#### ANNA MALICKA-KLEPARSKA

# LIMITATIONS ON INVOLUNTARY-STATE CONSTRUCTIONS IN POLISH: BETWEEN STRUCTURE AND SEMANTICS

A b s t r a c t. Involuntary State Constructions in Polish, formed with the clitic form *się*, are complex structures at the interface of the lexicon, morphology and syntax. Recently they have been analyzed in a most interesting way, where their properties are explained away with the use of the applicative structure, proposed a few years ago. In this paper we try to show that the uniformly structural analysis does not allow us to explain away all the limitations on the production of Involuntary State Constructions. We discuss the limitations concerning the one-argument predicates used in Involuntary State Constructions in the context of the control of such states by the human element. The irregular behavior of such verbs is explained with the use of re-analysis rules, which are lexical operations, not the syntactic ones, perhaps to be derivative from more general tendencies operating in the lexicon and connected with assigning thematic roles to arguments. Other limitations concern psychological predicates, whose behavior is also explained with the use of the same rules. We also consider the possibility of the existence of a split among psychological predicates, similar to a split proposed for Spanish. This split, together with the proposed syntactic structure, may explain why only the predicates that refer to continuing state may derive the Involuntary State Constructions.

# 1. EXPOSITION OF THE DATA: ESSENTIAL CHARACTERISTICS AND STRUCTURE (RIVERO, ARREGUI AND FRĄCKOWIAK (2010))

As a reference point of our analysis we have chosen an account of Involuntary-state constructions<sup>1</sup> given in Rivero, Arregui and Frackowiak (2010)<sup>2</sup>, since it is singularly insightful and up-to date. It is also significant

Dr. hab. Anna Malicka-Kleparska, Prof. of CUL – Chair of English-Polish Contrastive Linguistics at the John Paul II Catholic University of Lublin; address for correspondence: IFA, Al. Racławickie 14, 20-950 Lublin; e-mail: malic@kul.pl

<sup>&</sup>lt;sup>1</sup> Henceforth: ISCs.

<sup>&</sup>lt;sup>2</sup> Henceforth: RAF (2010).

that RAF (2010) are preoccupied primarily with the Polish data, the material which we will address in this paper.

Before we set out to highlight RAF's (2010) proposal, we have to mention that it is exceedingly concise, promising more from some work to appear. Consequently, the reader has occasionally to piece together the picture, augmenting it at times with his own guesses.

Involuntary-state constructions as analyzed in RAF (2010) are phrases of uniform make-up, but varied semantic characteristics. The uniformity of structure RAF (2010) attribute to a syntactically derived applicative lean-to against the TP headed by a mute modal element, while semantic properties partially result from lexical characteristics of the lexemes building the sentences and partially from general properties of the structure. In other words the analysis is both lexically and syntactically motivated — the approach to morpho-syntactic phenomena very prominent from the times of Reinhart and Siloni (2005).

Semantic variety of these constructions will be illustrated with the structures in (1.-5.) below<sup>3</sup>:

- Marta chciała zjeść ciastko, a jej się kichnęło
   Marta wanted to eat a cookie but she.DAT REFL sneezed.NEU
   'Marta wanted to eat a cookie, but she suddenly had to sneeze'
- Napisalo mi się własne imię
  Wrote.NEU I.DAT REFL own name.ACC
  'I wrote my own name (by chance)'
- Tańczyło mi się dobrze
   Danced I.DAT REFL well
   'I danced well and the dancing was good'
- 4. Basi dobrze się mieszka u siostry
  Barbara.DAT well REFL live.NEU PRESENT at sister.GEN
  'Barbara lives well at her sister's'
- Dłuży mi się niewiarygodnie
   Tarry.NEU I.DAT REFL unbelievably
   'I am bored unbelievably'

One of the formal features that set out these constructions and must be accounted for is the argument in the Dative case, but with non-uniform semantic function: In the above examples it stands for an Agent in (1., 2., 3.),

<sup>&</sup>lt;sup>3</sup> See RAF (2010: 704-705, 707) for the examples (1.-4.), (5.) is mine<sub>[AM-K]</sub>. An extensive analysis and discussion of certain verb classes in ISCs and semantic considerations have been originally presented in Dziwirek (1994), which source RAF (2010) quote in their work.

