CLAUSE STRUCTURE, CASE AND AGREEMENT IN POLISH EXISTENTIAL, POSSESSIVE AND LOCATIVE SENTENCES: A PHASE-BASED ACCOUNT*

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ABSTRACT

In this paper it will be argued that the difference between existential and locative sentences is primarily structurally encoded at the vP/VP level (at the first phase of a derivation). The crucial question is which argument of the verb BE (the Location or the nominal argument ('Theme')) is projected as the “external argument”, i.e., which argument is the subject of inner predication. In the case of existential sentences it is the Location argument which is the subject of inner predication, and in the case of locative sentences it is the nominal argument. The subject of inner predication becomes by default also the subject of outer predication, i.e., the topic of the sentence. Hence, in the case of locative sentences the nominal argument is the subject of outer predication, i.e., the topic of the sentence, and in the case of existential sentences it is the Location which becomes the topic. (Or, alternatively, the actual topic (the subject of outer predication) might be the situational/event variable, and the Location functions as a restriction on it.) However, the actual arrangement of constituents in the sentences under discussion, as in any other Polish sentence, is determined by the pragmatic/communicative principles. Given this, it is reasonable to think that the NOM/GEN case alternation in negated existential/locative sentences is primarily a matter of syntax, and not one of information structure or scope of negation. The analysis will be modeled in accordance with the phasal model of Chomsky (2000 et seq.).

KEYWORDS: phase syntax; existential sentences; possessive sentences; locative sentences; Polish; phases; case; agreement; feature inheritance

1 The issue*

Cross-linguistically, there is evidence for a close affinity between locative, existential and possessive sentences. In many languages the only difference between locative and existential sentences seems to be a different arrangement of the locative and the nominal phrases: while in locative sentences the nominal phrase precedes the locative phrase, in existential sentences the opposite is the case, i.e., it is the locative PP that precedes the NP;¹ cf. (1a, b). In addition, in

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¹ Throughout this paper I will use the general term ‘nominal phrase’ (NP) to refer to any nominal phrase to avoid a discussion about the NP- vs. DP-distinction, which is especially problematic in languages such as Polish which do not have the category article. The abbreviations used in the glosses follow the glossing conventions of the Leipzig Glossing Rules.
many languages also possessive sentences closely resemble existential/locative sentences in that the possessor is realized by means of a prepositional (locative) phrase; cf. (1c).2

(1) Russian (Freeze 1992: 553-4)
   a. **Kniga** byla na stole.  **locative**
      book\textsubscript{NOM} was on table
      ‘The book is on the table.’
   b. **Na** stole byla *kniga*.  **existential**
      on table was book\textsubscript{NOM}
      ‘There was a book on the table.’
   c. **U** menja byla *kniga*.  **possessive**
      at me was book\textsubscript{NOM}
      ‘I had a book.’

Given this, it is not astonishing that it is often assumed (see, among others, Hoekstra and Mulder 1990; Freeze 1992; den Dikken 1997, 2006; Moro 1997; cf. also Witkoš 1998, 2000; Harves 2002; Partee and Borschev 2007) that existential, locative and possessive constructions are all derived from the same underlying structure in (2a). The different types of constructions arise as the result of moving either the NP\textsubscript{THEME} (locative sentences) (cf. (2b)) or the PP\textsubscript{LOC} (existential/possessive sentences) (cf. (2c)) into a sentence-initial position (mostly understood as [Spec,IP]):

(2) a. **BE** [\textsc{sc} NP\textsubscript{THEME} PP\textsubscript{LOCATION}]  **locative**
   b. NP\textsubscript{THEME} **BE** [ t\textsubscript{tp} PP\textsubscript{LOCATION}]  **locative**
   c. PP\textsubscript{LOCATION} **BE** [NP\textsubscript{THEME} t\textsubscript{pp} ]  **existential/possessive**

However, in many languages possessive sentences look different: they have a nominal possessor instead of a prepositional one, and instead of the verb BE the verb HAVE is used:

(3) Polish
   a. **Książka** była na stole.  **locative**
      book\textsubscript{NOM} was on table
      ‘The book is on the table.’
   b. **Na** stole była *książka*.  **existential**
      on table was book\textsubscript{NOM}
      ‘There was a book on the table.’
   c. **Jan** miał *książkę*.  **possessive**
      John\textsubscript{NOM} had book\textsubscript{ACC}
      ‘John had a book.’

In order to account for the difference between Polish-type and Russian-type possessive constructions (HAVE vs. BE, nominal vs. prepositional possessor; cf. (3c) vs. (1c)), it is usually assumed that BE and HAVE are not lexical verbs, but rather spell-outs of (various) functional

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2 As Myler (2014: 80) points out, “the credit for first thoroughly demonstrating the typological robustness of [the parallelisms between locative sentences, existential sentences and possessive sentences] falls to Clark (1970) and her (1978) paper that superseded it”.

heads in syntax (see den Dikken 2006 for an extensive discussion). More precisely, HAVE is a result of syntactic incorporation of a(n abstract) prepositional locative head into BE, giving rise to an NP possessor as in English; cf. (4).³

(4) “NP” P+BE [NP<THEME> tPP] possessive

If the above analysis is true, we could stop here and assume the same analysis for the Polish examples in (3) as well. The goal of the paper is to show that the matters are not as simple as they seem to be. In Section 2, it is shown that such a uniform analysis cannot account for the interpretational and structural differences between the respective sentences in Polish. It is argued that an account assuming different underlying structures for the respective sentences does a better job. First of all, it can better account for the structural differences (case and agreement facts) and the word order facts. Secondly, it can better explain the interpretational differences. The analysis proposed in this paper is based on a phase-approach to syntax, the feature-inheritance idea and the low nominative hypothesis. Before this new analysis is presented in Sections 4 and 5, in Section 3 it is shown that a phase-extension analysis based on a uniform underlying structure (den Dikken 2007a, b) cannot account for the Polish facts. Finally, Section 6 concludes the paper.

2 Previous accounts
2.1 What is wrong with a uniform analysis

As was pointed out in Section 1, a standard analysis of existential, locative and possessive sentences assumes that all these sentences are derived from the same underlying structure in (2). This simple “uniform” analysis might seem appealing and attractive at first glance, but on a closer inspection it turns out to be “too simple”. For instance, it is not clear what accounts for different interpretations if locatives and existentials/possessives have the same underlying argument structure. What decides which element (NP<THEME> or PP<LOCATION>) has to move? Freeze (1992) solves this problem by assuming that the question of which argument (the THEME or the LOCATION) moves to [Spec,IP] is governed by the [+/-definite] feature of the THEME; cf. (5).⁴

(5)a. BE [SC NP<THEME> PP<LOCATION>]
   a.’ locative sentence (NP > BE > PP)
   Lekarz był we wsi. doctorNOM.SG.M was3.SG.M in village
   ‘The doctor was in the village.’
   a.’’ Lekarz nie był we wsi. doctorNOM.SG.MNEG was3.SG.M in village
   ‘The doctor was not in the village.’

   b. BE [SC NP<THEME> PP<LOCATION>]
   b. existential sentence (PP > BE > NP)
   We wsi był lekarz.
in village was3.SG.M doctorNOM.SG.M
   ‘There was a doctor in the village.’
   b.’’ We wsi nie było lekarza.
in village NEG was3.SG.N doctorGEN.SG.M
   ‘There was no doctor in the village.’

³ Actually, it is an old observation that BE and HAVE are related in some way (see Benveniste 1966).
⁴ For space reasons, I will mainly concentrate on existential and locative sentences.
Even if it works in (5), this account is too simple. For example, in negated existential sentences the THEME argument can very well be definite/topical and move to some sentence initial position; cf. (6b/b’).

(6)a. We wsi nie bylo lekarza. existential sentence (PP > BE > NP) in village NEG was3.SG.N doctorGEN.SG.M ‘There was no doctor in the village.’

b. Lekarza nie bylo w wsi. existential sentence (NP > BE > PP) doctorGEN.SG.M NEG was3.SG.N in village ≈ ‘The doctor was not in the village.’

b.’ (Context: John had a small accident and went to see his doctor (= Peter). Unfortunately) Lekarza/Piotra nie bylo dzisiaj w wsi. doctorGEN.SG.M/PeterGEN.SG.M NEG was3.SG.N today in village ‘The doctor was not in the village today.’

An attentive reader has presumably noticed that there is an important difference between affirmative and negated existential sentences in Polish: while in the former the NP THEME is marked for NOMative and agrees with the finite verb (cf. (5b’)), in the latter the NP THEME appears in GENitive and there is no agreement; the finite verb appears instead in its default – 3rd person neuter – form (cf. (5b’’)). But, even more importantly, there is also a difference between negated existential sentences, on the one hand, and negated locative sentences, on the other hand. Only in the former is the nominal phrase marked for GEN (and accordingly, we observe a default agreement on the verb), while in the latter the nominal phrase stays marked for NOM and agrees with the finite verb, as shown in (5a’’).

Now, if locative and existential sentences have the same underlying structure, why is there a difference in case marking of the NP THEME in negated variants of the respective sentences (as in (5))? Not only that this analysis does not provide any insightful explanation of this fact, even worse, it makes wrong predictions. Given that negation can obviously influence the case marking of the Theme argument and given furthermore that “properties of the probe/selector α must be exhausted before new elements of the lexical subarray are accessed to derive further operations” (Chomsky 2000:132), the question arises as to how the NP THEME is ever able to escape the GEN marking (by negation); cf. (7). Actually, given (7) we should expect that both in negated locative and negated existential sentences the NP is marked for GEN, contrary to fact.

(7)a. BE [SC NP THEME PP LOCATION]

b. NEG+BE [SC NP THEME PP LOCATION] GENOK/expected / NOMunexpected

To conclude, a simple uniform analysis of existential and locative sentences sketched above leaves us without any clear answer to the question about the case marking of nominal arguments and about possible word orders in such sentences. Is there another way of explaining the problematic facts? Could one attribute the differences in the case marking in the respective

5 Clark (1978) can in some sense be viewed as a precursor of this idea. She formulates the following discourse rules: [+definite] nominals precede [-definite] nominals, and [+animate] nominals precede [-animate] nominals. However, as Myler (2014: 148) points out, these discourse rules reflect tendencies at best, that is, they are not absolute. The latter would, however, be required for Freeze’s analysis to work. Without an absolute complementarity it is not clear how the grammar can choose one of the movement options over the other (see Myler 2014 for more discussion of this point).
6 The case marking in possessive sentences will be discussed in Section 5.1.
sentences, for instance, to the differences in the scope of negation? The next section will show that this is not an option either.

2.2 What is wrong with an analysis in terms of negation scope / information structure

According to Babby (1980), there are two factors that are relevant for the GEN marking of the “subject” in negated existential sentences, namely: (i) scope of negation and (ii) information structure (understood here in terms of Theme-Rheme structure7). He distinguishes between existential sentences (ES), on the one hand, and declarative sentences (DS) (to which our locative sentences would belong), on the other hand. While in the former negation/affirmation has scope over the entire sentence, in the latter the scope of negation/affirmation is restricted to the verbal predicate, i.e., the subject is not included in the scope of negation/affirmation, but rather the entity denoted by the subject NP is presupposed to exist independently; cf. (8). On the proposed analysis negated existential sentences with a GEN NP would correspond to thetic sentences and negated declarative sentences with a NOM subject NP to categorical sentences.

(8) | AFFIRMATIVE | NEGATED |
---|---|---|
EXISTENTIAL | a. [Scope of A VP NP] ⇒ NEG | b. [neg VP NPGEN] |
DECLARATIVE | c. NP [Scope of A VP] ⇒ NEG | d. NP NOM [neg VP] |

Next, Babby (1980) proposes identifying the scope of negation/affirmation with the rheme part of a sentence. Accordingly, affirmative and negated existential sentences are analyzed as “rheme-only” sentences (possibly with an optional locative theme). The GEN is assigned to the “subject” NP in negated existential sentences (NES) in accordance with the following rule:

(9) Rule of Genitive marking in NES: [Rheme V NP] ⇒ [neg V NPGEN]

Conditions: (a) NP is indefinite, (b) V is semantically empty

However, this analysis of the GEN marking of the nominal argument in NES is problematic for reasons we have already discussed. First, we saw in (6b) that the GEN marking is not an exclusive property of indefinite NPs. Second, as was illustrated in (6), a GEN marking is possible even if a given NP is not part of the rheme, that is, it does not represent ‘contextually non-bound (“new”) information’ (see footnote 7), contrary to what the condition in (9) would let us expect.

Moreover, the assumption that the NOM/GEN case alternation in negated locative/existential sentences can be reduced to the scope of negation is problematic as well. In Babby’s analysis an NP has to occur in the scope of negation (which in turn is identified with the rheme part of a sentence) in order to be marked for GEN. At first glance it might appear that the scope of negation is indeed a decisive factor determining the case marking of the nominal argument in negated existential/locative sentences. Thus, the difference between (10a) and (10b) would be

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7 The Theme-Rheme structure here basically corresponds to the Topic-Focus structure (in the Prague School tradition; see Sgall 2003). As Hajičová (2003: 169) explains, “[t]he articulation of the sentence into T and F (the Topic-Focus Articulation, TFA) is based on what is presyntactically understood as the “given–new” strategy. The semantic basis of TFA can be seen in the relation of aboutness: a prototypical declarative sentence asserts that its Focus holds about its Topic. (…) The Topic primarily consists of ‘contextually bound’ items (referring to “given information” in the prototypical case), and the Focus contains ‘contextually non-bound (“new”) elements (…).” For a comprehensible explanation of basic information structure notions, see Krifka (2007).

8 See Partee and Borschev (2004, 2007) and the references cited there for a discussion about how verbs can be semantically “bleached” to just an “existential meaning”.
that in the former case the NP is outside the scope of negation while in the latter case it is still in the scope of negation.

