

INVERSE BINDING AND THE STATUS OF THE SPEC. TP POSITION IN  
POLISH

PRZEMYSŁAW TAJSNER

*Adam Mickiewicz University, Poznań*

ABSTRACT

If the object DP in “inverted” OVS orders in Polish is anaphoric, then there is a question of the satisfaction of anaphoric A-binding in this new position. One type of examples suggests that there is no reconstruction at LF, hence the movement is to an A-position. Other cases seem to indicate the extension of the binding domain. Nonetheless, more facts from Polish point to contrary assumptions. First, object DPs with anaphoric possessives seem to be reconstructed at LF in base positions and there are examples suggesting no extension of the binding domain.

The paper offers an account of these perplexingly contradictory facts in terms of the Thematic Hierarchy (Grimshaw 1990) and the specific First Merge properties of “quirky” subjects for some object experiencer verbs (e.g. *podobać się*) and psych-causative (*frighten*-type) verbs (*irytować*). Such subjects do enter the derivation in Spec.vP but rather in Spec.VP positions. In conclusion, it is argued that the OVS configurations in Polish do not differ in principle from so-called *Dislocation* structures, featuring the OSV order (contrary to Baylin 2003 and Witkoś 2007).

1. Introduction

It has been suggested by Tajsner (1998) and Witkoś (2007) that the derivation of the non-canonical OVS order in Polish involves a displacement of an object into the Spec. TP position. The problem which we want to address in this paper is that of the syntactic status of the Spec. TP position in Polish. On raising the issue we also want to address a related question of the classification of the operation of argument scrambling to Spec. TP as either A- or A'- type of movement.

## 2. Extension of binding, reconstruction and object raising to Spec. TP

The relevant examples are (1)-(3) below, all representing the “inverted” OVS order.<sup>1</sup>

- 1) Książkę dał Ani **Marek**.  
book<sub>ACC</sub> gave Anna<sub>DAT</sub> Marek<sub>NOM</sub>  
‘Mark gave Anna a book.’
- 2) Ani dał Marek **książkę**.  
Ann<sub>DAT</sub> gave Marek<sub>NOM</sub> book<sub>ACC</sub>
- 3) Janka zaprosił **Adam**.  
Janek<sub>ACC</sub> invited Adam<sub>NOM</sub>  
‘Adam invited John.’

In his discussion of Russian scrambling Baylin (2003) classifies analogous Russian cases as instances of A-movement (*Generalized Inversion, GI*) and contrasts them with the OSV pattern derived by so called *Dislocation*, which he claims to be an instance of A'-movement. The diagnostics is based on syntactic locality tests and the binding properties of the derived structures. Unlike the cases of Dislocation, Generalized Inversion is claimed to be an instance of A-movement showing little LF reconstruction effect, and allowing for the extension of the A-binding domain. Witkoś (2007) generally sustains Baylin's (2003) claims for Polish. He provides an example of the extension of the binding domain in the sentence's left edge involved in an instance of GI:

- 4) ?? Nowe historie o sobie spodobały się Marii.  
[new stories about self]<sub>NOM</sub> liked self Mary<sub>DAT</sub>  
‘Maria liked new stories about herself.’
- 5) Marii spodobały sie nowe historie o sobie.  
Mary<sub>DAT</sub> liked self [new stories about self]<sub>NOM</sub>  
‘Maria liked new stories about herself.’

Example (4) is illicit because there is no binder for the anaphoric expression included within the nominative (subject) DP. If the dative indirect object is raised (inverted by GI) to the Spec. TP position it provides a necessary binder

---

<sup>1</sup> The use of bold type on the final words in (1)-(3) indicates the application of nuclear sentence stress for rendering non-exhaustive end-focus.

for the anaphor, hence the grammaticality of (5). The case has been referred to as “inverse binding” in which the object binds a constituent within the subject.

Furthermore, GI, unlike Dislocation, is argued not to reconstruct on the basis of the cases like the following:

- 6) Nowe książki o Janie spodobały się jemu samemu.  
 [new books about Jan<sub>i</sub>]<sub>NOM</sub> liked self to him<sub>i</sub> himself  
 ‘New books about Jan pleased him himself.’
- 7) \*?Jemu<sub>i</sub> samemu spodobały się nowe książki o Janie<sub>i</sub>.  
 To him<sub>i</sub> himself liked self [new books about Jan<sub>i</sub>]<sub>NOM</sub>  
 ‘New books about Jan pleased him himself.’

If there was reconstruction in (7) its ungrammaticality should be alleviated with the dative indirect object placed back in LF into the c-command domain of the subject, hence eliminating the observed Condition C effect. Such an alleviation of the Condition C violation may be observed in an instance of Dislocation, deriving the OSV order:

- 8) [Jemu<sub>i</sub> samemu] [nowe książki o Janie<sub>i</sub>] nawet się spodobały.  
 [to him<sub>i</sub> himself] [new books about Jan<sub>i</sub>]<sub>NOM</sub> even self liked  
 ‘New books about Jan even pleased him himself.’

The explanation of the contrast lies in that Dislocation is an instance of A'-movement featuring obligatory LF reconstruction.

The status of the Spec. TP position is crucial for the explanation of the observed properties and contrasts. If it is an A-position, then the constituents raised to the position may serve as A-binders and the binding domain is expanded along with the movement. It seems, however, that a wider range of facts from Polish do not corroborate such a status of the Spec. TP position, at least for the cases of the inverted OVS pattern. We will try to show below that the facts of anaphoric binding in Polish put the possibility of the extension of the binding domain postulated for GI by Baylin (2003) and Witkoś (2007) in doubt.