Theme (4.), Experiencer (5.). The *by chance* semantic element, which is evident in (2.), according to RAF (2010), results from either the type of the predicate used (1. – with a semelfactive verb), or from the context (e.g. in 2.), but it is not indispensable<sup>4</sup>, contrary to what RAF (2010) claim, as (6.) below shows, although manner modification of some sort is necessary (see 7.):

 Tańczyło mi się dobrze, ponieważ dobrze odpoczęłam 'I danced well, as I had taken a rest'
 vs.

## 7. \*Tańczyło mi się

Another formal characteristic is the appearance of non-agreeing verbal form of the third person singular neuter<sup>5</sup>, for all kinds of dative arguments, whether singular or plural, masculine, feminine or neuter, which can be attributed to the absence of a nominative argument in this structure that would function as a subject. Still one more constant feature consists in the presence of resumptive<sup>6</sup> pronominal clitic element  $sie^7$ .

RAF (2010) mention also the lack of control (see however 6. above) of the dative argument over the event described by the structure: Most of the

<sup>&</sup>lt;sup>4</sup> A critical analysis of RAF's (2010) picture of ISCs is to be found in Malicka-Kleparska (2012).

<sup>&</sup>lt;sup>5</sup> See e.g. Laskowski (1984: 146-148) for a more thorough presentation of the position of this verbal form in the Polish system of predicative expressions.

<sup>&</sup>lt;sup>6</sup> Rivero and Sheppard (2003:135), whom RAF (2010) follow in this point, claim that *się* is a Nominative Indefinite pronoun, which in the structures like ISCs 'resumes datives'. Their proposal is exceedingly complex (but not immediately relevant to our discussion) and derives ISCs with the use of semantic and syntactic procedures from underlying structures of the kind:

a.  $[_{CIP}NP_i[_{CL}Refl][_{TP}[_{T}Pres][_{VP}NP_iwokr/sleep]]]$ 

b.  $\exists x[hum][work/sleep(x[hum])]$ 

<sup>&</sup>lt;sup>7</sup> Się is a clitic which in Polish performs a number of syntactic and word formational functions, still not enough researched. For instance, it forms with the main predicate dispositional middles: Ta koszula pierze się łatwo 'This shirt washes easily', inchoatives: Dziewczyna czerwieni się 'The girl is blushing', antipassives: Oni się pakują 'They are packing up', reflexives: On się czesze 'He combs his hair', impersonal constructions: Szkołę się buduje '(They) have the school built', Szkoła się buduje 'The school is being built' and reflexiva tantum: Ja się śmieję 'I am laughing'. Się does not have separate word stress and it appears with a verb, however it is not an affix, as it may precede or follow the verb, or indeed be separated from it, e.g.: On się pakuje 'He is packing up' vs. On pakuje się od dwu godzin 'He has been packing up for two hours' vs. On się szybko pakuje 'He is packing up quickly'. For details see e.g. Szober (1957), Wróbel (1984), Kardela (1985), Bułat (2004), Szymanek (2010), etc. We use the term 'resumptive' in a completely pre-theoretical way as a morphological element that shares some features with the Dative argument present in the same construction.

above examples are due to some circumstances or the inadvertent nature of the action, and not to the volition of the dative argument. Thus it seems quite surprising that such structures should be unacceptable with the datives that stand for in-animates, as RAF (2010) state<sup>8</sup>:

### 8. \*Słońcu się wzeszło

Sun.DAT REFL came out.NEU

'The sun (somehow) came out'

Consequently, the features to be accounted for in ISCs are: the occurrence of the dative argument in the absence of the nominative subject, the default verbal form showing no agreement, the necessity of manner modification, the human/animate character of the dative argument, which, however, does not exert any control over the event and, additionally, the presence of resumptive *się* in such structures.