(10) a. Lekarz nie był we wsi.
    doctor nom sg.m NEG was3 sg.m in village
    ‘The doctor was not in the village.’

    b. Lekarza nie było we wsi.
    doctor gen sg.m NEG was3 sg.n in village
    ‘There was no doctor in the village.’
    ‘The doctor was not in the village.’

This assumption is, however, problematic for at least two reasons (see Borschev and Partee 2002, Partee and Borschev 2002, and Partee 2000 for similar observations and extensive discussion of Russian facts).

Firstly, notice that Polish has no articles, hence the definite/indefinite interpretation of nominal phrases must be rendered in some other way, mainly by word order or by some special (in)definiteness markers such as demonstrative or indefinite pronouns. Now, on the assumption that a GEN marked NP has to occur within the scope of negation (in the rhematic part of a sentence), we would actually expect that a bare nominal phrase like the NP ‘doctor’ in the example above (i.e., an NP that is not accompanied by any overt marker of definiteness like a demonstrative pronoun) should be interpreted as indefinite. Thus, we would expect that the example (10b) above has (mainly) the interpretation: ‘There was no doctor in the village.’ This interpretation is in fact quite difficult to get here. The most obvious reading (under normal intonation\(^9\)), which is in accordance with the basic rule about the interplay of word order and the definite versus indefinite interpretation of noun phrases in Polish,\(^10\) is the reading under which the NP ‘doctor’ is interpreted as definite, and thus belonging to the thematic part of the sentence.\(^11\) But note that – if the above observation is correct – this would actually mean that the GEN NP can occur outside the syntactic scope of negation. In other words, as example (10b) shows, an NP can occur outside the rheme part of the sentence (i.e., outside the scope of negation on Babby’s account) and still be GEN marked.

Secondly, notice that both in negated existential sentences and in negated locative sentences the Theme arguments, independently of whether they are marked as GEN or NOM, must be in the scope of negation if they are themselves negative pronouns, so-called ‘n-words’; cf. (11). This is so because negative pronouns behave like negative polarity items in that in order to be properly interpreted, i.e., to be grammatical, they must be licensed by (be in the scope of) an appropriate licenser (here: negation; see Błaszczak 2001 as well as the references cited there for a detailed discussion). Note that negation does not differentiate here between locative and existential sentences, as shown in (11’), which is modelled on Babby’s (1980) analysis (see Section 4 for a different account). This emphasizes once again that the case marking of the nominal argument in the examples at hand cannot be a matter of being in the scope of negation.

    nobody nom sg.m there NEG was3 sg.m
    ‘Nobody was there.’

\(^9\) Under normal intonation the sentence stress falls on the final element, that is, the default placement of the focus exponent in Slavic is in the right periphery of a sentence (see Junghanns 2002, 2003).


\(^11\) See Section 5.3 and 5.4 for further discussion of the examples in (10).
b. *(Nikogo) tam **nie** było (nikogo).*  

existential

(nobody_{GEN,SG,M}) there

NEG was_{3,SG,N} (nobody_{GEN,SG,M})

‘Nobody was there.’ / ‘There was nobody there.’

(11’) a.  

\[ \text{NEG} \quad \text{[nikt_{NOM} VP]} \]  

locative

\[ \text{‘licensing’} \]

b.  

\[ \text{NEG} \quad \text{[VP nikogo_{GEN}]} \]  

existential

\[ \text{‘licensing’} \]

To sum up the discussion so far, it seems that the scope of negation alone cannot explain the difference in the case marking of the nominal argument in negated existential/locative sentences. Likewise, information structure alone, though relevant, is not the decisive factor either. If neither scope of negation nor information structure alone, what else could explain the problematic facts at hand? In the following section we will look at a more promising approach in terms of “perspective structure”. However, we will also see that even this promising approach cannot satisfactorily solve the case marking problem.

2.3 Why an analysis in terms of different perspective structure is more promising

Given the existence of examples like (6b), Borschev and Partee (2002) argue that the decisive contrast between negated locative (NDS) and negated existential sentences (NES) is to be defined not in terms of the Theme-Rheme structure (and the scope of negation), but rather in terms of “Perspective Structure”. They assume that existential and locative sentences have a common structure, as defined in (12).

(12) The common structure of “existence/location situations” and their descriptions:

\[
\text{BE (THING, LOC)}
\]

Now, the relevant assumption is that an “existence/location situation” may be structured either from the perspective of the THING or from the perspective of the LOCation. The participant chosen as the point of departure for structuring the situation is called by Borschev and Partee (2002 et seq.) the *Perspectival Center*; see the Russian examples in (13) and (14). If THING is chosen as the *Perspectival Center*, the emerging structure of the interpretation is that of a locative (“declarative”) sentence. In contrast, if LOC is chosen as the *Perspectival Center* the resulting structure of the interpretation is that of an existential sentence (see Borschev and Partee 2002 for a detailed discussion and more examples). Importantly, an NES denies the existence of the thing(s) described by the subject NP in the *Perspectival Center* LOCation.\(^{12}\)

(13) Perspective Structure: BE *(THING, LOC)* [THING is the *Perspectival Center*]

a. Ivan nom byl na lekcii.

\[
\text{Ivan}_\text{NOM} \quad \text{was}_{3,\text{SG,M}} \quad \text{at} \quad \text{lecture}
\]

‘Ivan was at the lecture.’

\(^{12}\) Another important assumption is that “any Perspectival Center must be normally presupposed to exist”. Given this assumption, we expect that NDS (our negated locative sentences) and NES (our negated existential sentences) differ not only in terms of case marking of their “subjects”, but also in terms of presupposition. More precisely, while in an NDS the existence of the THING (i.e., the NOM subject) is always presupposed, in an NES it is the existence of the LOC that is presupposed; see Partee and Borschev (2002: 192) for discussion. See Section 5.3.1 below for further discussion.
b. Ivan ne byl na lekcii. NDS
   IvanNOM NEG was3.SG.M at lecture
   ‘Ivan was not at the lecture.’

(14) Perspective Structure: BE (THING, LOC) [LOC is the Perspectival Center]
a. Na lekcii byl Ivan. ES
   at lecture was3.SG.M IvanNOM
   Lit.: ‘At the lecture there was Ivan.’ / ‘Ivan was at the lecture.’
b. Na lekcii ne bylo Ivana. NES
   at lecture NEG was3.SG.N IvanGEN
   Lit.: ‘At the lecture there wasn’t Ivan.’ / ‘Ivan wasn’t at the lecture.’

An analysis in terms of Perspective Structure as such does not explain why the nominal argument in negated existential sentences is marked for GEN (i.e., what the factors are that allow for a GEN marking of what would appear to be a “subject” NP), but it seems to be more promising than the other analyses discussed in the previous sections in that it at least makes the right predictions, namely it restricts the GEN marking of a nominal argument to one particular type of sentence, i.e., to negated existential sentences in which the LOCATION is chosen as the Perspectival Center, meaning that it is the LOC and not the THING whose existence is presupposed (see footnote 12). Since the Perspective Structure is a different kind of distinction than a Theme-Rheme structure (see below), it is no longer necessary for an NP to be the rHEME (or part of the rHEME) of the sentence in order to be marked for GEN. Thus, an NP which is the rHEME (or part of the rHEME) in a given sentence can still be marked for GEN as long as such an NP is the THING in a negated existential sentence (i.e., in a sentence where the LOC is chosen as the Perspectival Center).

In the following a phase-syntactic analysis will be developed whose aim is to account for the differences between Polish existential/possessive and locative sentences, especially their case, agreement, word order (information structure) properties. Basically, the claim is that an analysis based on the Perspective Structure, as proposed by Partee and Borschev in their numerous works, is in principle correct. However, the claim needs to be stronger: the difference in the interpretation of locative (Babby’s ‘declarative’) and existential (Babby’s ‘existential’) sentences, which Partee and Borschev attribute to the question of what (THING or LOC) is chosen as the Perspectival Center, is in fact just a reflex of fundamentally different structures of the respective sentences. That is, the difference between locative and existential sentences is above all structurally encoded and all other properties of the respective sentences follow from this. For space reasons, a detailed analysis cannot be provided here, i.e., only the crucial elements of this analysis will be highlighted (for details, see Błaszczyk 2007, 2008a, b, 2009).

Before introducing our own phase-theoretic account of existential/possessive and locative sentences in Polish, let us first have a look at another phase-syntactic analysis put forward by den Dikken in his recent papers (see den Dikken 2006, 2007a, b).

3 A “predicate inversion + phase extension” analysis (den Dikken 2007a, b)
3.1 The basic idea

Den Dikken assumes that all predication relationships are syntactically represented as in (15a). The relationship between a predicate and its subject in the base representation of predication structures is mediated by a RELATOR, an abstract functional head. In Predicate Inversion constructions there is a need for LINKERS. They connect the raised predicate to the small clause harbouring its subject; cf. (15b). Importantly, both RELATORS and LINKERS are meaningless elements (in the sense of having no semantic load).
Applying this analysis to ‘prepositional predicates’ in locative and existential sentences, we get the following structures:

(16) a. Gazeta jest na stole.
    ‘The newspaper is on the table.’
    [SUBJECT newspaper] is [PREDICATE on the table]. ‘canonical’ (locative sentence)

b. Na stole jest gazeta.
    ‘There is a newspaper on the table.’
    [PREDICATE on the table] is [SUBJECT newspaper]. ‘inverse’ (existential sentence)

The analysis which den Dikken proposed in his (2007a, b) articles is based on the following premises, summarized below in (17).

(17) a. Phase Impenetrability
    Syntactic relationships (Agree) and processes (Move) are constrained by the Phase Impenetrability Condition (PIC) of Chomsky (2000 et passim): in phase $\alpha$ with head $H$, the domain is not accessible to operations outside $\alpha$, only $H$ and its edge are accessible to such operations.

b. Inherent Phase
    An inherent phase is a predication (subject-predicate structure).

c. Phase Extension
    Syntactic movement of the head $H$ of a phase $\alpha$ up to the head $X$ of the node $\beta$ dominating $\alpha$ extends the phase up from $\alpha$ to $\beta$: $\alpha$ loses its phasehood in the process, and any constituent on the edge of $\alpha$ ends up in the domain of the derived phase $\beta$ as a result of Phase Extension.\(^\dagger\)

With this theoretical background in mind, let us look at the structures for canonical and inverse predications in (18) proposed by den Dikken:

(18) a. [RP SUBJECT [RELATOR [PREDICATE]]] ‘canonical’

b. [FP PREDICATE, [F [RP SUBJECT [RELATOR $t_i$]]]] ‘inverse’

The structure in (18b) raises two questions: (i) How can $F$ establish an Agree relationship with the predicate from its vantage point outside the RP, which (in light of (17a)) is a phase?, and (ii) How can the predicate Move to a higher A-specifier position across the A-specifier position in which its subject is base-generated? Den Dikken answers these questions as follows: (i) in order for $F$ to establish an Agree relationship with the predicate, there must be no phase boundary in between $F$ and the predicate, and (ii) for raising of the predicate across its subject to be allowed, the two phrases must be equidistant. How can this be established? Den Dikken

\(^\dagger\) Note that den Dikken’s system reintroduces the dynamicity of barrierhood that Barriers was known for: the idea that constituents can inherit barrierhood (or phasehood) from categories they dominate (see den Dikken 2007a: 2).
proposes two options, given in (19), as to how the predicate can be made visible to F and equidistance can be ensured.

(19) a. Option 1: The head of the small-clause predicate is raised up to the RELATOR: 
    \[ \text{[RP DP [RELATOR+X]} [XP t_1 \ldots]] \]

b. Option 2: The RELATOR raises to a functional head introduced outside the small clause: 
    \[ \text{[FP Spec [F+RELATOR]} [\text{RP DP [t_i [XP PREDICATE]]}]] \]

Regarding Option 1, it is assumed that movement of the head H of a phrase HP embedded inside a phase \( \Phi \) to the head of the phase makes both H and its maximal projection visible to probes outside the phase. However, notice that given the definition of ‘closeness’ in Chomsky (1995 and later works), given in (20), closeness is satisfied even without head movement (cf. also Surányi 2007, den Dikken 2007b).

(20) In the configuration \[ \text{[KP ZP [ K \ldots [YP \ldots XP]]] }, \text{with K seeking to attract something to its specifier (ZP), YP is closer to K than XP unless YP is in the same minimal domain as (a) ZP or (b) XP.} \]

As far as Option 2 is concerned, it is assumed that movement of the RELATOR up to F extends the RP phase to FP; cf. (21). The predicate is no longer separated from the attracting head F by a phase boundary, the inherent small-clause phase RP is extended up to FP. Both the probe (F) and the goal (the predicate) are within this extended phase. As a result of phase-extending head movement of the RELATOR to F, it is also ensured that the predicate’s landing site and the base position of the subject are in the same minimal domain, hence equidistant: \( \beta \) (the base position of the subject, SpecRP) in (21c) is not closer to the predicate’s base position than \( \alpha \) (the predicate’s landing site, SpecFP) because \( \beta \) is in the same minimal domain as \( \alpha \) (but see the comment above).

(21) a. \[ \text{[RP SUBJECT [RELATOR [PREDICATE]]] } \Phi \]

b. \[ \text{[FP F+R}_i \text{[RP SUBJECT [t_i [PREDICATE]]]}} \Phi \]

c. \[ \text{[FP PREDICATE}_j \text{[F+R}_i \text{[RP SUBJECT [t_i t_j]]]}} \Phi \]

Another important consequence of the phase-extending movement is that the subject of RP, while originally on the edge of the RP phase (cf. (21a)), ends up being embedded within the domain of the extended phase (FP) as a result of movement of the RELATOR up to F (cf. (21c)). Thus, in (21) the subject will be invisible to any outside probes, and hence unable to establish any Agree relationships with outside probes.