### 3. Anaphoric phrases in Polish

Consider first in brief what constitutes a class of Polish anaphoric expressions. The class comprises the set of free-standing pronominal DP forms inflected for accusative, genitive, dative, instrumental and locative cases:

- |    |               |               |              |             |              |
|----|---------------|---------------|--------------|-------------|--------------|
| 9) | Acc           | Gen           | Dat          | Inst        | Loc          |
|    | <i>siebie</i> | <i>siebie</i> | <i>sobie</i> | <i>sobą</i> | <i>sobie</i> |

The accusative form renders English personal reflexive forms: *herself*, *themselves*, etc., the dative form renders English *to herself*, *to themselves*, and the locative one, the forms *about herself*, *about themselves*, etc. The class of anaphors comprises also an instance of the anaphoric possessive *swój*, inflected for case, number and gender, for example:

- 10) *swój*<sub>ACC/SING/MASC</sub> dom (his/her/their, etc. (own) house)  
*swoją*<sub>ACC/SING/FEM</sub> mamę (his/her/their, etc. (own) mother)  
*swoimi*<sub>INST/PL</sub> kolegami (with his/her/their, etc. (own) colleagues)

Interestingly, the case paradigm for the anaphoric pronoun represented in (9) lacks a nominative form. This may be understood as a restriction imposed on the grammar by the Polish lexicon; the subject cannot be anaphoric. The restriction may be overcome by syntactic means, though. Thus, the anaphoric adjective *swój* may occur within a nominative DP, in a class of comparative constructions with a preposition *jak* ('like'), as in (11):<sup>2</sup>

- 11) Jarek<sub>i</sub> wygląda jak [*swój*<sub>i</sub> brat bliźniak]<sub>NOM</sub>.  
 Jarek<sub>NOM</sub> looks how [his (own) twin brother]<sub>NOM</sub>  
 'Jarek looks like his twin brother.'

#### 4. Constraints on inverse binding

Provided that the presence of the anaphoric adjective makes the whole DP anaphoric in a relevant respect, one might try to put it in a position c-commanded by a direct object raised to Spec. TP by Generalized Inversion, as in (12) or (13):

- 12) \*Marysi<sub>i</sub> zdradziła swoja<sub>i</sub> siostra.  
 Mary<sub>ACC</sub> betrayed [her (own) sister]<sub>NOM</sub>  
 'Mary was betrayed by her own sister.'
- 13) \*Marysi<sub>i</sub> spodobały się swoje<sub>i</sub> siostry.  
 Mary<sub>DAT</sub> liked self [her (own) sisters]<sub>NOM</sub>  
 'Mary liked her own sisters.'

The placement of the object DP in Spec. TP should provide the binder for the anaphor within the nominative DP just as it happened in (5) above. This does

<sup>2</sup> Likewise, a free standing anaphor like *sobie* may be part of a larger DP in nominative like *historie o sobie* 'stories about oneself'.

not occur in either (12) or (13) though, and the sentences are ungrammatical, displaying the lack of proper anaphoric binding. In that they do not differ from the non-inverted forms (14) and (15):

- 14) \*Swoja<sub>i</sub> siostra zdradziła Marysię<sub>i</sub>.  
[her (own) sister]<sub>NOM</sub> betrayed Mary<sub>ACC</sub>
- 15) \*Swoje<sub>i</sub> siostry podobały się Marysi<sub>i</sub>.  
[her (own) sisters]<sub>NOM</sub> liked self Mary<sub>DAT</sub>

The case (15) above is particularly instructive. Inverse binding (extension of the binding domain) appears to be possible in (5) featuring an anaphor occurring as a complement of a noun (*historie o sobie* ‘stories about -self’) but not in (15) in which the anaphor takes the form of a possessive adjective (*swoje siostry* ‘her own sisters’).

Consider also a case of the inversion involving a PP complement:<sup>3</sup>

- 16) \*U Kowalskich<sub>i</sub> był swój<sub>i</sub> krewny.  
At the Kowalskis was [their (own) relative]<sub>NOM</sub>  
‘Their (own) relative was at the Kowalskis.’

Again, the DP within the PP raised to Spec. TP does not provide the binder for the anaphor within the nominative DP. Note also that all the above cases of illicit binding are rescued if the possessive anaphoric adjective is replaced with the pronominal forms:

- 17) Marysię<sub>i</sub> zdradziła jej<sub>i</sub> siostra.  
Mary<sub>ACC</sub> betrayed [her sister]<sub>NOM</sub>  
‘Mary was betrayed by her own sister.’
- 18) Marysi<sub>i</sub> podobały się jej<sub>i</sub> siostry.  
Mary<sub>DAT</sub> liked self [her sisters]<sub>NOM</sub>  
‘Mary liked her own sisters.’

<sup>3</sup> The case is supposed to correspond to the grammatical Russian example used by Baylin (2003), which illustrates the possibility of extending the binding domain as a result of Generalized Inversion:

U Petrovych byl svoj dom.  
At the Petrovs was [self’s house]<sub>NOM</sub>  
‘The Petrovs had their own house.’

The possessive meaning of the construction is not available in Polish, only a locative meaning. This probably affects the syntactic analysis of the construction, though it is not clear how.

- 19) U Kowalskich<sub>i</sub> był ich<sub>i</sub> krewny.  
 At the Kowalskis was [their relative]<sub>NOM</sub>  
 ‘Their relative was at the Kowalskis.’

The examples above show clearly that the binding domain is not extended in these cases. If the Spec. TP position was unconditionally an A-position, then any constituent with matching inherent properties should be able to act as an A-binder of a lower anaphor. What may be observed instead is that the non-subject DP can only control the lower pronominal, which excludes the extension of the binding domain.

Furthermore, the form with the accusative DP containing the anaphoric adjective inverted to Spec. TP c-commanding a subject DP is fully licit:

- 20) Swoją<sub>i</sub> siostrę zdradziła Marysia<sub>i</sub>.  
 [her (own) sister]<sub>ACC</sub> betrayed Mary<sub>NOM</sub>  
 ‘Mary betrayed her own sister.’

Examples like (20) indicate that the inverted OVS structure is reconstructed at LF for binding just like a corresponding Dislocation OSV structure (21) is:

- 21) Swoją<sub>i</sub> siostrę Marysia<sub>i</sub> zdradziła.  
 [her (own) sister]<sub>ACC</sub> Mary<sub>NOM</sub> betrayed  
 ‘Mary betrayed her own sister.’

The site of the reconstruction must be low enough to allow for the subject DP to c-command the direct object again. The reconstruction of the object cannot thus occur in the “intermediate” outer Spec. vP, because from there the object still c-commands the subject in the base position of the inner Spec. vP, as shown in (22):<sup>4</sup>

- 22) [<sub>vP</sub> [swoją<sub>i</sub> siostrę] [<sub>vP</sub> [Marysia]<sub>i</sub> ...]]

