the semantic index to acquire an interpretation via an assignment function (and also allows
tracking of individuals as participants within a discourse, as in Heim 1982). Crucially,
such an index can carry presuppositional indices (for interpretable gender and number; see,
e.g., Sudo 2012). As Kučerová (2018) demonstrates, these presuppositional indices can be
used by the syntax-morphology interface: if the spelled-out structure lacks a valued fea-
ture, e.g., gender, and the semantic index includes a gender specification, morphology can
realize this additional presuppositional specification, modulo the Maximize Presupposition
principle of Heim 1991. The principle requires that if the language has a morphologi-
cal realization that faithfully reflects the presuppositional content of a lexical item, such a
morphological representation should be used instead of a morphological realization with-
out the presuppositional content.8 We follow the logic of Kučerová (2018) and argue that
the syntax-semantics interface can enrich the label of the DP phase label by the presuppo-
sitional content of a person feature as well, i.e., [±speaker].

We thus argue that when the syntax-semantics interface associates the unvalued person
feature in the label, i.e., the feature projected to the label in narrow syntax, with a semantic
index, this semantic index will be enriched by the presuppositional content of the person
feature in the given common ground, and will map the unvalued person feature on the
appropriate person value. In our case, the unvalued person feature, more precisely, the
corresponding semantic index, will be enriched as [+participant, −author].9 Thus, after the
DP structure, such as that in (15) gets licensed by the syntax-semantics interface as part of
transfer, the label in addition to the features projected from narrow syntax will contain the
corresponding semantic index as well. A simplified structure of CI-licensed ten pan ‘this
gentleman’ is given in (19). For concreteness, we set the random numeral in the index as
7. The two distinct person representations, i.e., the unvalued person feature from narrow
syntax, and the specified person value in the CI label, namely, within the corresponding
semantic index, are in bold.

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8The original formulation does not talk about morphological realizations, instead the principle regulates
a choice of lexical items. Since the present paper assumes a realizational morphology, i.e., morphological
input is late inserted and reflects syntactic structures (Halle and Marantz 1993 and subsequent work), the
formulation in the main body of the text is adjusted accordingly.

9Alternatively, we could treat 2nd person as [+participant, +hearer]. Both versions would do equally well
for our current purposes.
What happens when such a CI-labeled DP becomes the goal of agree with a predicate? Before we can answer this question, we have to clarify one important point regarding derivational timing. We strictly assume the so-called Y-model, i.e., it is critical that semantics cannot feed into narrow syntax. How then could agree in narrow syntax, or agreement as a post-syntactic process, be in any way sensitive to information introduced as part of phase transfer to the syntax-semantics interface? We argue that the CI information is effectively ‘smuggled’ in the derivation via an inherent asynchrony of spell-out to the syntax-morphology interface and transfer to the syntax-semantics interface (see Kučerová 2018 and Kučerová 2019 for a detailed discussion). Although CI transfer and the corresponding CI labeling affects the complete maximal projection of a phase head, here D, only the complement of the phase head is sent to the syntax-morphology interface. The so-called edge of the phase thus remains in the derivation of the next phase and gets incorporated into the narrow syntax derivation. However, since the edge of the phase has been labeled by the syntax-semantics interface, the semantic enrichment that yields the formation of the semantic index referring to [+participant, −author] is part of the label, and in turn is present in the derivation.

What does this mean for the predicate agreement? When the label of the DP becomes a goal for an agree relation with T, where T probes for a person feature, the unvalued person feature on the DP ten pan ‘this gentleman’ gets matched with the probing unvalued person feature on T. Since neither of the features is valued, the person feature in the narrow-syntax agree chain remains unvalued. The corresponding derivation is shown in the schematic representation in (20). The morphologically spelled-out complement of D is marked as α. For concreteness, we assume that the DP argument becomes the goal of agree in its base-
generated position (spec,vP). If the DP moves to spec,TP (for example, to satisfy the EPP),
the corresponding A-movement builds on the primary downward probing relation between
T and the DP in the specifier of vP. Since at this stage of the derivation, the complement
of v has been spelled out as well, we mark the morphologically spelled-out complement as
β.  