### 3.2 Conceptual problems

At first glance, the analysis seems plausible. It gives rise to several questions, though, which are not clearly answered in den Dikken’s account. For instance, what is this enigmatic RELATOR? What properties make it be a phase head? Similarly, it is not clear what the F-head is. Den Dikken’s suggestion is that it is “a radically empty and meaningless place-holder whose sole purpose is to provide a landing-site for phase-extending movement of the RELATOR”
(den Dikken 2007b: 154). Does it mean a return to radically empty, meaningless categories, like Agr-heads (contra Chomsky 1995 et sub.)?\textsuperscript{14} Besides, notice that the presence of such categories would seem to involve a Look-ahead.

Another issue is the question of the motivation behind the Predicate Inversion. Why does the predicate move instead of the subject? Given that this movement is an A-movement, it should be a phi-features and case-related movement. But given den Dikken’s analysis, this would be a “revitalization”, hence back to a “Move”-perspective (instead of the “Attract”-perspective), Greed instead of “Suicidal Greed” and consequently a case of Look-ahead.

In a similar vein, one wonders why Phase Impenetrability should hold in den Dikken’s system or how Spell-Out works in this system and how Spell-Out can be delayed. It is also completely unclear why head-movement should extend phasal domains. Why should inherent phases lose their phasal character under head-movement?\textsuperscript{15} Den Dikken (2007b: 154) suggests that “movement of the RELATOR up to F is typically (though perhaps not systematically) a case of substitution rather than adjunction” […] “with R-to-F movement being substitution, and with FP = RP upon substitution of the RELATOR for F, Phase Extension is an automatic result of movement of the RELATOR; the boundaries of the original RP phase are simply stretched up to FP, with the original FP (which is reduced to a segment of the new, bigger RP) automatically losing its status as a phase in the process.” See (22).

\begin{enumerate}
\item a. [FP Spec [F [RP SUBJECT [RELATOR [PREDICATE ]]]]]
\item b. [FP=RP Spec [F=RELATOR, [RP SUBJECT [t [PREDICATE ]]]]]
\end{enumerate}

One can be sceptical though whether this really helps. Does RP really cease to be a phase? (cf. Pesetsky 2007 for a notion of “property delay”). Another question is why R-to-F movement is necessary for Predicate Inversion. Why can’t a predicate simply move to the edge of RP to be visible to an outside probe? Den Dikken’s suggestion is that this would lead to improper movement (adjunction to RP (A-bar) would be followed by an A-movement (SpecFP)).\textsuperscript{16} And finally, the reason for why the subject could not move to the edge of FP to avoid PIC is – according to den Dikken – the assumption that adjunction to meaningless categories is disallowed. Matushansky (2007:96f.) notices a potential problem here. If the impossibility of extracting the small clause subject out of inverted copular constructions is due to the Phase Impenetrability Condition, agreement with this subject should also be impossible, which – as she noticed referring to Heycock and Kroch (1998) – is empirically incorrect; cf. (23).

\textbf{(23)} Delinquency is a menace to our society.

Also a menace are / *is factory closings and fascist propaganda.

Potentially, to solve this problem, one could assume that F+R raises further to T, thus extending the phase to TP. However, Matushansky (2007:97) observes this solution would be problematic: Lexical verbs also license copular inversion, as shown in (24), but lexical verbs do not raise to T in English (according to a standard assumption).

\textsuperscript{14} Den Dikken points out that “F is not an Agr-type head” […] “agreement is a relationship, not a head” (den Dikken 2007b: 154, fn. 24).

\textsuperscript{15} These questions are discussed in Boeckx (2007:46). He points out that it is not clear how something like phasehood can be inherited in a framework that assumes Inclusiveness (Chomsky 1995). Is phasehood a lexical property? How can it be transferred upon head-movement? How can it be lost under head-movement, since movement is copying?

\textsuperscript{16} One might be skeptical though why this should be the case. Notice that “A- and A’-movement have no status in the present framework; the terms are used only for convenience. It follows that no principles can be formulated in terms of the A-/A’-distinction […]” (Chomsky 2004: 125, fn. 30).
The best solution remains instant retreat.

3.3 Polish-specific problems

Coming back to Polish, the account put forward by den Dikken (2006, 2007a, b) does not really provide a solution to the problems discussed in Section 2. We have no explanation for why Predicate Inversion takes place. Neither do we have an explanation for GEN/NOM marking. Furthermore, if the derivation of existential and possessive sentences proceeds in a parallel way (via a “PP preposing” / “Predicate Inversion”) and HAVE arises as the result of the incorporation of a prepositional head into BE, then we would expect that (25) is true. What is not expected are examples of the type (25c), in which the verb HAVE is used and there is still a (locative) preposition present, contrary to fact, as shown in (26c).17

(25) a. ✓ “NP” HAVE NP
    b. ✓ PP BE NP
    c. * PP HAVE NP

(26) a. Samochód ma silnik. (Polish)
     carnom has motoracc cf. “NP” HAVE NP (25a)
     ‘A/The car has an engine.’
    b. W samochodzie jest silnik.
     in carloc is motornom cf. PP BE NP (25b)
     ‘There is an engine in the car.’
    but: c. W samochodzie nie ma silnika. cf. *PP HAVE NP (25c)
     in carloc neg has motorgen
     ‘There is no engine in the car.’
    but: d. W samochodzie nie było silnika.
     in carloc neg was motorgen cf. PP BE NP (25b)
     ‘There was no engine in the car.’

To account for the cooccurrence of P(P) and HAVE, one could assume, for example, that there is an incorporation of some element into BE but such incorporation does not automatically give rise to a BE→HAVE switch (cf., e.g., Muromatsu 1997 for an idea along such lines). The effects of this incorporation might be different in different languages depending on the prepositional status of the incorporating element. Or one could assume, following a suggestion by Belvin and den Dikken (1997) and den Dikken (2006), that there is in fact a P-into-BE incorporation but the underlying structure is much more complex. Neither of these options is satisfactory. If the result of the incorporation (BE or HAVE) depends on the prepositional status of the incorporating element or similarly, if we follow Belvin and den Dikken’s (1997)/den Dikken’s (2006) suggestion that the ‘have’ form in (26c) is indeed due to the P-into-BE incorporation but

17 Notice that Polish is not isolated in this respect; similar facts can be found, e.g., in Croatian and Bulgarian. See Blaszczyk 2007, 2008b for details; cf. also Broekhuis and Cornips 1997 for a similar objection made on the basis of Dutch data.
the examples in question actually have a more complex structure, as indicated in (27), why should there be a difference between (26c) and (26d) or between (26c) and (26b)?

(27) PPLOCATIONi BE [SC NP [PP P proi]]
    base-generated in a topic position and co-indexed with a pro-predicate

Apart from the “old” problems, shared by other accounts discussed in Section 2, new problems arise that are specifically related to den Dikken’s (2007a, b) analysis. First, in the light of the discussion above, long-distance agreement with the subject (in inverted structures) should be expected to be impossible, given that there is arguably no V-to-T raising in Polish (cf. Witkoś 1998), but see (28).

(28) a. Na stole była książka.
    on table BE3.SG.F PST book NOM.SG.F
    ‘There was a book on the table.’

b. W ogrodzie często były [jakieś dzieci].
    in garden often BE3.PL.PST [some children] NOM.PL
    ‘There were often (some) children in the garden.’

(28’a) a. [RP NP-SUBJECT [RELATOR [PP-PREDICATE]]]
    \( \Phi \)

b. [FP F+Ri [RP SUBJECT [ti [PREDICATE]]]]
    \( \Phi \)

c. [FP PP-PREDICATEj [F+Ri [RP NP-SUBJECT [ti tij]]]]
    \( \Phi \)

d. PROBE-T [FP PP-PREDICATEj [F+Ri [RP NP-SUBJECT [ti tij]]]]
    PIC!

Second, it is not clear how ACC/GEN assignment would work in possessive sentences; cf. (29) and (30). Which element/elements is/are here the assigner of ACC case?

(29) a. Jan ma auto.
    John NOM has car ACC
    ‘John has a car.’

b. Jan nie ma auta.
    John NOM NEG has car GEN
    ‘John has no car.’

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18 Myler (2014: 214) suggests in reference to example (25c)/(26c), his (135c)/(136), that PPs possibly have an articulated adpositional functional sequence and “if it is one of these higher heads that incorporates into BE to yield HAVE, then [(25c)] becomes a possible surface form.” Even if one assumes such a possibility, this does not explain yet why there is a difference between (26c) and (26d) or between (26c) and (26b). Why would the incorporation of such a higher head (in the adpositional functional sequence in a PP) into BE give rise to HAVE in (26c) but not in (26b) and (26d)? If in the latter cases, there is no incorporation (to explain the BE form of the verb), how to account for that? What would make the incorporation obligatory in one case but not in the other analogous cases?
Given Belvin and den Dikken’s (1997:155) assumption that “[t]he complex F-head resulting from P-to-Agr-to-F-movement is realised on the surface as have, not be, due to the fact that the Agr-head that incorporates into F has come in the possession of the dative preposition’s case-feature”¹⁹ (cf. (31)), we would expect R+P to raise further to F (which would result in ‘have’).

(31) a. \([\text{FP Spec} \ [F: F [\text{AgrP DP}_{\text{subj}} [\text{Agr} \ P [\text{P DP}]]]]]\)
   
   b. \([\text{FP [pp tj DP]}] [F [\text{RP [NP car]} \ [\text{RELATOR} = \emptyset + P_i \ tj]]]]\)

However, following den Dikken (2007a:11), as a result of the raising of the head of the small clause predicate up to the RELATOR, (i) the features of the predicate head are transferred up to RP and thereby made visible to the outside probe F that seeks to attract the predicate, and (ii) the base position of the predicate and the base position of its subject are made equidistant. This in turn has the beneficial effect of rendering the predicate inversion into SpecFP grammatical without the need for movement of the RELATOR up to F ever arising: such movement is literally redundant; the derivation in [(30b)] is grammatical without it. Let us assume for the sake of argumentation that there is some ACC-assigning V-head higher up in the structure, as indicated in (32). Notice, however, if ‘John’ also needs case (it surfaces as NOM), it will prevent ‘car’ from being assigned ACC. But then, ‘John’ should surface as ACC; see (33).

(32) \(V:\text{ACC} [\text{FP [pp tj John]}] [F [\text{RP [NP car]} \ [\text{RELATOR} = \emptyset + P_i \ tj]]]]\)

(33) a. \(V [\text{FP [pp tj John}_{\text{uCASE}}]) [F [\text{RP [NP car}_{\text{uCASE}}]} \ [\text{RELATOR} = \emptyset + P_i \ tj]]]]\)
   
   b. \(V [\text{FP [pp tj John}_{\text{uCASE}}]) [F [\text{RP [NP car}_{\text{uCASE}}]} \ [\text{RELATOR} = \emptyset + P_i \ tj]]]]\)
   
   c. *John_{\text{ACC}} has car??.

On the other hand, if ‘John’ has already been assigned structural case, it should cause Defective Intervention Effects, as indicated in (34).²⁰ In contrast, if ‘John’ does not have any structural case feature (just a lexical/inherent case feature), it will not cause Defective Intervention Effects, but the question will still be what happens to the NOM case and agreement (of T)? Compare (35).

(34) \(V [\text{FP [pp tj John}_{\text{CASE}}]) [F [\text{RP [NP car}_{\text{CASE}}]} \ [\text{RELATOR} = \emptyset + P_i \ tj]]]]\)

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¹⁹ According to Belvin and den Dikken (1997: 155), “in a language like English, the incorporating dative P is phonologically null and must incorporate into Agr in order to be licensed (…)”.

²⁰ Defective Intervention arises if an inactive local Goal blocks the matching relation between the Probe and another active but nonlocal Goal (see Chomsky 2000). In the example at hand, the local inactive Goal ‘John’, whose uninterpretable structural case feature has already been deleted, would block an Agree relation between V and the active but nonlocal Goal ‘car’, whose uninterpretable structural case feature is still unchecked (not deleted).
In the next section, a new phase-based account of existential/possessive and locative sentences is proposed which solves these (or at least does not cause similar) problems.

4 Proposal

4.1 Existential/possessive and locative sentences have different underlying structures

The discussion in the previous sections has shown that the interpretational and formal distinctions between (negated) locative and existential sentences (among others, different case markings of the nominal argument (NOM vs. GEN), different agreement properties (agreement vs. lack of agreement, i.e., ‘default’ agreement) \(^{21}\)) must be structurally encoded and cannot be attributed to “predicate inversion”, even if the latter is enriched with a phase-extending mechanism, nor can it be declared to be a matter of scope of negation or information structure. Also the notion of Perspective Structure is too “weak”. According to Partee and Borschev (2004), their Perspective Structure is “not directly syntax, although it may be reflected in the syntax”. Rather, the Perspective Structure is understood as a choice of what structure one wants to impose on some piece of reality that s/he wants to describe. Unlike Partee and Borschev, I would like to propose that Perspective Structure is not only reflected in the syntax, it is directly encoded in the syntax. What Partee and Borschev describe as taking Perspective on some piece of reality is in fact choosing between different verbs, each of which has its own selectional properties: (i) existential BE, (ii) possessive BE / HAVE (which might be understood in some abstract sense as “BE + P”) \(^{22,23}\) (iii) locative BE (agentive reading), and (iv) locative BE (simple position meaning). Thus, unlike in Freeze’s (1992) analysis, BE is not just a spell-out of some functional category (or functional categories) in syntax, and existentials, locatives and possessives are not derived from the same underlying structure, but each involve a different “base structure”, presented in (36) (see Harley 1995 for a related, yet different proposal). \(^{24}\)

\(^{21}\) Other formal distinctions between locative and existential sentences are discussed in detail in Błaszczak (2007, 2008a).