Rather, the reconstruction site for the object must be the position of its first Merge as a complement of the verb:

- 23) [<sub>vP</sub> [Marysia]<sub>i</sub> ... [<sub>vP</sub> V [swoją<sub>i</sub> siostrę]]]

---

<sup>4</sup> We apply here the phase-based mode of derivation and the clausal architecture involving a “light” verb projection vP with two possible Specifier positions, the inner one and the outer one, as in Chomsky (1999, 2001, 2005).

It follows from the above observations that the option of inverse binding is not freely opened to all instances of the object DPs raising to Spec. TP instead of the subject. The extension of the binding domain appears to be conditioned in two important ways; (i) the DP raised to this position must be a (dative) object of an experiencer type of verb, but not an (accusative) object of a different type of verb, and (ii) the anaphor bound by the object must be a free standing anaphor embedded within a larger DP (*historie o sobie* ('stories about -self'), *dowcipy z siebie* (*samego*) ('jokes about -self')), etc. but not the possessive, anaphoric adjective (*swoje siostry*, *swojego brata*, etc.). It has also been shown that the placement of the anaphoric DP in Spec. TP in GI configurations is possible without changing the binding relations in a sentence. This indicates that there is possible reconstruction in such cases, contrary to Bailyn's (2003) and Witko's (2007) predictions.

#### 5. Argument structure of Experiencer verbs and *frighten*-type psych verbs

If the above predictions and grammaticality judgments are correct then we can return to Witko's (2007) arguments about the status of GI and the position of Spec. TP in Polish and consider a possible alternative explanation. First, the acceptable cases involving the extension of the binding domains he provides are limited to the class of object *experiencer* verbs, like *podobać się* ('like') in which the dative object takes the function of a "quirky subject". It may be observed, however, that at least one more verb type in Polish displays similar properties. These are the so called *frighten* verbs of the class of psychological verbs, represented in Polish by such items as *irytować*, *niepokoić*, *przerażać*, *szokować*, etc. ('irritate', 'disturb', 'frighten', 'shock', respectively), as exemplified by (24) below.<sup>5</sup>

- 24) Marię<sub>i</sub> irytowały/przerażały/niepokoili/szokowały [historie o sobie]  
 Mary<sub>ACC</sub> irritated/frightened/disturbed/shocked [stories about self]<sub>NOM</sub>  
 'Mary was irritated/frightened/disturbed/shocked by the stories about herself.'

The "quirky" subject in such cases bears Acc not Dat.<sup>6</sup> Next, the only type of anaphor which appears in constructions with such verbs are those embedded within a larger nominative DP (e.g. *historie o sobie*, 'stories about oneself') while the DPs

<sup>5</sup> We use here Grimshaw's (1990) classification of predicate types.

<sup>6</sup> By "quirky" subject we mean a case when the thematically most prominent argument is not also the most prominent in the other dimension, as proposed in Grimshaw (1990). This includes the cases in which non-nominative, and non-agent DPs become subjects.

containing a possessive anaphoric adjective (e.g. *swoja siostra*, ‘one’s own sister’) do not appear to tolerate extended binding. The situation is analogous to this represented by experiencer object verbs, as illustrated by (25) and (26):

- 25) \*Marii<sub>i</sub> podobał się swój<sub>i</sub> nauczyciel.  
Mary<sub>DAT</sub> liked self her (own) teacher
- 26) \*Marię<sub>i</sub> irytowała/przerażała/niepokoїła/szokowała swoja<sub>i</sub> siostra.  
Mary<sub>ACC</sub> irritated/frightened/disturbed/shocked her (own) sister

Furthermore, the effect of the extension of binding is lost for both groups of verbs if the DP contains possessive lexical subject:

- 27) \*Marię<sub>i</sub> irytowały [ich<sub>j</sub> historie o sobie<sub>i</sub>]  
Mary<sub>ACC</sub> irritated [their stories about self]<sub>NOM</sub>  
‘Mary was irritated by their stories about her.’
- 28) \*Marii<sub>i</sub> spodobały się [ich<sub>j</sub> nowe historie o sobie<sub>i</sub>].  
Mary<sub>DAT</sub> liked self [their new stories about self]<sub>NOM</sub>  
‘Maria liked their new stories about herself.’

Given the above handful of intriguing facts we would like to suggest that the source of the acceptability of examples like (5) and (24) is that they involve two semantically marked classes of verbs. These are the object experiencer verbs and dyadic (selecting two arguments, as in Klimek – Rozwadowska 2004) *frighten*-type psychological verbs. One complement of such verbs denotes the theme or source (or involuntary causer) of emotions experienced by the individual denoted by the second complement. The former complement is rendered as nominative, the latter may be dative (for object experiencer verbs, e.g. *podobać się* ‘like’), *przypomnieć się* ‘recall’), or accusative (for *frighten*-type *psych* verbs). The thematic role carried by the nominative DPs is *Source* or *Theme* while that of the dative or accusative argument is invariably the *Experiencer*.

## 6. The thematic hierarchy

The crucial element of the proposal is now the adoption of some form of the Thematic Hierarchy by which “the order of NP arguments is *not* free...” We thus follow an assumption that “the consensus in the field is that the order is determined by the thematic roles of the corresponding semantic arguments” (Jackendoff 2002: 143). Grimshaw (1990: 24) postulates the following thematic hierarchy:<sup>7</sup>

<sup>7</sup> The discussion of the dependence of syntactic order on thematic hierarchy and the proposals of



## 29) (Agent (Experiencer (Goal/Source/Location (Theme))))

What matters most for our needs is that of the two theta roles associated with object experiencer and *frighten*-type psych verbs, the Theme and Source argument are less prominent than the Experiencer argument. This designates to them a lower position in a syntactic hierarchy.

In Grimshaw's (1990) terms the prominence relations in the argument structures involved for object experiencer verbs and *frighten*-type of psych verbs are as follows:<sup>8</sup>

## 30) Psychological state (object experiencer verbs)

(x (y))  
Exp Theme

31) Psychological causative (*frighten*-type psych verbs)

((x (y)))  
Exp Theme

(adopted from Grimshaw 1994: 41).