(20)

Thus narrow syntax agree per se cannot and does not yield a valued person feature. How-
ever, we argue that the state of affairs plays out differently when the relevant agree chain
gets realized by the syntax-morphology interface. We argue that morphology is presented
with an ambiguous input: there is an agree chain with the unvalued person feature, and
there is a semantically enriched semantic index as part of the DP label within the agree
chain. We argue that morphology can either target the narrow-syntax input, or it can use
the person information associated with the DP label. When morphology strictly uses the
narrow-syntax input, then the predicate agreement is realized as the morphological default,
i.e., 3rd person. When morphology takes the CI-informed DP label into account as well,
the predicate agreement is realized as 2nd person (to reflect the [+participant, −author]
presuppositional information associated with the semantic index).

We thus have derived the variable predicate agreement we observe in argument uses of
pan.M/pani.F. Crucially, such duality requires D to be a phase head, because for person to
be licensed by the syntax-semantics interface, that DP must be a phase.

10 Since both the complement of D and the complement of v have been spelled-out the derivation requires
some form of a parallel derivation, or some form of a re-admittance to the workspace procedure, as e.g. in
De Belder and Van Craenenbroeck (2015). We leave the technical aspects aside as they are not critical for the
question of person valuation we focus on in this paper.
2.4 Predictions

The current proposal crucially associates the semantic enrichment of the unvalued person feature with phase properties of the D head itself. In this respect our proposal differs from recent proposals that argue for a special \([\pm\text{speaker}]\) functional head at the left periphery of a clause (e.g., Sigurdsson 2004). The two lines of reasoning make different predictions for arguments other than the structural subject. If there is a designated functional head in the left periphery, then only the person features of the structural subject can be enriched by this head. If, however, the D head itself is the locus of this presuppositional enrichment, then any argument can in principle be interpreted as \([+\text{participant}]\). As the example in (21) demonstrates, only the prediction made by the present proposal is borne out. The direct object \textit{pan} clearly refers to the speaker.

(21) Szanowny Panie, chciałbym pana przedstawić.
    respected Mr.\textsc{VOCAT.M.SG} like.1.M.SG gentleman introduce.\textsc{ACC.2.M.SG}
    moje\textsc{m} friend.\textsc{DAT}
    ‘Sir, I would like to introduce you to a friend of mine.’

Our proposal further predicts that any lexical DP should have the same freedom in person valuation as \textit{pan.M/pani.F}. That is, any 3rd person DP should be able to be interpreted as \([+\text{participant}]\). We argue that this prediction is in fact correct. For example, any lexical DP, even in a language like English, can function as a vocative, i.e., be valued as \([+\text{participant}, -\text{speaker}]\) (for example, the proper name \textit{Sam} in \textit{Hey, Sam, how are you?}). However, these cases are admittedly rare. We hypothesize that this type of semantic enrichment is rather restricted because the incongruent valuation of the corresponding narrow-syntax feature and its CI-labeled counterpart is highly marked and, in most cases, is excluded by economy of derivation that prefers pronominal structures over full lexical noun phrases.

3 When a noun phrase is not a phase

Not every root-\textit{n} formation forms a DP. We argue that the \textit{pan.M/pani.F} modifiers used in politeness constructions in (2), repeated below as (22), are \textit{nP} constituents.

(22) ta (*pani) nasza (*pani) wspaniała pani dyrektor\textsc{ka}
    this.\textsc{F.SG} Ms.\textsc{F.SG} our.\textsc{F.SG} Ms.\textsc{F.SG} wonderful.\textsc{F.SG} Ms.\textsc{F.SG} headmaster.\textsc{F.SG}
    kichneta sneezed
    ‘this wonderful headmaster of ours/ Ms. Maria sneezed.’

Such \textit{nP}s lack a phase head that can be the locus of CI person features (only D hosts person), and behave as a modifier rather than an argument. Such modifier behavior manifests itself semantically by the lack of inherent referential features: \textit{pani} in (2) must refer to
the headmistress. \textit{nP} modifier behavior also has a morphological reflex where $\phi$-features on $n$ that heads the \textit{nP} modifier undergo concord with the $\phi$-features of the the head noun. Whereas structurally the modifier \textit{nP} is in \textit{Spec,nP} of the head noun (‘headmistress’ in (22)), positioning it uniquely adjacent to the head noun and, in essence, forming a syntactic compound. This claim is supported by the strict adjacency restriction imposed on the \textit{nP} modifier: it cannot be separated by any of the other nominal modifiers, as can be see in (22) as well.

References


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