\(^{22}\) Note that the analysis proposed in this paper does not preclude the possibility of analyzing HAVE in some abstract sense as “BE + P” (for example, as part of the lexical information about HAVE). What is at issues here is, however, that this “BE + P” should not be taken to be the result of a syntactic incorporation of P into BE. This in fact would come close to the view advocated in Myler (2014). Myler (2014), while sharing the view that BE and HAVE are related, does not assume that there is a special incorporation operation involved. More specifically, in his analysis HAVE is BE plus “something else” (HAVE = BE + x), but this x is not an adpositional element (p. 74) but rather “an external-introduction-introducing Voice head endowed with phi features with which it can license a DP in its complement” (p. 216). In that sense, HAVE and BE are linked via transitivity (see also Hoekstra 1994 and Jung 2011 for similar ideas). In other words, Myler (2014) takes HAVE to be the transitive form of BE: “The copula is realized as HAVE if the rest of the structure is transitive (Hoekstra 1994); it will be realized as BE otherwise.” (p. 61). Notice that by making this assumption, Myler (2014) “explicitly endorses the view that HAVE is a transitive verb syntactically” (p. 414). This is in fact what the present analysis assumes (see below).

\(^{23}\) The difference between existential and possessive sentences is that in the latter the possessive verb has different selectional properties. In languages like Russian such a possessive verb (BE) selects a ‘n-phrase’ (recall example (1c)); in languages like Polish which have a separate ‘possessive’ verb HAVE (which may be analyzed at some abstract level as BE + P) a nominal possessor is selected (recall example (3c)).

\(^{24}\) Note that the present proposal is in some sense similar to Myler’s (2014) account of predicative possessive constructions in that he also departs from the Freeze tradition “in arguing that at a good amount of the variation in
Given that in the case of the existential verb BE the (quasi) external argument is the Location (which might be understood as a Possessor) while the nominal argument is the internal argument, the resulting structure is what Partee and Borschev (2004:217) describe as “in an existential sentence, it is as if the predication is somehow “turned around”, to assert of the LOCATION that it has the THING in it.” While for Partee and Borschev the answer to the question of “in what way and at what ‘level’ of structure the predication is ‘turned around’” (ibid.) is at the level of Perspective Structure, the answer proposed here is that this is a matter of having different verbs BE whose arguments are differently projected in the syntax (see also footnote 24).

(36) a. $[v' \mathbf{v} [\mathbf{VP} \mathbf{NP_{ THEME}}]]$ existential

i) affirmative

Na przyjęciu był Jan. (Polish)
at party BE$_{3,SG,M,PST}$ John$_{NOM}$PP-NP$_{NOM}$
Lit.: ‘At the party there was John.’ / ‘John was at the party.’

ii) negative

Na przyjęciu nie było Jana. (Polish)
at party NEG BE$_{3,SG,N,PST}$ John$_{GEN}$PP-NP$_{GEN}$
Lit.: ‘At the party there wasn’t John.’ / ‘John wasn’t at the party.’

b. $[v' \mathbf{v} [\mathbf{V} \mathbf{NP}_{P}]]$ possessive

i) affirmative

Jan$_{NOM}$ miał auto. (Polish)
John$_{NOM}$HAVE$_{3,SG,M,PST}$ car$_{ACC}$NP$_{NOM}$-NP$_{ACC}$
‘John had a car.’

U menja byla kniga. (Russian)
at me BE$_{3,SG,F,PST}$ book$_{NOM}$PP-NP$_{NOM}$
‘I had a book.’

the surface structure of possession sentences reflects real differences in their underlying argument structure” (p. 74). Similarly, Boneh and Sichel (2010) demonstrate that Palestinian Arabic has three BE-based possession constructions and argue that these constructions involve different argument structures (see Myler 2014 for a critical discussion). However, unlike what is suggested in the present analysis and similarly to Freeze (1992), Myler (2014) assumes that BE is a copula – a dummy verb needed to “sentencify” fundamentally non-sentency meanings” (p. 61). In Myler’s account both the existential copula (used in existential constructions) and a predicative copula (i.e., a copular verb used with nominal predicates) are instantiations of the same $v$. The special existential interpretation of an existential sentence is thus argued not to come from the copula itself, but from “a separate syntactic piece”, namely an expletive “which (sometimes silently, sometimes overtly) is present in the structure of such sentences” and “introduces simple existential closure” (p. 55). In the present account, a difference is being made between existential verb BE ($v+V$) (a lexical verb) and a predicative copula BE ($v)$ (a functional element) (see Blaszczyk 2007, Ch. 4). Note that this view is in accord with Clark’s (1978) crosslinguistic observation “that existentials and locatives sometimes share a BE verb to the exclusion of copula constructions with a nominal predicate” (cited from Myler 2014:88) (see Blaszczyk 2007 for a discussion of differences between existential/locative sentences and predicative copular sentences in Polish and other languages).

25 See also Bjorkman and Cowper (2015) for a more recent discussion of there-sentences in English in which they show that the analysis in terms of predicate inversion (Hoekstra and Mulder 1990; Freeze 1992; Moro 1997; Belvin and Dikken 1997) cannot account for the full range of data (including new data concerning there in progressive, transitives, unergatives, there with stage-level (in contrast to individual-level) adjectives). Bjorkman and Cowper (2015) argue that i) there is not an expletive, ii) it merges as a specifier of the highest head in the lower phase of the clause, and iii) it is sensitive to not only to the argument structure but also the temporal/event structure of its complement.
Regarding the contrast between locative and existential sentences, it should be observed that only the NP in locative sentences can have an agentive interpretation, as illustrated in (37) (due to Dziwirek 1994: 173-4). Furthermore, only the NP in locative sentences shows usual subject properties (in terms of binding), as illustrated in (38). This is expected under the analysis proposed here since only locative sentences (on their agentive reading) have an external NP argument (“Agent”) whereas the nominal argument in existential sentences is a Theme argument, generated in the underlying ‘direct object’ position.

(37) a. Celowo nie byłem na przyjęciu u Ewy.  
\textit{locative}  
on purpose NEG was$_{1,SG,M}$ at party at Eve  
‘I wasn’t at Eve’s party on purpose.’

b. *Celowo nie było mnie na przyjęciu u Ewy.  
\textit{existential}  
on purpose NEG was$_{3,SG,N}$ me$_{GEN}$ at party at Eve

(38) a. Jan$_{i}$ (nie) był w swoim / *jego$_{i}$ pokoju.  
\textit{locative}  
John$_{NOM}(\text{NEG})$ was$_{3,SG,M}$ in REFL / *his room  
‘John was (not) in his room.’

b. Jana$_{i}$ nie było w jego$_{i}$/ *?swoim$_{i}$ pokoju.  
\textit{existential}  
John$_{GEN}$ NEG was$_{3,SG,N}$ in his / *?REFL room  
‘John wasn’t in his room.’
Note that in the proposed account in fact two types of locative sentences are distinguished: locative sentences with ‘agentive reading’ (see (36c)) and locative sentences with ‘simple position meaning’ (see (36d)). The former sentences do not describe just a stative situation. The nominal argument, which is usually a human entity, is in fact a controller or “internal causer” of the described eventuality, and in accordance with Levin and Rappaport Hovav’s (1995: 135) “Immediate Cause Linking Rule”, it is generated as an external argument. By contrast, in its ‘simple position meaning’ BE – just as any other simple position meaning verb (like, e.g., to lie, to stand etc. (cf. (39))) – describes the location of some (normally) inanimate entity. Importantly, in contrast to locative ‘agentive’ sentences, in case of (36d) the situation is not controlled by the described entity, i.e., being on the table is not controlled or caused by the book, but rather it is a result of someone’s else putting the book on the table. The locative phrase is obligatory with this meaning, it is treated as an internal argument (cf., among others, Levin and Rappaport Hovav 1995). Following Levin and Rappaport Hovav (1995), the nominal argument is also analyzed as an internal argument, generated in [Spec,VP]; cf. (36d). Notice that BE actually seems to replace the corresponding simple position meaning verb (in the case of (36d), BE seems to replace the verb lie; cf. (39)); BE is just a “semantically bleached“ variant of the corresponding simple position meaning verb.

(39) simple position meaning verb (cf. (36d))
   i) affirmative
      Książka leżała na stole.  
      book NOM SG.F lie 3.SG.F.PST on table NP NOM-PP
      ‘The book was lying/lay on the table.’
   ii) negative
      Książka nie leżała na stole.  
      book NOM SG.F NEG lie 3.SG.F.PST on table NP NOM-PP
      ‘The book wasn’t lying/didn’t lie on the table.’

26 For a detailed discussion as to why the locative phrase in the examples at hand must be analyzed as an argument and not an adjunct, see Maienborn (1996).
27 Alternatively, as Hoekstra and Mulder (1990) propose, the NP and PP could form a small clause; cf. (i).
   (i) [S \[V [BE [NP THEME PP LOC]]]]
28 This observation leads to the prediction that BE in its ‘simple position’ reading can be used only in cases in which a semantically more specific simple position meaning verb could be used as well. This prediction seems to be fulfilled, as the contrast between the acceptable examples (i) and the unacceptable ones in (ii) illustrate. Note that if acceptable at all (and without any further special contextual conditions), (ii) would have a funny interpretation that ‘the cheese’ was on its own in the store. (See Błaszczak 2007 for a more detailed discussion of the differences between agentive and simple positive locative sentences.)

(i) a. Jan był w sklepie.
      John NOM BE 3.SG.M.PST in store
      ‘John was in the store.’
   b. *Jan nie był w sklepie.
   (Lit.: ‘John wasn’t in the store.’)
(ii) a. Ser był w sklepie.
      cheese NOM BE 3.SG.M.PST in store
      (Lit.: ‘The cheese was in the store.’)
   b. *Ser nie był w sklepie.
      (Lit.: ‘The cheese wasn’t in the store.’)
Concluding this subsection let us notice that by proposing that the difference between locative sentences and existential sentences is directly encoded in the syntax, the case marking of the nominal argument (NOM vs. GEN) becomes a matter of syntax. In other words, whether the nominal argument is going to be marked for NOM or GEN is a question of what syntactic structure a given sentence has. By doing this, we free the case marking in negated existential and locative sentences from the obligation to reflect the information structure differences or differences in terms of the scope of negation (recall the analysis by Babby 1980). Before we develop a formal account of case and agreement as well word order differences, let us introduce another important assumption.

4.2 ‘Inner predication’ and ‘outer predication’

The analysis is based on the distinction between ‘inner predication’ (i.e., the predication within the v-V-domain: the thematic-aspectual domain, inner domain) and ‘outer predication’ (i.e., the predication within the C-T domain: the discourse-informational domain, outer domain). These two predication domains determine what syntactically relevant phases are.29

In the first phase of the derivation (the ‘inner’ phase) the arguments of a given verb are syntactically projected, resulting in a thematic-aspectual structure. For a “verbal phrase” to be thematically complete, all argument positions must be discharged, which means that also the eventuality argument (the referential argument) must be discharged, or to put it in other terms, existentially bound (cf. Zwarts 1992: 47). Assuming that the existential binding of the eventuality argument takes place in the Polarity Phrase (PolP), PolP in this sense closes up the v-V-domain, that is, PolP belongs to the first phase of derivation, the ‘inner phase’.30 It is also at this level (or to put it more precisely: at the first phase of derivation in a phasal model of Chomsky 2000 et seq.) that the fate of the case marking of the nominal argument in negated existential and locative sentences is decided (see Section 5.1).

The inner phase is also the domain within which ‘inner predication’ takes place. Following Chierchia (2004:26), this predication relation is taken to be a relation which consists in predicating a property of an individual (importantly, an individual of any sort), the result of which is a proposition: “If r is a property and u an individual (of any sort) and ⊤ is the predication relation, then ⊤r(u) is the proposition that u has property r” (ibid.). Syntactically, the predicator (⊤) can be regarded as being associated with the functional head v, VP functioning then as a property. In other words, there is a predication relation which is mediated by v°, and which consists in predicating a property, realized syntactically as a VP, of an individual occupying the [Spec,vP] position (the external argument), the subject of the ‘inner predication’ so to speak.31

In the second phase of the derivation (the ‘outer’ phase) the temporal properties (and also temporally related aspectual properties) and modal properties (including force/clause typing etc.) are determined. And, more importantly, also discourse-informational properties are settled here. The latter comprise, among others, determining what the sentence is about, that is, choosing the sentence topic, the subject of the ‘inner predication’ so to speak. Normally, one of the verb’s arguments, i.e., one of the elements of the preceding phase, is chosen to be the topic

29 Recall that den Dikken’s (2007a, b) inherent phase is also based on predication (subject-predicate structure). However, den Dikken’s analysis is very different from that proposed here.
30 Depending on the value of the head of the PolP, affirmative or negative, the meaning we will get will be: there is an eventuality e such that … (∃e) or there is no eventuality e such that …(¬∃e), respectively.
31 In the case of verbs lacking an external argument it can be assumed – following Chierchia (2004) – that they have an “expletive subject” via the “Expletivization Rule”. Expletivization applies to a proposition and turns it into a property that is “predicated of an arbitrarily chosen funny object” (ibid., p. 32). See Błaszczak (2007) for a more detailed discussion.
of a sentence. Given that the eventuality argument is the referential argument of the verb, it can be chosen to be the topic of a sentence as well. This is what happens in thetic sentences (see below).\textsuperscript{32} In this respect, word order and discourse-pragmatic properties are decided on at the second phase (CP/TP), although they are in some sense derivatives of the decisions taken with respect to the first Spell-Out domain. With this background, let us turn now to a formal analysis.