The difference between the depth of embedding of the x argument for the two types of verbs follows from the difference in their prominence in the *event structure* they enter in the two cases. The event structure, which Grimshaw (1990) argues to be associated lexically with every verb, expresses the aspectual dimension by which an expression is split into two sub-events: the activity and the state. The argument expressing Cause is claimed to be always associated with the first sub-event, which gives it prominence in the aspectual dimension with respect to all other thematic roles. For the class of object experiencer verbs there is no Cause argument involved, hence the Experiencer role is most prominent in both the thematic hierarchy and the aspectual hierarchy. This determines its status as an external argument.

If there is a mismatch between the prominence of an argument in the two hierarchies, no argument gains the status of the external argument. This occurs in the case of *frighten*-type psych verbs, which involves the Cause role. The

---

the relevant hierarchies may also be found in: Grimshaw (1990), Dowty (1991), Van Valin and La Polla (1997), Jackendoff (1990a).

<sup>8</sup> Actually, Grimshaw (1990) discusses the difference between *fear*-type psych (*fear, like, love*) verbs and *frighten*-type psych verbs (*frighten*). We classify Polish object experiencer verbs like *podobać się, przypominać się* ('like', 'recall') together with Grimshaw's *fear*-type psych verbs on the following grounds: Both types involve the same two arguments: Theme and Experiencer, which are canonically aligned in the same way: Experiencer > Theme (*Jankowi podoba się Ania* vs. *John likes Anna*). Furthermore, neither of them expresses a clear causative relation: Theme is not a Cause of the action.

Cause, which is subsumed in the Source role, is more prominent in the aspectual dimension while Experiencer is more prominent in the thematic hierarchy. As a result, no argument gains the status of the external argument in (31), hence the greater depth of embedding of *x* in (31) than in (30). Despite the lack of the external argument in the structure of *frighten*-type psych verbs, the prominence of Exp with respect to Theme (Source) is anyhow warranted, as presumed by the hierarchy in (29).

#### 7. Thematic hierarchy, the position of first Merge and the reconstruction site

Following these assumptions, the dative and accusative objects raised to the position Spec. TP in examples like (5) and (24) above are Experiencer arguments, which according to the thematic hierarchy, should precede the Theme arguments. A reverse consequence of the thematic hierarchy predicted in Grimshaw's theory is that "theta marking always proceeds from the least to the most prominent" (Grimshaw 1990: 35). The interpretation of these points in terms of the minimalist derivation should be that the argument with a less prominent role should be first-Merged lower in the structure. If this is correct, the binding facts observed in (5) and (24) would follow straightforwardly if the base (i.e. first-Merge) structure was reconstructed at LF in which the dative and accusative DPs c-command the nominative DPs.

We have seen that there is evidence for the need of such reconstruction from examples like (20). It may be seen also that the account proposed explains the ungrammaticality of (7). The case (12) is explained as well, since it features a relation in which the (nominative) Agent argument contains the anaphor, which cannot thus be properly bound in the reconstructed LF structure by the accusative DP, regardless of the surface alignment between the two DPs. What remains to be explained are the cases (13) and (15) as well as (25) and (26) above, in which the possessive anaphors are included in the DPs representing Theme or Source. Since they are the arguments merged earlier than the DPs representing Experiencer, at a reconstructed LF, the Experiencer DP should thus always c-command the Theme/Source argument at a reconstruction site allowing for proper binding of the anaphor contained in the latter, regardless of the superficial order of the two. One more unexplained case is (4) in which at LF the dative (experiencer) DP apparently binds the nominative DP, thus giving no account of the marginality of the example.

Let us first consider the cases (13), (15), (25) and (26). The crucial property of the structures will be that the anaphor functions in them as a possessive adjective (e.g. *swoją siostrę* 'his (own) sister'). In that the cases differ from the grammatical examples in which the anaphor is a free-standing complement of a noun (*historie o sobie* 'stories about -self') embedded deeper within the struc-

ture of the DP. The explanation of the contrast we propose is based on two premises. The first is the observation of the general difference in availability of anaphoric interpretation between two types of configurations, illustrated below:

- 32) \*Swoje<sub>i</sub> dowcipy irytowały Marysie<sub>i</sub>.  
 her own jokes<sub>NOM</sub> irritated Mary<sub>ACC</sub>  
 intended meaning: ‘Her<sub>i</sub> own jokes irritated Mary<sub>i</sub>.’
- 33) Dowcipy o sobie<sub>i</sub> irytowały Marysie<sub>i</sub>.  
 Jokes about herself irritated Mary  
 intended meaning: ‘Jokes about her<sub>i</sub> irritated Mary<sub>i</sub>.’

If the anaphor is the possessive specifier of the nominal phrase the anaphoric interpretation is excluded and the sentence is illicit. If the anaphor is embedded deeper within the nominative subject DP the anaphoric interpretation is possible and the sentence is well formed.

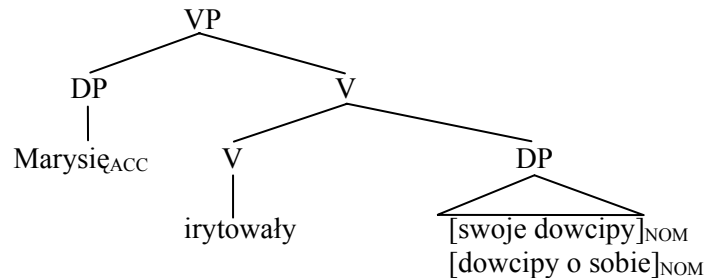
The real nature of the violation in (32) is not obvious. Assuming that the nominative subjects occupy A-positions in both (32) and (33), the source of the ungrammaticality of (32) is presumably not the lack of proper anaphoric A-binding. If this was the problem with (32) there would be no explanation for the well-formedness of (33) in which anaphoric binding is possible despite analogous configuration. More plausibly, the inappropriateness of (32) is caused by a Condition C violation with the name A-bound by the anaphor. The condition for such an account is the postulation of the “anaphoric transparency” of the phrase, so that the anaphoric “load” of the specifier percolates to the whole subject DP.<sup>9</sup> There is no condition C violation in (33) because the anaphor is more deeply embedded there and its “anaphoricity” does not project to the whole subject DP.