5 Formal account
5.1 Case properties

5.1.1 First attempt of an analysis
One welcome effect of the assumption that locative and existential sentences have different underlying structures is that the case marking properties cease to be puzzling. The GEN marking can be taken to a regular instance of the Genitive-of-Negation (GoN) rule in Polish. The GoN in Polish is restricted to just one configuration: direct object position of a negated transitive verb. Now, the analysis of existential sentences along the lines proposed in (36a) provides an immediate solution to the GEN dilemma in this case. The GEN marking of the nominal argument in negated existential sentences is no longer surprising, no more than the NOM marking of the nominal argument in negated locative sentences. On the contrary, the GEN marking is actually expected – given the structure in (36a) – and it is completely compatible with the usual GoN facts in Polish. Let us look at the structures provided in (40).

\begin{enumerate}
\item \textbf{a. NEG} [\_vP \_vP \_vP \_vP] \textit{canonical transitive}
\begin{itemize}
\item Jan nie czyta książki.
\item John\textsubscript{NOM}NEG read\textsubscript{IPFV.3.SG.PRS} book\textsubscript{GEN} NP\textsubscript{NOM-NPGEN} \Rightarrow \textit{GoN}
\end{itemize}
\begin{itemize}
\item ‘John is not reading a book.’
\end{itemize}

\item \textbf{b. NEG} [\_vP PP\textsubscript{LOC/POSSESSOR} \_vP \_vP \_vP] \textit{existential}
\begin{itemize}
\item Na przyjęciu nie było Jana.
\item at party NEG BE\textsubscript{3.SG.N.PST} John\textsubscript{GEN} PP\textsubscript{NPGEN}
\end{itemize}
\begin{itemize}
\item Lit.: ‘At the party there wasn’t John.’ / ‘John wasn’t at the party.’
\end{itemize}

\item \textbf{c. NEG} [\_vP NP\textsubscript{AGENT} \_vP \_vP \_vP] \textit{locative (‘agentive’)}
\begin{itemize}
\item Jan nie był na przyjęciu.
\item John\textsubscript{NOM}NEG BE\textsubscript{3.SG.M.PST} at party NP\textsubscript{NOM-PP}
\end{itemize}
\begin{itemize}
\item ‘John wasn’t at the party.’
\end{itemize}

\item \textbf{d. NEG} [\_vP \_vP \_vP \_vP] \textit{locative (‘simple position’)}
\begin{itemize}
\item \textit{no GEN}
\end{itemize}
\end{enumerate}

\textsuperscript{32} Notice that the subject of the inner predication and the subject of outer predication may but need not coincide. This can be observed in example (6). According to the analysis developed in this paper, both (6a) and (6b) are existential sentences, i.e., they have the same subject of the ‘inner predication’ (the same ‘inner phase’). However, they have different subjects of the ‘outer predication’ (see Section 5.3 for discussion).
In order to be marked for GEN under negation, the nominal argument must be in the right configuration: the nominal argument has to be generated as a direct internal argument of the negated transitive verb. Thus, to put it in descriptive terms, it seems that for an internal argument to be GEN marked under negation in Polish, there must be another (external) argument present in the structure; cf. (40a). Now notice that on the analysis advocated in this paper only existential sentences offer the right configuration for GoN assignment; cf. (40b). The locative argument (location), which is generated “externally” to the verb (in the specifier position of a light verb), might be understood (in some abstract sense) as a possessor: The situation that some entity exists/does not exist at some location can be understood in such a way that the location contains/does not contain some entity. In contrast, locative (“agentive”) sentences do not provide the right configuration: in this case (cf. (40b)), the NP is itself the external argument. To account for these facts in a formal way, the following ingredients are needed: (i) a v with its uninterpretable φ-features, which are necessary for initiating an Agree relation with an (object) NP in the first place, and (ii) negation (NegP), which influences the case value being assigned to such an NP. Both v and Neg (or more generally, a Polarity head) belong to the first phase of derivation, as was pointed out in Section 4.2. V itself does not have phi-features on its own, but inherits them from v (Chomsky 2008, see also Richard 2007). Given the principle of “Maximizing of matching effects” (Chomsky 2001), the uninterpretable features must be eliminated at once as soon as a probe has located its goal. In the case at hand the uninterpretable features both of the probe and the goal (i.e., the phi-features of v-V and the case feature of the object NP, respectively) erase (i.e., are marked for deletion). Importantly, the case feature of the object itself does not enter into an Agree relation with v since v does not have this feature. Rather, the case feature is deleted as a side-effect of (here invisible) agreement in phi-features between the verb and the object. Structural case is just “a reflex of an uninterpretable phi-set” (Chomsky 2000:122). Importantly, the uninterpretable features of the probe and goal are deleted (or more precisely: marked for deletion), but they have not been valued yet. Following Chomsky (2004:116), I assume here that valuation of features is part of the operation TRANSFER. Given that structural case is regarded as a single undifferentiated feature whose particular manifestation depends on interpretable features of the probe: NOM in the case of finite T, ACC in the case of little v and Null case in the case of control T (Chomsky 2000: 123), in order to determine the value of a given case feature, TRANSFER must know (i.e., must remember) that, for instance, the object NP has undergone an Agree relation with v. Therefore, Chomsky assumes that TRANSFER must be cyclic, it has a “memory” of phase-length (Chomsky 2004:116).
I will assume here that TRANSFER has access to all the information about the derivation thus far, i.e., all the Merge and Agree operations which have taken place until the point of TRANSFER, i.e., until a phase, the ‘inner’ phase in the case under discussion, has been completed. More importantly, at the point of TRANSFER when valuation of unvalued features takes place, the whole structure constructed thus far is present. This is to say that no matter how much of the material built up until the point of TRANSFER is actually going to be spelled out, that is, independently of how big the spellout domain of a phase is, TRANSFER has access to the whole phase. This is important to stress since while the object NP usually belongs to the spellout domain of the first phase, the verb does not. To value the case feature of the object, the information about \( v \) is needed, more precisely: (i) the information about the Agree relation with \( v \), (ii) the information about the presence of an external argument, and (iii) the information about the value of the head of the PolP.

An attentive reader might have noticed a potential problem. We solved the problem of the GEN marking in negated existential sentences, but how to explain the NOM marking of the NP in affirmative existential sentences. Thus, the question is how the “low NOM” is possible, if the NP stays in its base position and if Pol/\( v \) is a phase of derivation in which the case marking of the internal argument is regulated. In order to account for this problem, we need to make some additional assumptions.

5.1.2 A revised analysis
First, we need to differentiate between structural case and inherent/lexical case. Structural case is understood as [\( u\text{CASE} \)] (uninterpretable/unvalued). In order to get rid of this uninterpretable feature, an NP must undergo an Agree relation with a functional head which has uninterpretable phi-features; structural case (NOM/ACC) is thus associated to phi-features in the sense that subject-verb and object-verb agreement results in structural case assignment. The value of the assigned case is determined at the point of TRANSFER, i.e., valuation itself is part of the operation TRANSFER (see the discussion above). In contrast, inherent/lexical case is analyzed here as [Case[\( \text{val} \)] ] (valued/(presumably) interpretable). The point is that the value of the [CASE] feature in this case is lexically specified or determined in some other way\(^{37}\) which – importantly – is different from the way in which the value of structural case is determined.

Secondly, there are two structural case assigners: C-T and v-V (assuming with Chomsky 2008 that T inherits its phi-features from C, and by analogy, V inherits the phi-feature from \( v \)); cf. (41).\(^{38}\)

\[
(41) \quad C \quad T[u\phi_{[\cdot]}] \quad [v_P XP \quad [v \quad v_P V[u\phi_{[\cdot]}] \quad YP]]
\]

Thirdly, the most crucial assumption: The [\( u\text{CASE} \)] feature of an NP undergoing an Agree relation with \( v \) (v-V) does not need to be valued for ACC (as argued by Chomsky 2000 et seq.). Rather, its actual value depends on whether there is some other NP with an uninterpretable structural case feature present in the structure (a similar idea to Marantz’ 1991 view of “dependent case”; see also Harley 1995). More specifically, NOM as the most unmarked case (see (42)) is assigned first unless there is yet another XP with an unvalued structural case feature.

\(^{37}\) For example, \( pP/PP \)-internally, as an effect of some relation with P (or \( p-P \)).

\(^{38}\) T that is not selected by C (as in raising infinitives) is defective and cannot assign case. The analysis of control infinitives depends on whether they are treated along the lines proposed by Chomsky (2000 et seq.) as CPs with a PRO subject that is assigned a Null case by C-T control, or whether they are treated as TPs (in a way parallel to raising infinitives), as suggested, e.g., by Hornstein (1999 et seq.). The movement theory of control is assumed by, for example, Witkoś (2010) for Polish. The latter type of analysis has become popular in recent years in linguistic literature, but it has also been criticized; see, for example, Wood (2012). See Lindert (2017) for a recent overview.
(cf. Woolford 2003, 2006 for a similar view; see also Sigurðsson 2006 for a related, but technically different proposal). In this sense nominative assignment as such is dissociated from T.\footnote{This is a welcome result since – as Sigurðsson (2006:293) points out – “the idea that Nom is assigned (under agreement) by T, the alleged T-Nom connection, faces serious empirical problems.” For example, NOM objects are found in various kinds of infinitives in Icelandic.}

(42) *Universal Case Markedness Hierarchy* (cited from Woolford 2003: 309)

(least marked) nominative < accusative < dative (most marked)

To see the analysis work, let us look at two examples provided below. In (43), XP has a \([u\text{CASE}_{\{j\}}]\) feature. In accordance with the assumption above, the \([u\text{CASE}_{\{j\}}]\) feature of YP is valued for ACC (which is the second least marked case). However, there might be some extra (language specific) factors overriding the “ACC assignment”. For instance, if Neg is present, a “marked” option may be chosen: instead of ACC GEN is assigned. This is what happens in negated transitive sentences in Polish, as we saw above (recall (40a)).

(43) \[
\begin{array}{ll}
\text{[VP XP}_{\{i\}\text{[val]}, u\text{CASE}_{\{j\}}]} & [\cdot \ u\text{C}\{\cdot\} \cdot[V P _{\{i\} \text{val}}, u\text{CASE}\{\cdot\}]_{\}]_{]}_{]}_{]\}
\end{array}
\]

“NP”

ACC (GEN under negation)

Cf. possessive constructions in Polish

\begin{itemize}
\item \textit{i) affirmative}
\item \textit{Jan mial auto.}
\item \textit{JohnNOM HAVE3.SG.M.PST carACC}
\item ‘John had a car.’
\item \[ NP[u\text{CASE}_{\{j\}}] v-V NP[u\text{CASE}_{\{j\}}]_{]}_{]\}
\item \textit{ii) negative}
\item \textit{Jan nie mial auta.}
\item \textit{JohnNOM NEG HAVE3.SG.M.PST carGEN }]
\item ‘John didn’t have a car.’
\item \[ NEG [ NP[u\text{CASE}_{\{j\}}] v-V NP[u\text{CASE}_{\{j\}}]_{]}_{]\]
\end{itemize}

In (44), XP has a \([\text{CASE}_{\{val\}}]\) feature. As a consequence, the \([u\text{CASE}_{\{j\}}]\) feature of YP is valued for NOM (since the NOM is the least marked case). However, like in case of (43), there might be some extra (language specific) factors overriding the “NOM assignment”. For example, the presence of negation and the [perfective] property of the verb might be the factors conspiring to a “marked” option: instead of NOM GEN is assigned. This is what happens in negated existential sentences in Polish, as we saw above.
Cf. existential constructions in Polish

(i) affirmative

Na przyjęciu był Jan.

at party BE3.SG.M.PST JohnNOM

Lit.: ‘At the party there was John.’ / ‘John was at the party.’

\[ PP[CASE[val]] \ v-V \ NP[uCASE[ ]]]

\[ NOM \]

(ii) negative

Na przyjęciu nie było Jana.

at party NEG BE3.SG.N.PST JohnGEN

Lit.: ‘At the party there wasn’t John.’ / ‘John wasn’t at the party.’

\[ NEG \ [ PP[CASE[val]] \ v-V \ NP[uCASE[ ]]]

\[ GEN \]

The [perfective] condition is intended to explain the following contrast (the assumption is that the habitual BE has clear imperfective properties⁴¹):

(45) a. Jan nie bywał na przyjęciach.

JohnNOM NEG BE3.SG.M.PST.HABIT at parties √NOM

‘John didn’t use to come to parties.’ (Lit.: ‘John didn’t use to be at parties.’)

b. *Jana nie bywało na przyjęciach.

JohnGEN NEG BE3.SG.N.PST.HABIT at parties *GEN

This assumption also explains another puzzling fact mentioned earlier in the paper, namely the question of why in negated present existential BE sentences a different verb form is used. The negated present form is actually nie ma ‘not has’ instead of the expected nie jest ‘not is’ (recall (26c)). This is puzzling since no other lexical verb takes a different form in the present tense

⁴⁰ Note that (44) could also be assumed for ergative-absolutive constructions, as indicated in (i), provided that ergative is not a structural case (the latter is assumed, for example, by Nash 1995, Stepanov 2004, Woolford 1997, 2006, among others). As pointed out by Trask (1979: 388), “(…) ergative languages can be divided into two main types”, referred to as type A and Type B. More importantly, “Type B results from the incorporation of a nominalized verb form into the inflectional paradigm, most often a stative de-verbal adjective incorporated by means of a possessive construction” (ibid., p. 402). More specifically: “Since the verbal adjective is a nominalized form, it quite often happens that the agent phrase (or what is later interpreted as an agent phrase) is attached by means of a possessive construction, as seems to have been the case in Old Persian and Old Armenian (…); a consequence of this is that the ergative case is often identical to the genitive, dative, locative, the cases most often used to express possession” (Trask 1979: 397-8).