However, we have assumed in the previous discussion that in the derivations of examples like (32) and (33) featuring a psych *frighten*-type verb, the DP representing the *Experiencer* theta role is more prominent, hence base-Merged later. The relevant configuration at the point of the first Merge of the *Experiencer* DPs is (34):<sup>10</sup>

<sup>9</sup> A further question is the presence of co-indexation which is generally incompatible with a minimalist approach to binding. If anaphoric binding properties are in fact the result of A-movement, as in Hornstein (2001) the analysis would have to account also for the mechanics of the movement from the position of anaphor to antecedent, the question to which we return.

<sup>10</sup> We assume that the anaphors are “copies” of the DPs moving locally as in Hornstein (2001). The insertion of the antecedents of the anaphors is thus an instance of Internal Merge, not External Merge, with further consequences for the composition of Initial Numeration. We do not discuss here the details of the analysis in this respect, though.

34)

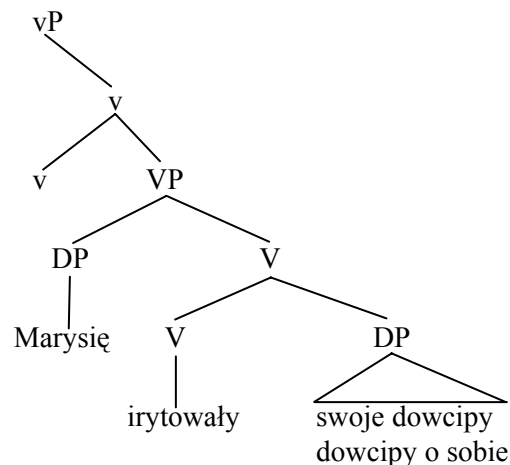


The vital property of the configuration in (34) is that the Acc DP c-commands the anaphors within the Nom DP, hence allowing for the anaphoric interpretation. Furthermore, given Grimshaw's (1990) predictions, the *Exp* argument in (34) is not the external argument. This may be interpreted in minimalist terms as base-Merge in [Spec. VP], not [Spec. vP].

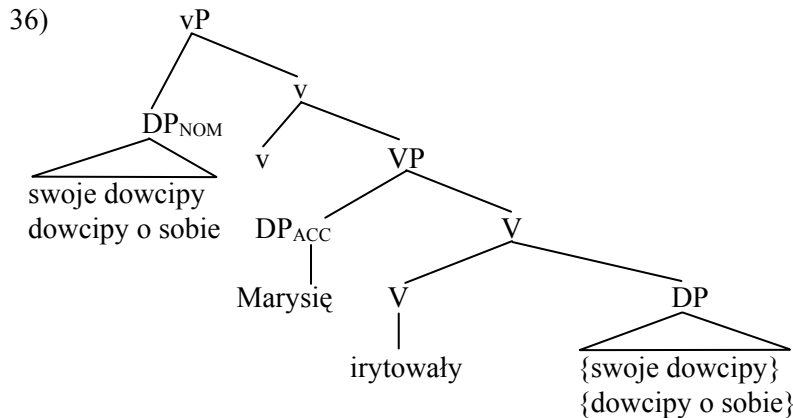
Nevertheless, the presence of the *v* head and hence of the Spec. vP position appears indispensable for the structure in (34) given the presence of nominative Case on the lower DPs. A nominative DP has to enter an Agree relation with a T head which is to be introduced at a later (CP) phase so that it must occupy a position which is accessible for such a relation. This is the second major premise on which we base our analysis of the perplexing contrast between the effect of anaphoric binding in the cases involving possessive and free-standing anaphors.

Thus, a merger with *v* is the next step in the derivation of examples (32) and (33) resulting in the formation of configuration (35):

35)



The nominative DP is then internally merged in Spec. vP, which is also an A-position. This results in the extension of the binding domain, as illustrated in (36):



Configuration (36) may be taken to be responsible for the Condition C violation resulting in the ungrammaticality of (32), as discussed above.<sup>11</sup>

#### 8. Verbs *podobać się* and *lubić*

Note also that the account proposed above allows for the explanation of the perplexing contrast between examples (37) and (38):

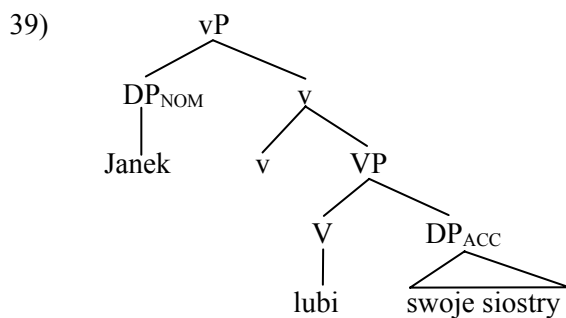
- 37) Janek<sub>i</sub> lubi swoje<sub>i</sub> siostry.  
 Janek<sub>NOM</sub> likes his own sisters<sub>ACC</sub>  
 ‘Janek<sub>i</sub> likes his<sub>i</sub> sisters.’
- 38) \*Jankowi<sub>i</sub> podobają się swoje<sub>i</sub> siostry.  
 Janek<sub>DAT</sub> likes his own sisters<sub>NOM</sub>  
 ‘Janek<sub>i</sub> likes his<sub>i</sub> sisters.’

The verbs *lubić* and *podobać się* (‘like’) are synonymous and we will assume that they belong to the same semantic class of object experiencer verbs. The theta role of the prominent argument for both is *Experiencer* and the lower argument is marked as *Theme*. As indicated above, the difference between them is purely syntactic and it lies in the selection of cases. In the derivation of either sentence, the *Experiencer* DP is the most prominent argument in terms of the thematic hierarchy. Consistently, it should be merged later in a structure than

<sup>11</sup> We assume here that the configuration in (36) is LF-reconstructed fully after the movement of the ACC object to Spec.TP. Thus, the superficial position of the ACC object in *Marysię irytowały swoje dowcipy* is Spec. TP, which is an A'-position which does not extend the binding domain, as discussed earlier. But, at LF it is reconstructed in Spec.VP. The nominative subject, in turn, is reconstructed in the position of first Merge, as a complement of V.

the second *Theme* argument. However, “later” means different things for the two cases; for the verb *podobać się* the Exp DP is first-merged in Spec. VP, as discussed above, resulting in a configuration analogous to (34) above. For the verb *lubić*, however, probably for economy reasons, the experiencer DP is first-merged already in the Spec. vP.<sup>12</sup> This means it qualifies syntactically for the external argument.