(i) \[ [vP XP[iϕ[val], CASE[val]] [v \ v[uϕ[ ]]] [vP YP[iϕ[val], uCASE[ ]]]]\]

Ergative Absolutive

⁴¹ The aspectual difference between być and bywać can be described as follows: bywać has properties of an imperfective verb as far as both its lexical semantic properties (situation type aspect) and grammatical behavior (grammatical/morphological aspect) are concerned. In contrast, być has semantic properties characteristic of an imperfective verb, but from a grammatical/morphological point of view it behaves as a perfective verb. See Błaszczak (2007, 2008a, b) for a detailed discussion.
when it is negated. In the analysis proposed here, there is no need to resort to some P-into-BE incorporation mechanism. The solution follows quite naturally from the fact that for an NP argument of a negated BE to be marked for GEN two conditions must be fulfilled: (i) the right configuration and (ii) perfective properties of the predicate. Now, in negated present existential sentences instead of a BE form a HAVE form is used because the present form jest is not perfective. (The actual present ‘jest’-forms derive from the Old Church Slavonic imperfective subparadigm of the present tense paradigm of the verb byti; cf. van Schooneveld 1951; see Błaszczak 2007 and the references cited there for discussion.) I would like to suggest that this is precisely why the defective być paradigm is supplemented by the verb (nie) ma, which due to its (inherent) transitive nature – just like any other negated transitive verb in Polish – has the property of assigning the GEN case under negation. Note that – just as is the case for any other negated transitive verb in Polish – the GEN-assigning capacity of (nie) ma does not depend on its aspectual properties. (This conclusion corresponds in some respects to the conclusion reached by Witekś (2000) in his analysis of the negative locative copula nie ma.) In other words, unlike in the case of negated existential sentences with być (see above), there is no requirement for nie ma to be perfective in order to assign the GEN case to its internal argument.

To conclude, given the proposal made in this section, the source of the NOM marking on the internal NP argument, as in the Polish existential sentences, is not Tense (or C-T). Rather, the case feature of the internal argument is valued here as NOM as the result of an Agree relation with V (whereby V inherits its uninterpretable phi-features from v).

### 5.2 Agreement properties (long-distance agreement)

There is still a problem that needs to be solved, namely the question of what happens to the \[\[u\Phi\]] features of Tense (C-T) in the case of (44) if NOM has been already assigned “low in the structure” (i.e., in the first phase). That is, how can C-T get rid of its uninterpretable phi-features when there is no NP to agree with? (The internal NP argument does not have any uninterpretable feature (since it has already “lost” its \[u\text{CASE}\] feature in the Agree relation with v-V), hence it is unable to undergo any further Agree operation.)

I would like to make here the following proposal. T – in order for its phi-features to be valued at all – will have to take on the same value as v-V’s phi-features have. This is possible since Vb (shorthand for: v+V) has to undergo an Agree relation with T anyway. This could thus be analyzed as some form of Pesetsky and Torrego’s (2007) “feature sharing”; cf. (46) and (47).

\[
\begin{align*}
(46) \quad & \text{Tns} \quad \text{[v, walked]} \quad \Rightarrow \quad \text{Tns} \quad \text{[v, walked]} \\
& \quad \text{iT[ \quad uT+past} \quad \text{iT[2]} \quad \text{uT+past[2]} \quad \text{Agree}
\end{align*}
\]

42 An Agree relation between T and v might be motivated by the need of feature valuation for the purposes of the semantic interpretation of Tense. An analysis along such lines have been recently proposed by Pesetsky and Torrego (2007).

43 Note that unlike Chomsky (2007), who takes uninterpretable features to be unvalued, receiving their values only under Agree, Pesetsky and Torrego (2007) claim that a feature can be interpretable but unvalued, and, likewise, a feature can be uninterpretable but valued. Thus, in (46), T on Tns is an interpretable feature that is unvalued and acts as a probe while T on the finite verb is an uninterpretable feature that is valued and acts as a goal. As the result of an Agree relation between Tns and V, interpreted here in terms of feature-sharing, we get a structure with a single valued feature shared by two locations (multiple instances of a single feature are indicated by means of indices in brackets).
The proposed account of “long-distance” agreement (with a postverbal NOM “object”) seems to be a better solution than that suggested by Chomsky (2001) or Legate (2005). Chomsky (2001) understands the PIC (Phase Impenetrability Condition) in such a way that at the phase ZP containing phase HP, Z can access only the edge of HP. However, PIC imposes no restrictions on what can be accessed by a probe located within ZP. If ZP = [C [T vP]], C can access only the edge of vP, but T can access a goal within vP, e.g., a NOM object NP in Icelandic or by analogy, a NOM theme NP in existential sentences in Polish. However, given Chomsky’s (2008) model, assumed in the present analysis, T does not have phi-features in and of itself, which means that it can no longer act as a probe. Instead, T inherits its phi-features from C. It is C that ultimately initiates the Agree relation hence it seems that we cannot really make use of the strategy from Chomsky (2001) just described.

Legate (2005) proposes another solution to “long-distance” agreement which avoids the problem just mentioned. Her idea is that agreement applies in a cyclic fashion, through the intermediary of every intervening phase-defining head. In the case of postverbal NOM “objects”, such an object first agrees with v, which in turn agrees with the finite T. More precisely, v has unvalued phi-features and undergoes an Agree relation with the object NP. Adopting the conception of agreement as the establishment of a hyperlink to a shared set of feature values, v bears both the phi-features and the unvalued case feature of the object NP. Then, T is merged with unvalued phi-features and the ability to license nominative case (but see Chomsky 2008). T enters an agree relationship with v, and as the result of this operation – according to Legate (2005) – v, T, and the (object) NP bear the phi-features originally associated with the (object) NP and the nominative case feature originally associated with T (ibid., p. 149).

Notice, however, that Legate’s proposal seems to be problematic for one reason (which Legate 2005 in fact notices herself): It poses the question as to the morphological realization of the nominative case feature on the postverbal “object” NP. The question is – given that the “object” NP is spelled out before the agree relationship with T is established – how the morphology succeeds in realizing the correct case morphology. As Legate (2005) observes, it might be necessary to assume here that the morphology has access to prior phases. When the

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44 I take \( \phi_{\text{face}} \) to mean that the values assigned to the phi-features of v-V will be the same whatever values the phi-features of the NP (internal argument) are.

45 The reason behind this proposal seems to be the assumption that Spell-Out of the vP phase is triggered by the insertion of the subsequent phase-head, i.e., the matrix C. Therefore, at the point at which T probes, material within the vP phase is still accessible and T may in fact enter into an Agree relation with a postverbal NP.
vP phase is spelled out, the morphology receives an object NP without a case feature. At this point the morphology may insert the form of the NP bearing the morphological default case, or it may realize the NP without case morphology. On a subsequent phase, when the finite T that licenses nominative case on the NP in question is spelled out, the case feature value on the NP is updated (valued as NOM) as a result of the syntactic agreement relationship between v and finite T at a later phase. This is so because this agreement relationship alters the feature values that the NP in question links to. “[t]he morphology may then repair the material on the previous phase, giving [the NP] nominative case morphology as required” (ibid., p. 149). It seems to me that the proposal made above in (47) though in effect similar to that of Legate (2005), is more attractive since it does not require going back to prior phases and updating the feature values of the material already spelled out.

5.3 Information structure

In Section 4.2, it was pointed out that in the second phase of the derivation (the ‘outer’ phase) the temporal properties and modal properties (including force/clause typing etc.) are determined. And, more importantly, also discourse-informational properties are settled here. The latter comprise, among others, determining what the sentence is about, that is, choosing the sentence topic. In this respect, word order and discourse-pragmatic properties, are decided on at the second phase (CP/TP), although they are in some sense derivatives of the decisions taken with respect to the first Spell-Out domain. Before developing a formal account, let us first look at the gist of the proposal in more descriptive terms.

5.3.1 The gist of the proposal

The “subject” of the ‘inner’ predication usually (by default) becomes a “subject” of ‘outer’ predication, understood here in terms of a Topic-Comment structure. This corresponds to the cross-linguistic observation that the subject of a sentence is by default also the topic of the sentence unless the subject is somehow explicitly marked as not being the topic (such marking strategies may include the use of special focus particles, the placement of the subject in some postverbal position, or the use of special intonation). Notice that by making the assumption that the “subject” of the ‘inner’ predication becomes (by default) the topic of the sentence, we also derive Borschev and Partee’s observation concerning the presuppositional nature of their Perspectival Center (see footnote 12). Given that what Borschev and Partee refer to as ‘Perspectival Center’, i.e., the Location argument and the nominal argument (‘Thing’), are the “subject” of the ‘inner’ predication in existential and locative sentences respectively, and given furthermore that the “subject” of inner predication is by default also the topic of the sentence, we derive the fact that “any Perspectival Center must be normally presupposed to exist” (Partee and Borschev 2002:188). This is so because we (normally) presuppose the existence of things (the topic) we are talking about. Or to put it more generally, the subject of predication is normally presupposed to exist.46 Thus, in the default case, the Location seems to become the topic in an existential sentence and the nominal argument (‘Thing’) becomes the topic in a locative sentence. The remaining part of the sentence (V plus the nominal argument in the former case, and V plus the Location argument in the latter case) represents the comment, and thus the new information in the unmarked case. This gives us the unmarked word orders of the respective sentences, i.e., the unmarked PP–(neg)V–NP order of existential sentences and the

46 That the topic constituent comes together with an existential presupposition is presumably even more understandable if we take sentences with an (overt) topic to correspond to categorical statements. Categorical judgments are ‘double judgments’, i.e., they consist of two steps: (i) “naming an entity” and “making a statement about it” (see Sasse 1987 and the references cited there for discussion). The first step can be taken to be equivalent with asserting the existence of an entity about which – in the second step – a statement will be made.
unmarked NP–(neg)V–PP order of locative sentences. But – as was illustrated in Section 2.1. (see (6)) – negated existential sentences show more flexibility as far as the ordering of their constituents is concerned. This is so because – unlike affirmative existential sentences, which have a presentational function, i.e., are usually used to introduce new participants into a discourse – the negated existential clauses are in most cases not used discourse-initially, hence they contain discourse-linked material (old information, theme). Now, observe that the main principle governing the actual arrangement of lexical items in a sentence in Polish (as in other Slavic languages) is not grammatical, but communicative. Thus, as argued in Grzegorek (1984: 92), “lexical items occur in the order of their relative communicative value, i.e., according to the increasing degree of C. D. (= Communicative Dynamism) or according to the topicality in Givon’s terminology. [...] In languages such as Polish or Russian preverbal position usually marks the part of the sentence which is old information, whereas the verb functions either as transition or as part of the focal phrase.” Given this principle, it is actually expected that constituents representing old information will be placed in a preverbal position. And this is exactly what happens in the Polish examples; cf. (48).

(48) [Preceding context: I was told that the doctor should be in the village at this time, but:]  
Lekarza we wsi nie było.  
doctorGEN.SG.M in village NEG was3.SG.N  
‘The doctor was not in the village.’

Note that in the examples above both the GEN marked nominal argument as well as the Location argument represent old information, i.e., they belong to the background. Is there an explicit (distinguished) topic in such examples? Are we talking about ‘the doctor’ or rather about ‘the village’? It seems to me that it is certainly possible here to take ‘the doctor’ to be the topic of the respective sentence (‘the village’ simply being the background or thematic/given information). It is also possible that only the GEN marked NP appears in preverbal position whereas the locative phrase appears postverbally, as in (49), where it is part of new information.

(49) Context: John had a small accident and went to see his doctor. Unfortunately)  
Lekarza nie było dzisiaj we wsi.  
doctorGEN.SG.M NEG BE3.SG.N.PAST in village  
‘The doctor was not in the village today.’  
(He had some important meeting in the town.)

Finally, let us look at (50). Here, both the Location argument and the nominal argument appear postverbally. In such examples it could be assumed that the actual topic is the invisible event variable. However, it might be assumed that in such cases there is a situationally or contextually determined invisible restriction on the event variable: ‘at that time’ as in (50a) or more generally ‘there and then’ as in (50b). The postverbal material in (50) represents new (focal) information or discourse-neutral information.

(50) a. (W owym czasie) nie było we wsi lekarza.  
(at that time) NEG was3.SG.N in village doctorGEN.SG.M  
‘(At that time) there was no doctor in the village.’

b. Był duży ruch.  
was3.SG.N [big traffic]NOM.SG.M  
‘There was heavy traffic.’
The interpretation we get in this case is that of a canonical thetic sentence. It is assumed in the
literature that though thetic judgements lack a topic constituent, they have a topic denotation,
namely the situation itself (see, among others, Erteshik-Shir 1997; Zybatow and Junghanns
1998; É. Kiss 2002; Krifka 2007; see also Boroschev and Partee 2002). In other words, in cases
in which the verb’s situation variable (see below) serves as a sentence topic, what the sentence
is about is exactly a situation as such, or more precisely, the fact that a situation as descriptively
categorized by a given vP/VP exists or does not exist. This accords with Sasse (1987: 526f.):
thetic sentences are assertions about the existence (or nonexistence) of some entity (referred to
by Sasse as “entity-central thetic expressions”) or some event (“event-central thetic
expressions”).

In the following section it will be shown how these ideas could be implemented in a phase
model of syntax.

5.3.2 Implementation: EPP and Edge features
It has been pointed out in Section 5.1 that Tense does not have phi-features on its own, but
rather inherits them from C. In addition, following a suggestion by Chomsky (2008), I assume
that T does not have any EPP-feature on its own. Rather, it might inherit this feature (understood
here in terms of an “edge feature”) together with phi-features from C. More precisely, in
discourse-neutral or unmarked contexts, i.e., in contexts in which no special requirements are
imposed by the proceeding discourse (see below), C will normally “pass” its edge feature onto
T together with phi-features. An important consequence of this is that in cases in which C
relinquishes to T its right to have its own specifier, i.e., when C transfers its edge feature to T,
it also abandons its “right of self-determination”, i.e., the ability to select on its own the
candidate (goal) for internal merge. Rather, the inherited edge feature from C can be satisfied
only by an element which simultaneously undergoes an Agree relation with Tense: If two
probes can be satisfied by one and the same goal, they might be “bundled” to one complex
probe which as such will seek a goal (in other words: two probes can “work in tandem” (see
also Miyagawa 2005)).