The configuration after the whole sequence of the first mergers of the arguments at the vP phase in the case of sentence (37) would be like in (39) below:



Naturally, there is no possible movement (internal Merge) of the accusative DP to Spec. vP, as it is the case in the derivation of examples with *podobać się* because the position is occupied by the nominative DP. No promotion of a “quirky subject” to the external argument is thus possible in this case. A further result is that in (39), which is a base structure reconstructed at LF, there is no possible violation of binding conditions A or C, hence the grammaticality of (37), and any “scrambled” or topicalized variant of (37) like those in (40) and (41):

40) Swoje<sub>i</sub> siostry lubi Janek<sub>i</sub>.

41) Swoje<sub>i</sub> siostry Janek<sub>i</sub> lubi.

Recall that Grimshaw (1990) has distinguished between psych (*frighten* type) and object experiencer verbs by assuming that the second class projects an external argument while the first does not. We interpret these points in a different way; Polish psych verb (*frighten*-type, e.g. *irytować*) and the verb *podobać się* of the object experiencer class project the empty position of the external argument as the Spec. vP. This is an A-position which has to be filled with a nominative DP by Internal Merge and not by External Merge. The relevant DP is first merged in a lower position, as the complement of the verb. For the verb

<sup>12</sup> The economy measure is the following; by first-merging in Spec. vP, not Spec. VP, there is no need for another instance of Internal Merge (Move).

*lubić*, the position of the external argument (Spec.vP) is filled by an instance of External Merge by the nominative (*Experiencer*) DP, while the other DP (*Theme*) is first merged as the complement of the verb. In this way we derive an observed parallel between psych verbs and the verb *podobać się*, which is not shared by the synonymous verb *lubić*, with respect to the binding properties.

### 9. Psychological agentive verbs

It should be noted finally that the psych (*frighten*-type) verbs in Polish have their regular transitive counterparts, illustrated in (42):

- 42) Marię<sub>i</sub> irytował/przerażał/niepokoił/szokował jej<sub>i</sub> sąsiad.  
 Mary<sub>ACC</sub> irritated/frightened/disturbed/shocked [her neighbour]<sub>NOM</sub>  
 ‘Mary was irritated/frightened/disturbed/shocked by her neighbour.’

The difference between the verbs used as in (42) and those in the previous examples is that here the second argument rendered by a nominative DP is classified as *Agent*, not *Experiencer*. In Grimshaw’s (1990: 41) classification the type is labeled *psychological agentive* and assigned a structure like in (43);

- 43) (x (y))  
 Agent Exp

It follows from the thematic hierarchy that the *Agent* is dominant over *Experiencer*, hence the external argument may only be the former, not the latter. Furthermore, for examples like (42) there should be no licit interpretation if the anaphor was included within the agentive argument, even if the anaphor was appropriately deeply embedded within the DP. A relevant example might be (44) contrasted with (45):

- 44) \*Marię irytowali sąsiedzi ze swojej kamienicy.  
 Mary<sub>ACC</sub> irritated [neighbours from her own apartment-house]<sub>NOM</sub>  
 ‘Mary was irritated by the neighbours from her apartment-house.’
- 45) Marię irytowały historie ze swojego dzieciństwa.  
 Mary<sub>ACC</sub> irritated [stories from her own childhood]<sub>NOM</sub>  
 ‘Mary was irritated by the stories from her childhood.’

The clear difference in the grammaticality status between (44) and (45) provides strong support for our earlier assumptions. The avoidance of Condition C violation is possible only in (45) and not in (44) because at the LF reconstruction site

of (45) at which binding is assessed the accusative DP (*Experiencer*) c-commands the nominative DP (*Theme (Source)*) containing the anaphor. This allows also for the proper anaphoric interpretation of the possessive pronoun in this case. On the contrary, at the reconstructed LF site for (44), the nominative DP (*Agent*) necessarily c-commands the accusative DP (*Experiencer*), as follows from the thematic hierarchy. This disallows proper anaphoric binding and induces a Condition C violation in this case.

10. Word order types and focal effects for *experiencer* verbs and *frighten*-type *psych* verbs

Before we conclude let us return to example (4), repeated as (46) below, provided by Witkoś (2005) to illustrate the lack of reconstruction in the case of the movement of the “quirky subject” to Spec. TP.

- 46) ?? Nowe historie o sobie spodobały się Marii.  
 [new stories about self]<sub>NOM</sub> liked self Mary<sub>DAT</sub>  
 ‘Maria liked new stories about herself.’

It seems that the general marginality of cases like (46) is not sustained given that some minor modifications of (46) may result in its acceptability, as in (47) or (48):

- 47) Dowcipy o sobie spodobały się (tylko) **MARII/Marii**, (inni woleli żartować ze swoich kolegów).  
 [jokes about self]<sub>NOM</sub> liked self (only) Mary<sub>DAT</sub>, others preferred to joke at their colleagues  
 ‘Only Mary liked the jokes about herself (the others preferred to joke about their colleagues).’
- 48) Sceny ze swojego dzieciństwa przypomniały się tylko **TOMKOWI/Tomkowi**.  
 [scenes from self childhood]<sub>NOM</sub> recalled self only Tomek<sub>DAT</sub>  
 ‘Only Tomek remembered the images of his childhood.’

In particular, what may eliminate the marginality of cases like (46) is the use of focal or emphatic stress on the final element. Cases like (47) and (48) fall under the category of either non-exhaustive (information) or exhaustive (identificational) focus, in Kiss’s (1998) classical classification. The alternation is marked with the two options of bold type; small or capital letters.