There are (at least) two options of how the edge feature (EF) of C can be satisfied:

(51) **Option 1**: EF is passed on together with phi-features to T; a feature-tie is formed: EF is
bundled up with the features of T (i.e., features that T either has on its own or
inherits from C) into a complex probe; as a consequence, EF can be satisfied only by
elements simultaneously undergoing an Agree relation with T.

Possible variants:

a. EF is satisfied by a (NOM) NP undergoing an Agree relation with Tense in phi-
features; the resulting structure is interpreted as a canonical categorical sentence with
a NOM NP as sentence topic.

b. EF is satisfied by a verbal element (v+V) undergoing an Agree relation with Tense
(which is analyzed here, following the proposal by Pesetsky and Torrego 2007, as an
agreement in Tense features); the resulting structure is interpreted as a canonical thetic
sentence with the verb’s situation argument in the function of sentence topic.

---

47 More recently, Jiménez-Fernández and Spyropoulos (2013) have extended this idea to v-V. Also v enters the
derivation with discourse and phi-features and also these features can be inherited in tandem or separately by V.
The idea is used to explain discourse-driven word order variation in small clauses.

48 Yet another possibility, not discussed below, would be an External Merge option, that is, the edge feature on C
could be satisfied by merging some element directly at the target, thus creating a specifier of C.

49 In order to explain how the verb movement to T can satisfy the edge feature of T (which T inherited from C), I
will assume Matushansky’s (2006) analysis of head movement according to which head movement consists in fact
(52) **Option 2:** EF stays on C (i.e., it is not passed on together with phi-features to T); no feature-tie is formed (on the contrary, we have to do with so to speak independent probes: EPP (EF) on C and phi-features (inherited from C) on T, plus, of course, the Tense feature on T); consequently, EF can be satisfied independently of agreement relations determined by T. To put it differently, C can determine on its own the candidate to satisfy its EF.

**Possible variants:**

a. C chooses a NOM (subject) NP to satisfy its EF; the resulting structure is (unlike that in Option (1-a)) “marked” in that the subject obligatorily receives a kind of contrastive or CLLD interpretation.\(^{50}\)

b. C chooses any other accessible (i.e., occupying the edge of the vP-phase) element to satisfy its EF; the resulting structure might also be considered as somehow “marked” (in comparison with the “unmarked” or canonical option (1-a)) in that the proposed element seems to be normally required to be discourse-linked.

5.3.3 Illustrative examples

When T agrees with a NOM NP, such an NP will normally satisfy the edge feature of T (which T has inherited itself from C) resulting in categorical statements in which the subject (the NOM NP) is the topic of the sentence; cf. (53). In other words, in an unmarked context the grammatical subject – unlike a nonsubject – can always – quasi per default – be interpreted as the topic of the sentence (recall (51a): Option 1-a).

(53) Lekarz był w wsi.
    doctor NOM.SG.M was 3.SG.M in village
   ‘The doctor was in the village.’

(53’) a. C T [vP NP v [VP V ...]]
    \[\begin{array}{c}
    \text{u}\phi^{[\text{val}]}
    \\
    \text{uEF}
    \\
    \text{uCASE}^{[\text{val}]}
    \end{array}\]
   ‘Feature transfer’ from C to T

b. C T [vP NP v [VP V ...]]
    \[\begin{array}{c}
    \text{u}\phi^{[\text{val}]}
    \\
    \text{uEF}
    \\
    \text{uCASE}^{[\text{val}]}
    \end{array}\]
   Agree in phi-features between T and NP

---

\(^{50}\) It would also be conceivable that C chooses a verbal element (v+V) to satisfy its EF. By analogy with (2-a), we would also expect the resulting structure in this case to receive (unlike in Option (1-b)) a kind of “marked” (e.g., obligatorily contrastive) interpretation.
Deletion of uninterpretable features \([uF]\) as a result of Agree

d. C  
```
T  [iP  NP  v  [VP  V .....]]
  ^{\phi[1]}  ^{i[1]}
uEF  \#\text{CASE[NOM]}^{51}
```

The NP undergoing an Agree relation with T is chosen to satisfy the EF

```
Movement/Internal Merge
```

\[
\begin{align*}
\text{C} & \quad \text{NP} \quad T \\
& \quad [iP  NP  v  [VP  V .....]]
\end{align*}
\]

\[
\begin{align*}
\text{EF} & \quad i\phi[1]  \quad \#\text{CASE[NOM]} \\
\text{T} & \quad [\text{[NP]}>52  \quad v  \quad [\text{VP}  \quad V \quad .....]]
\end{align*}
\]

Deletion of \([uEF]\) on T

If the edge feature is satisfied by the verb/verb complex \(v+V\) (which itself undergoes an Agree relation with T (Option 1-b in (51) above), then it is the situation variable of the verb that serves as a topic. The interpretation we get in this case is that of a canonical thetic sentence. Compare (54) (all irrelevant details are omitted here for ease of exposition).\(^{53}\)

(54)  
\[\text{Był duży ruch.} \]
\[\text{was}_{3,\text{SG,M}} \quad \text{big traffic}_{\text{NOM,SG,M}}\]
‘There was heavy traffic there.’

(54’) a. C  
```
T  \quad \text{Vb} (= v+V)
  ^{\phi[1]}  \quad i\phi[1]  \quad \#\text{val}
uEF
```

‘Feature transfer’ from C to T

b. C  
```
T  \quad \text{Vb}
  ^{\phi[1]}  \quad i\phi[1]  \quad \#\text{val}
uEF
```

Agree in Tense features between T and verb\(^{54}\)

c. C  
```
T  \quad \text{Vb}
  ^{\phi[1]}  \quad i\phi[1]  \quad \#\text{val}
uEF
```

Deletion of uninterpretable features \([uF]\) as a result of Agree / Valuation as part of Transfer

---

\(^{51}\) The presentation is simplified here somewhat for ease of exposition. Recall from Section 5.1.1 that feature valuation is part of the operation TRANSFER.

\(^{52}\) The square brackets indicate the copy of the moved NP.

\(^{53}\) As pointed earlier in Section 3.3, there is arguably no V-to-T raising in Polish (cf. Witkoś 1998). Notice that the assumed verb movement in thetic sentences has a discourse (information structure) motivation. The verb satisfies the edge feature. A similar claim is made in Zybatow and Junghanns (1998), who assume that the functional head T has in the case at hand an (abstract) Topic feature that triggers an overt verb movement to T and makes the situation time be interpreted as a topic of the sentence (see Zybatow and Junghanns 1998:41ff.; Junghanns 2003: 197).

\(^{54}\) See the discussion on Pesetsky and Torrego (2007) in Section 5.2. Recall ex. (46).
Let us turn now to Option 2 in (52), i.e., the case in which C retains its EF. Given that edge feature transferring to T is a more economical variant (see Błaszczak 2007 for discussion), we would expect that if C retains its edge feature but is nevertheless a NOM (subject) NP that is chosen by C to satisfy its edge feature (Option 2-a), the interpretation of the subject in such a case should be somehow marked, i.e., we expect it to deviate from the unmarked or default sentence topic interpretation. This is presumably what is going on in Greek and Romance languages but for space reasons cannot be discussed here.55

As far as Option 2-b is concerned, i.e., the case in which C chooses any other accessible element to satisfy its EF, let us look at (55). In (55) the initial GEN NP takes on the role of the sentence topic. One could use a sentence like (55) to tell something about John or about a certain doctor (notice that in the latter case the articleless NP doktora ‘doctor_{GEN}’ has a definite/thematic interpretation ‘the doctor’, i.e., it must be a doctor previously mentioned in the context). In sentences like the ones in (55), which are neither canonical categorical sentences with a default subject NP as sentence topic nor canonical thetic sentences with the verb’s situation argument as sentence topic, C does not pass on its edge feature to T. In accordance with the assumptions made earlier, C can select its own candidate (goal) for internal merge, i.e., unlike in the cases discussed above, it is not confined to elements with which it simultaneously undergoes an Agree relation. This is why a GEN NP can be chosen by C to satisfy its edge feature; cf. (55) (all irrelevant details, which have already been discussed above, are omitted here for ease of exposition; see below – Section 5.4 – for further details).

(55) (Context: John had a small accident and went to see his doctor. Unfortunately)

Lekarza nie bylo we wsi.
doctor_{GEN,SG,M} NEG BE_{3,SG,N,PAST} in village
‘The doctor was not in the village.’
(He had some important meeting in the town.)

55 In short, Alexiadou and Anagnostopoulou (1998) argue that in null subject languages like Greek or Spanish preverbal subjects in SVO orders do not occupy the canonical subject A-position but rather all preverbal subjects are Clitic Left Dislocated (CLLD) in an A’-position. But see Błaszczak (2007) for a critical discussion.
(55') a. C \[IN\{vP PP Vb [vP <V> <IN\{NP]<NP\}]}\]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[\phi\text{-features transferred from } C \text{ to } T; \text{ EF remains on } C\]
\[\text{EF of } C \text{ satisfied by the proposed } \text{GEN NP}\]

b. \[\text{NP}_{\text{GEN}} \rightarrow C \[IN\{vP PP Vb [vP <V> <IN\{NP]<NP\}]}\]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[\text{EF of } C \text{ satisfied by the proposed } \text{GEN NP}\]

(56) We wsi był lekarz.
in village was doctor
‘There is a doctor in the village.’

Now, regarding examples like (56) above, two possible derivations (and thus interpretations) seem to be available (see (56’) and (56’’)). Given an appropriate context, sentences like those in (56) could be interpreted as telling us something about a certain location. In this scenario, C would also choose the element satisfying its edge feature on its own (i.e., there would be no transfer of the edge feature from C to T, just in the case (55) above), and the chosen element in the case at hand would be the locative PP, receiving the interpretation as the sentence topic (see (56’)).

In addition, it seems that sentences like (56) could be used in a more neutral context as stating the existence of a certain situation in the past, namely that of the existence of a doctor in a village. In this case, we would have to do with a non-verb initial thetic sentence. According to our assumptions presented above, in the case at hand the verb’s situation variable would serve as sentence topic (recall (54’)). However, one would need then to assume that there is nevertheless yet another movement, creating the outer specifier of T by preposing the highest accessible constituent of the vP-phase: the locative PP in the case of the existential sentences (see above). Alternatively, such a PP could be simply assumed to adjoin to TP. The proposed PP can be analyzed in terms of providing an overt restriction for the situation variable; see (56’’).57

(56’) a. C \[vP PP Vb [vP <V> NP]\]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]
\[u_{\phi[1]} \rightarrow iT[1] \]
\[u_{\psi[1]} iT[val] \]

56 An anonymous reviewer wonders whether the locative PP, which is placed in [Spec,vP], wouldn’t be a closer goal to C than the NP, thereby acting as an intervener. This is not the case. As explained in Section 5.4.2, the NP lekarza ‘doctor’ counts as old information. As such it must move out of the VP to the edge of the first phase to avoid focus assignment. Being at the edge of the first phase, it will be accessible to the edge feature on C (see (54b)).

57 That locative (or temporal) expressions might function as restrictions on the event variable appears to be intuitively clear. É. Kiss (2002:115) notes that in Hungarian such temporal and locative expressions tend to appear in topic position; cf. (i) (ibid.). The truth value of a given sentence is evaluated with respect to the referent of such a temporal or locative element. Thus, the truth value of (i) is evaluated with respect to the referent of tegnap ‘yesterday’.

(i) \[\text{TopP tegnap } \text{[VP meghívta Marit János vacsorára]}\]
\[\text{yesterday invited Mary, John for dinner}\]
‘Yesterday John invited Mary for dinner.’
‘Feature transfer’ from C to T, EF remains on C

\[
\begin{array}{c}
\text{PP C T [v_P <PP> Vb [vp <V> NP]]} \\
\text{uEF} \quad \text{iT[1]} \quad \text{uT[ val]} \\
\text{uEF} \quad \text{EF of C satisfied by the proposed PP}
\end{array}
\]

(56’’) a. C T [v_P PP Vb [vp <V> NP]]
\[
\begin{array}{c}
\text{uEF} \quad \text{iT[1]} \quad \text{uT[ val]} \\
\text{‘Feature transfer’ from C to T}
\end{array}
\]

Agree in Tense features between T and verb

b. C T [v_P PP Vb [vp <V> NP]]
\[
\begin{array}{c}
\text{uEF} \quad \text{iT[1]} \quad \text{uT[ val]} \\
\text{Agree in Tense features between T and verb}
\end{array}
\]

Deletion of uninterpretable features [uF] as a result of Agree / Valuation as part of Transfer
c. C T [v_P PP Vb [vp <V> NP]]
\[
\begin{array}{c}
\text{uEF} \quad \text{iT[2]} \quad \text{uT[2]} \\
\text{Deletion of uninterpretable features [uF] as a result of Agree / Valuation as part of Transfer}
\end{array}
\]
d. C T [v_P PP Vb [vp <V> NP]]
\[
\begin{array}{c}
\text{uEF} \quad \text{iT[2]} \quad \text{uT[2]} \\
\text{The v-V undergoing an Agree relation with T is chosen to satisfy the EF}
\end{array}
\]

Movement/Internal Merge
e. C Vb T [v_P PP <Vb> [vp <V> NP]]
\[
\begin{array}{c}
\text{uT[2]} \quad \text{uEF iT[2]} \quad \text{uT[2]} \\
\text{Deletion of [uEF] on T}
\end{array}
\]
f. C [PP [Vb T [v_P <PP> <Vb> [vp <V> NP]]]]
\[
\begin{array}{c}
\text{uT[2]} \quad \text{uEF iT[2]} \quad \text{uT[2]} \\
\text{additional PP preposing}
\end{array}
\]

5.4 Further issues

Now that we know how agreement and case assignment work we can go back to the questions or problems we have left open in the previous sections and try to answer them and thus to complete the analysis developed in this paper.