Note also that cases (47)-(48) feature the canonical SVO order, in which the *Experiencer* argument is the object, while most examples in this section feature



the non-canonical OVS pattern with the dative or accusative (*Experiencer*) DPs raised to the position of Spec. TP rendering the effect of “quirky” subjects. We would like to propose the following derivational mechanics for the two types of cases involving *Experiencer* and *frighten*-type psych verbs, rendering also the effect of nuclear stress placement and the realization of focus in its two variants: information and identificational (as discussed in e.g. Kiss 1998; Zubizarreta 1998; Winkler 2000; Zubizarreta and Vergnaud 2006; Reinhart 2006, etc.).<sup>13</sup>:

### 1. Type I: SVO order

The structure derived by the instances of the first mergers of the constituents at the vP phase is (49):

49)  $[_{vP} v [_{VP} DP_{DAT/ACC} [_v V DP_{NOM}]]]$

The dative/accusative DP in (49) is the *Experiencer*, hence it is prominent with respect to the nominative DP representing *Theme (Source)*. In the position the dative/accusative DP occupies in (49) it acts as a binder for an anaphor contained in the nominative DP. Next, the nominative DP is internally merged (moved) to the inner Spec. vP. The move is motivated by a need to escape the Spell-Out at the vP phase and the realization of the external argument, as discussed above. The position of the inner Spec. is an A-position resulting in the extension of the binding domain:

50)  $[_{vP} DP_{NOM}[_v v [_{VP} DP_{DAT/ACC} [_v V \{DP_{NOM}\}]]]]]$

The nominative DP in (50) occupies a position from which it may bind the *Experiencer* DP, thus inducing the observable Condition C violation in cases like (32) or (38) above. The dative/accusative DP stays in the Spec. VP and is transferred to PF at the vP phase. It will be assigned nuclear stress under the standard application of the Nuclear Stress Rule (e.g. Cinque 1993; Zubizarreta – Vergnaud 2006; Reinhart 2006; Adger 2007). The verb escapes SO at this phase by raising to v. The nominative DP in Spec. vP is now accessible for the Agree relation with a higher T head and for the Pied-piping to Spec. TP for the satisfaction of the EPP feature at the CP phase:

51)  $[_{CP} [_{TP} DP_{NOM} T [_{vP} \{DP_{NOM}\}[_v v V] [_{VP} DP_{DAT/ACC} [_v \{V\} \{DP_{NOM}\}]]]]]]]$

<sup>13</sup> In Tajsner (forthcoming) we argue for a tripartite distinction between pure information focus, identificational, non-exhaustive (non-polarity) focus and identificational exhaustive (polarity focus).

We assume further that the above derivation does not make use of the EPP feature in *v*.<sup>14</sup> Thus, there is no need for the projection of the outer Spec. *v*P and internal Merge of any constituent to satisfy the EPP feature in *v*. The placement of nuclear stress on the final element may be interpreted as resulting in either information focus or identificational, non-exhaustive focus, depending on the parameters of the context. For example, sentence (33) repeated here as (52), may be understood as performing a completive function of identificational focus when used as a response to a *wh*-question like (53) below:<sup>15</sup>

- 52) Dowcipy o sobie<sub>i</sub> irytowały Marysię<sub>i</sub>.  
 [Jokes about herself]<sub>NOM</sub> irritated Mary<sub>ACC</sub>  
 intended meaning: ‘Jokes about her<sub>i</sub> irritated Mary<sub>i</sub>.’
- 53) Kogo irytowały dowcipy o sobie?  
 Whom<sub>ACC</sub> irritated [jokes about himself]<sub>NOM</sub>  
 ‘Who was irritated by the jokes about himself?’

## 2. Type II: OVS order

The structure derived by the instances of the first mergers is identical as in Type I given in (49) above. The next step is also the same; the nominative (*Theme*) DP is internally merged in the inner Spec.*v*P in order to avoid the early SO at the *v*P phase. This is needed for the nominative DP to enter a probe-goal relation with the T head for checking the un-interpretatable  $\phi$ -features and the Case of the latter. However, a further step, still at the *v*P phase, is a movement of the dative/accusative DP to the outer Spec. *v*P, triggered by the presence of an additional occurrence of the EPP feature in *v*. Finally, the verb moves to *v* and the resultant structure is (54):

- 54) [<sub>v</sub>P DP<sub>DAT/ACC</sub> [<sub>v</sub>P DP<sub>NOM</sub> [<sub>v</sub> [<sub>v</sub>V] [<sub>v</sub>P {DP}<sub>DAT/ACC</sub> [<sub>v</sub> {V} {DP<sub>NOM}}</sub>]]]]]]

<sup>14</sup> The assumption may be seen as questionable given that sentences with *Experiencer* arguments featuring the canonical SVO order appear to introduce some marked interpretation, especially if equipped with focal stress. Under this view, no new interpretive effect would be carried by the OVS order in which the *Experiencer* DP is raised to Spec. TP. We assume however that the interface condition works in the following way: it triggers the introduction of the feature EPP in *v* only if the available standard mechanics of derivation does not guarantee some required interpretation. It applies blindly so it has no way of distinguishing “marked” from “unmarked” interpretation. What it does is distinguish the interpretation available with the use of standard syntactic means (i.e. without an extra occurrence of EPP) from the “new” interpretation unavailable with the use of regular means. A need to achieve the latter triggers the insertion of the EPP in *v*.

<sup>15</sup> See Tajsner (forthcoming) Chapters Four and Five.

No part of this structure is transferred to PF at the vP phase and at the CP phase the dative DP is Pied-Piped to Spec. TP to satisfy the EPP in T, while a probe-goal relation is established between the T head and the nominative DP in the outer Spec. vP. All this leads to structure (55):

- 55) [CP [TP DP<sub>DAT</sub> T [vP {DP<sub>DAT/ACC</sub>} [vP DP<sub>NOM</sub> [v V] ]]]]

The nuclear stress is assigned to the lowest (earliest merged) constituent of the part of structure transferred to PF at the CP phase, which is the nominative DP.<sup>16</sup>

Finally, the interpretation of sentences realizing the pattern (55) may involve pure informational focus or non-exhaustive, identificational focus, the latter option possible if the context provides the necessary topic. For example, sentence (56) will represent identification in the context of the *wh*-question (57):

- 56) Tomkowi podobały się dowcipy o **sobie**.  
 Tomek<sub>DAT</sub> liked self [jokes about self]<sub>NOM</sub>  
 ‘Tomek liked the jokes about himself’
- 57) Dowcipy o kim podobały się Tomkowi?  
 [Jokes about who<sub>LOC</sub>]<sub>NOM</sub> liked self Tomek<sub>DAT</sub>  
 ‘Jokes about whom did Tom like?’