5.4.1 PIC and the edge of a phase

The first question that needs to be clarified is what the edge of the first phase is. Recall from Section 4.2 that we have assumed that PolP belongs to the first phase, quasi as an extended projection of the vP proper; cf. (57).

\[
(57) \quad \text{[PolP Pol [v_P EA [v v [vp V NP]]]] (EA = external argument)}
\]
Now, given the structure in (52), neither the external argument nor the light verb \( v \) are – strictly speaking – at the edge of the first phase any longer and should not – in accordance with the PIC – be accessible to operations outside PolP. This is an unwelcome result since we know from the discussion earlier in this paper that both the external argument and the light verb (or the whole verbal complex: \( v+V \)) undergo an Agree relation with \( T \) (in phi-features, which \( T \) inherits from \( C \), and in Tense features, respectively). Moreover, both the external argument and \( v+V \) might serve as a goal for the edge feature of \( C \) (which is normally passed on to \( T \); see above). Thus, if nothing extra is said about how the external argument and \( v \) (or \( v+V \)) can be made “visible” to the probes outside the first phase, the PolP, we will be faced with a serious problem. Fortunately, there is a relatively easy way of solving this problem.

Notice that both the external argument (provided that EA is an NP with an unchecked, i.e., still active structural case feature; see below) and \( v \) still have some features that have not been satisfied within the first phase (recall Section 5.2). Would these elements remain in their base positions, their uninterpretable features [\( uF \)] could not be eliminated, thus causing the derivation to crash. The only way to prevent the derivation from crashing is to “repel” such elements to the edge of the structure constructed thus far, i.e., to the edge of PolP in the case at hand and thus making them accessible to operations in the second phase of derivation.\(^{58}\)

Notice that this “repel-based displacement” is not a real movement (or Internal Merge (IM) operation: it is not triggered by any uninterpretable feature of some attractor, or to put it differently, there is no probe at this point that would search for an appropriate goal and thus trigger an Agree or movement (IM) operation. Rather, what is going on in the case under discussion is that \( v \) (\( v+V \)) and the external argument are simply remerged to the very edge of the phase. Since this displacement/remerging operation is neither driven by an edge feature nor by phi-features, the target position will retain whatever status the original position has had. Thus, in the case at hand, the “new” position of the external argument will have the status of an A-position as far as further derivation is concerned; see (58).\(^{59,60}\)

\[
(58) \quad [\text{PolP} \ EA_{\{aF\}} \ [\text{PolP} \ [\text{Pol0max} \ VB_{\{aF\}} \ [\text{Pol}]] \ [vP \ <EA_{\{aF\}}] \ [v' \ <VB_{\{aF\}}] \ [VP \ <V> \ XP])]\]
\]

Note that – as shown in (58) – only elements with still unchecked uninterpretable features [\( uF \)] are repelled from \( vP \) and remerged at Pol/PolP. Thus, e.g., an external argument whose case feature has not been eliminated yet will be subject to this repel-based displacement operation. The question that arises now is what happens to external arguments which do not have any active case feature (any longer), as this is the case, for example, with locative PPs in existential sentences (on the assumptions made in Section 4). How will they ever be able to reach the edge of the first phase and to serve as potential goals for probes in the second phase of derivation?

---

\(^{58}\) This idea of “repelling” of elements whose uninterpretable features would otherwise remain unchecked to the edge of the structure constructed thus far, i.e., to the edge of the first phase, is in some sense similar to the proposal made by Stroik and Putnam (2005), according to whom displacement does not come from an operation that is either long-distance or attraction-based; rather, it comes from an operation that is local and repel-based; cf. (i).

\(^{59}\) This assumption seems to be justified, especially given Chomsky’s assumption (2008) that A- and A’-positions “are distinguished not by their structural status within a phrase-marker, but the manner in which they are derived” and [...] “A-/A’-movement have no status in the present framework” (Chomsky 2004:125; fn. 30).

\(^{60}\) Note also that all the elements within the vP (including the copy of the remerged external argument) will be licensed by negation, hence they could potentially be themselves (or contain themselves) so-called n-words, i.e., (morphologically) negative expressions of the type \( \text{niki} \) ‘nobody’, \( \text{nic} \) ‘nothing’ which participate in Negative Concord structures in Polish (see Błaszczyk 2001 for details). This would explain example (11) in Section 2.2.
(recall the discussion in Section 5.3). Before we answer this question, let us first clarify what happens to the (potential) edge feature of \( v \).

### 5.4.2 EF of \( v \) and Spellout Domain

Assuming a parallelism between C-T and \( v \)-V -- \( v \) can pass on its edge feature to V or retain it (see also footnote 47). In the former case a specifier of V is created, in the latter an outer specifier of \( v \) (the inner specifier position is “occupied” by the external argument). Now, if the edge feature is passed on to V, the specifier created in this case will not be at the edge of the phase anyway, even if we would stick to the standard Chomskyan assumption that \( vP \) is the first phase of derivation. What is not clear is, however, the question of what happens in the second case, i.e., when \( v \) retains its edge feature. At which point in the derivation would this feature have to be satisfied: before \( v \) (or Vb) moves to Pol\(^9\) or after this displacement has taken place? Note that if we assume the idea of repel-based displacement, then in principle only uninterpretable features that cannot be satisfied (eliminated, to be understood as: marked for deletion) during the first phase can cause such a displacement; all other features that can be satisfied within the first phase should be eliminated before the last resort operation (repel-based displacement) takes place. Consequently, this would mean for us that the edge feature of \( v \) must be satisfied before \( v \) (Vb) will be repelled to the edge of the phase (here: to Pol\(^9\)). But if so, the same question arises as in the case of external arguments which have no uninterpretable structural case feature (e.g., locative PPs in existential sentences), namely, how can such phrases satisfying the edge feature of \( v \) (thus creating the second, outer specifier of \( v \)) ever be able to reach the edge of the phase in order to be, for instance, accessible to the edge feature of C? To solve this problem, I would like to put forward the following idea whose details will have to be worked out yet.

Following the more or less standard assumption that at the end of a phase, the material in the complement of the phase-defining head undergoes Spell-Out, on the analysis developed here \( vP \) will be the spellout domain, given that PolP has been defined as the first phase of the derivation. Note that \( vP \) -- by virtue of being sister of Pol\(^9\) -- also represents the scope of negation/affirmation. Observe also that the scope of negation is normally taken to be directly correlated with Theme-Rheme (or focus) structure (Babby 1980; Prague school linguists; see Partee 2000 for discussion). If we assume a top-down model of focus assignment (cf. Rosengren 1993; Junghanns 2002), it could be claimed that the whole \( vP \) constituent is marked as ‘focus’ (‘rheme’), presumably as part of the operation TRANSFER. Now, we can assume that all material within the \( vP \) that is not compatible with this ‘focus’/‘rheme’ interpretation must leave the \( vP \) before it is sent to Spell-Out. This would mean that such elements will be remerged at the edge of PolP, or to used Zwart’s (2007) parlance, they will be “externalised” as the result of inner conflict (e.g., between old information as being not compatible with new information focus). A possible way of implementing this idea would be to assume that the fact that elements are interpreted as part of the focus domain or as background/old information is the consequence of the decisions one takes at the point of TRANSFER: all material we leave within the \( vP \) will be interpreted as focus/rheme, all other material which have been externalized from \( vP \) will be interpreted as old/background, discourse-linked information.\(^{61}\) Note that since this externalisation operation just like repel-based displacement is neither driven by an edge feature nor by phi-features, the target position will retain whatever status the original position has had.

Now, once we have made these assumptions, there will be no problem any longer to “remove” (if this is required), for example, the PP external argument (cf. (59a)), or the NP internal argument, which itself satisfies the edge feature of \( v \) (cf. (59b)), or both the PP external

\(^{61}\) Another possibility would be to assume that elements are somehow marked for being [-focus] and as such forced to leave the focus domain. As an anonymous reviewer points out, this option is less preferable since it relies on positing the focus feature and this would force the assumption that syntax can see the semantic features.
argument and the outer specifier of \( v \) (cf. (59c)) from \( vP \) and to remerge such elements at the edge of the phase.\(^{62}\) (59a) would represent the derivation of (56) while (59b) shows how example (55) would be derived. (59c) would represent a possible derivation of (48).

\[(59)\]

a. \([P_{PolP} PP_{LOC} [P_{PolP} [P_{Pol0max} Vb_{[uF]} [Pol]]] ]\)
\[\text{vP }PP_{LOC} [\text{v'} Vb_{[uF]} [\text{vP } V N P]]]]

b. \([P_{PolP} NP [P_{PolP} [P_{Pol0max} Vb_{[uF]} [Pol]]] ]\)
\[\text{vP }NP [\text{v'} PP_{LOC} [\text{v'} Vb_{[uF]} [\text{vP } V N P]]]]\]

c. \([P_{PolP} NP [P_{PolP} PP_{LOC} [P_{Pol0max} Vb_{[uF]} [Pol]]] ]\)
\[\text{vP }NP [\text{v'} PP_{LOC} [\text{v'} Vb_{[uF]} [\text{vP } V N P]]]]\]

6. Concluding remarks

Though there are certainly similarities between locatives, existentials and possessives, the idea that they all derive from the same underlying small clause structure seems to be too simple to account for all the different properties of the respective constructions. We have seen that such a uniform analysis would require assuming that there are two different BEs: BE incorporating the P-head (thus accounting for the change from BE to HAVE) and BE not incorporating the P-head (thus not changing to HAVE). But even if one made such an assumption, it would still not be clear what accounts for the use of a HAVE form in (some) existential sentences.\(^{63}\) Similarly, it is not clear what accounts for different interpretations given that locatives, existentials and possessives have underlyingly the same argument structure. What decides which element (NP_{THEME} or PP_{LOCATION}) has to move? If BE is not a lexical item with its own meaning but just a spell-out of functional heads in syntax, how do the different interpretations (existence vs. location etc.) arise?\(^{64}\)

It seems to me that the analysis advocated in this work that differentiated between different verbs BE (with different argument structures) not only avoids the technical and theoretical problems of a uniform analysis but also provides an explanation for the differences between various BE-sentences, and more importantly, has a solution to the otherwise puzzling GEN problem. As argued above, the difference between existential and locative sentences is syntactically encoded in terms of what (LOC or THING) is the subject of inner predication (at the vP/VP level). Also the case marking of the nominal argument has been claimed to be a matter of syntax. The actual word order in existential and locative sentences is pragmatically determined. For example, we have seen that in a (negated) existential sentence the nominal argument may appear postverbally or preverbally, depending on its discourse status. But importantly, in all these examples, independent of the actual position of the locative phrase in the sentence, it is the Location argument that is the subject of inner predication and the nominal

\(^{62}\) Note that all elements at the edge of a phase are equidistant to probes outside this phase.

\(^{63}\) Recall that in the analysis advocated in this work there is no need to resort to some P-into-BE incorporation mechanism to explain the change from a BE to a HAVE form in negated present tense existential sentences. The solution was suggested in Section 5.1.2 to follow quite naturally from the assumptions made about the conditions on GEN marking.

\(^{64}\) But see Hartmann and Miličević (2008). The authors, though also arguing contra Freeze (1992) that the existential structure is different from the locative one, do not assume that BE is a lexical verb. They argue that true existential meaning comes about through the interaction of the existential predication structure and the nominal structure. See also Myler (2014) (refer to footnote 24).
argument (‘Thing’) that is the object. This shows us that the case marking of the nominal argument cannot be primarily a matter of information structure.

However, this analysis also has a price to pay, namely it forces us to assume different verbs BE; each BE has its own selectional properties: (i) existential BE, (ii) possessive BE / HAVE (iii) locative BE (agentive reading), and (iv) locative BE (simple position meaning. Interestingly, as has been pointed out to me by Juan Romero (p.c.), in Spanish there are four different verbs: *ser, estar, haber, and tener*, which roughly (but not exactly) correspond to the verbs in (36). This might indicate that such a costly differentiated analysis could be on the right track. But definitely more research is needed to decide whether the price we have to pay for a nonuniform analysis is fair enough.

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65 Cf. (i)-(iv) for illustration:

(i) Pedro *tiene* un coche.
   Peter has a car
   ‘Peter has a car.’

(ii) Pedro *es* de Berlin.
    Peter is from Berlin
    ‘Peter is from Berlin.’

(iii) a. Pedro *está* en Berlin.
   Peter is in Berlin
   ‘Peter is in Berlin.’
   b. El hombre *está* en el parque.
    the man is in the park
   ‘The man is in the park.’

(iv) *Hay* un hombre en el parque.
   has a man in the park
   ‘There is a man in the park.’

Note that *haber* in (iv) corresponds to the existential meaning (or maybe also to ‘simple position’, as Juan Romero (p.c.) points out). *Estar* in (iii), on the other hand, would correspond to ‘agentive’ locative meaning, as further evidenced by the fact that you cannot use inanimate wh-phrases with *estar*. Cf. the following contrast in (v) pointed out to me by Juan Romero (p.c.). I leave these matters for further research.

(v) a. **Quién / *Qué está en el parque?**
   ‘Who is in the park?’
   ESTAR: ✓ who / *what

   b. *Quién / ✓ Qué hay en el parque?
   Lit.: ‘What is there in the park?’
   HABER: ✓ what / *who

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