## 11. Summary of the analysis

The issue considered in this paper has been the syntactic status of the position occupied by the fronted object in the so-called *Generalized Inversion* (after Bailyn 2003) structures in Polish. It has been argued above that the position of the inverted object is in fact the Spec. TP position, but contrary to Bailyn (2003) and Witkoś (2007) its status is not that of an A-position extending the binding domain, but rather of an A'-position which triggers reconstruction at LF. The array of real A-positions responsible for binding effects has been located lower in a structure, at the site of first mergers (base positions) of sentence constituents.

Furthermore, it has been argued that the sequence of the External Merge operations is determined by the Thematic Hierarchy (as of Grimshaw 1990 or Jackendoff 2002) to the effect that the roles higher in the hierarchy have to be assigned later in structure. This determines that the *Experiencer* argument of the two classes of Polish verbs; object experiencer verbs like *podobać się* (but not

<sup>16</sup> The lowest element in (55) is the verb but it may be assumed that the v-to-T movement occurs in PF prior to the assignment of nuclear stress. Thus, the verb carries nuclear stress only if it is the lowest element transferred to Spell Out at the vP phase.

*lubić*) and psych-causative verbs (*frighten*-type) must be structurally dominant over their second argument, which is *Theme (Source)*. The first-merge positions of these two arguments are Spec. of VP and the complement of the verb, respectively. This means that the verb types in question do not lexically select external arguments in Polish (in Grimshaw's 1990 terms). It has also been showed that the base arrangement of these arguments is reconstructed at LF which is a way of building the necessary binding configurations. In that the GI configurations in Polish do not differ in principle from so-called *Dislocation* structures, featuring the OSV order, also contrary to Baylin's (2003) and Witkoś's (2007) position.

Some more minimalist technology of derivation by vP and CP phases we have postulated may be summarized as follows. The nominative DP (subject) in the two above mentioned classes of Polish verbs is internally merged in the inner Spec. vP position, as a way of syntactic promotion to external argument. This also makes it available for further relations with the T head at a later phase of derivation (Case and Agree). The derivation of the OVS order is then further conditioned by the appearance of the feature EPP in v, triggering internal Merge of the dative or accusative DP (object, "quirky subject") in the outer Spec. vP. Once in this position, the DP carrying "quirky" case is already accessible for overt Pied-Piping to Spec. TP.

## REFERENCES

- Adger, David  
 2007 "Stress and phasal syntax", *Linguistic Analysis* 33: 238-266.
- Bailyn, John F.  
 1995 "Configurational case assignment in Russian syntax", *The Linguistic Review* 12: 315-360.
- Chomsky, Noam  
 1999 "Derivation by phase", *MIT Occasional Papers in Linguistics* 18.  
 2001 [Reprinted in: Michael Konstowicz (ed.), 1-52. *Ken Hale: A life in language*. Cambridge, MA: The MIT Press.]  
 2001a "Beyond explanatory adequacy", *MIT Occasional Papers in Linguistics* 20. Cambridge, Mass.: The Department of Linguistics and Philosophy, MITWPL.  
 2005a "Three factors in language design", *Linguistic Inquiry* 36: 1-22.  
 2005b "On phases" [Unpublished MS., MIT.]
- Cinque, Guglielmo  
 1993 "A null theory of phrase and compound stress", *Linguistic Inquiry* 24/2: 239-298.
- Dowty, David  
 1991 "Thematic proto-roles and argument selection", *Language* 67: 547-619.
- Everaert Martin – Henk van Riemsdijk (eds.)  
 2006 *The Blackwell companion to syntax*. Oxford: Blackwell Publishing.

- Grimshaw, Jane  
1990 *Argument structure*. Cambridge, Mass.: MIT Press.
- Hornstein, Norbert  
2001 *Move! A minimalist theory of construal*. Malden, Mass.: Blackwell.
- Jackendoff, Ray  
1990 *Semantic structures*. Cambridge, Mass.: MIT Press.  
2002 *Foundations of language. Brain, meaning, grammar, evolution*. Oxford: Oxford University Press.
- Kiss, Katalin  
1998 "Identificational focus versus information focus", *Language* 74: 245-73.
- Klimek, Dorota – Bożena Rozwadowska  
2004 "From psych adjectives to psych verbs", *Poznań Studies in Contemporary Linguistics* 39: 59-72.
- Kosta, Peter – Lilia Schürcks (eds.)  
2007 *Linguistic investigations into formal description of Slavic languages*. Frankfurt am Main: Peter Lang.
- Reinhart Tanya  
2006 "Focus – The PF interface", in: Tanya Reinhart (ed.), 125-164.
- Reinhart Tanya (ed.)  
2006 *Interface strategies: Reference set computation*. Cambridge, Mass.: MIT Press.
- Schwabe Kerstin – Ning Zhang (eds.)  
2000 *Ellipsis in coordination*. Tübingen: Niemeyer.
- Tajsner, Przemysław  
1998 *Minimalism and functional thematization*. Poznań: Motivex.  
(in prep.) Aspects of the grammar of focus. A minimalist view.
- Van Valin, Robert D. Jr. – Randy J. La Polla  
1997 *Syntax. Structure, meaning and function*. Cambridge: Cambridge University Press.
- Winkler, Susanne  
2000 "Silent copy and polarity focus in VP ellipsis", in: Kerstin Schwabe – Ning Zhang (eds.), 221-247.
- Witkoś, Jacek  
2007 "Polish and A-type scrambling", in: Peter Kosta – Lilia Schürcks (eds.), 457-470.
- Zubizarreta, Maria Luisa  
1998 *Prosody, focus and word order*. (Linguistic Inquiry Monograph 33.) Cambridge, Mass.: MIT Press.
- Zubizarreta, Maria Luisa – Jean-Roger Vergnaud  
2006 "Phrasal stress, focus and syntax", in: Martin Everaert – Henk van Riemsdijk (eds.), 522-568.