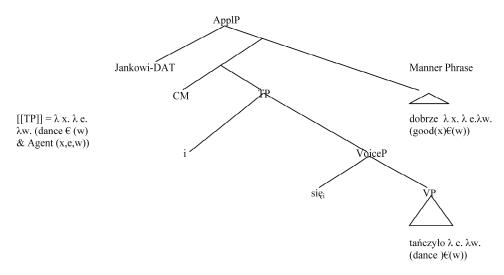
The above features of ISCs are dealt with by RAF (2010) by means of a structure where the dative argument is introduced in the specifier of the applicative phrase and consequently does not have all the qualities of the subject, e.g. it does not trigger agreement, the applicative head takes two arguments, a TP and a modifier phrase, and this last ingredient accounts for necessary manner modification in such sentences. The head is, as RAF (2010: 706) maintain<sup>9</sup>, in fact a modal element, which explains the lack of causation between the dative and the event and various phenomena connected with manner specification<sup>10</sup>. The structure proposed by RAF (2010: 706) looks as follows:

<sup>&</sup>lt;sup>8</sup> In example (8.) no manner is supplied, however, and the ungrammaticality may result from this factor. The sentence: *Slońcu wzeszło się dziś wcześnie* 'The sun rose today early' is grammatical, though there is personification involved. On the whole, descriptive sources on the Polish grammar maintain that, — see e.g. Laskowski (1984: 147): "... konstrukcje nieosobowe na *się* implikują istnienie osobowego wykonawcy czynności lub nosiciela stanu czy procesu ..." [impersonal constructions with *się* imply the existence of a person performing the activity or a bearer of a state or process tr. mine A.M.-K.], though this remark appears in the context of dativeless structures.

 $<sup>^9</sup>$  RAF (2010:706): 'Within this analysis, we propose that in polish ISCs Applicative Phrases (ApplP) are headed by a silent circumstantial modal (CM) with three obligatory constituents...the ApplP headed by CM takes a human dative specifier and includes both arguments of CM as embedded clauses: a TP as restrictor, and manner Phrase as the modal's nuclear scope. i is an index abstracting over the pronoun sie.' We will not dispute the merits and problems of the structure itself since we are not going to adopt it in our own solution.

<sup>&</sup>lt;sup>10</sup> RAF (2010:708) support their analysis of a high placed modal by supplying structures with two adverbials, where one element is to modify the whole sentence, while the other one, only the VP: *Dobrze Jankowi tańczyło się fatalnie* 'It felt good to John that he danced awfully'. Their

9.



This schema and its derivative consequences very elegantly account for all the basic properties of ISCs in Polish. However, the formation of ISCs is subject to a few limitations, not all of which find their source in (9.) or have been accounted for satisfactorily within these bounds. These limitations constitute the subject matter of the present paper, wherein we show that the conditions are not only related to the ISC structure, but also to semantics of the verbs that take part in the derivation, as well as to certain lexical re-arrangement procedures.

# 2. LIMITATION 1: 'PROTAGONIST CONTROL' WITH THE VERBS DERIVING ISCs<sup>11</sup>

The first limitation has been studied by RAF (2010) and ascribed both to the structure in (9.) and the properties of *się*. Namely the ISC structure-deriving verbs have to show the ability to link a personal protagonist in their argument positions, which property RAF (2010) call 'human control'. The

example is nevertheless ungrammatical, contrary to what they maintain. The ungrammaticality may result, however, from the fact that both adverbs are logically mutually exclusive, and the individual involved is one and the same.

<sup>&</sup>lt;sup>11</sup> The term 'protagonist control' has been taken from Levin and Rappaport Hovav (1995: 12) as we think it correctly describes what is going on in these structures, more precisely than 'human control' used by RAF (2010), as cases without human control also appear – see (10.) below, where we deal with a personifying metaphor.

structure contains (RAF 2010, after Rivero and Shephard 2003: sec 3.14 and 4.) a specialized variable with human presupposition (represented here by sie) in the Voice Phrase under TP. This TP has the external argument (in its specifier position) co-indexed with  $sie^{12}$ . The structure has also an alike co-indexed dative argument brought in by the applicative head. To this required human presupposition (ultimately shared by all the argumental positions) RAF (2010) attribute the ungrammaticality of examples like the ones in (8.) above (see however 10. below). We will show in sec. 3 that the sole condition concerning the 'protagonist control' is not enough to account for the gaps in ISC derivation and that the presence of the external argument in the lexical description of the basic verb is also essential.

# 3. LIMITATION 2: NO UNACCUSATIVES AND MIDDLES IN ISCs – BASIC VERBS MUST HAVE EXTERNAL AGENTIVE ARGUMENTS

Another limitation on the construction of ISCs results also from the structure in (9.), but has not been investigated by RAF (2010) in any detail. The structure requires that with ISCs there is an argument that would occupy the position external to VP and dominated by TP (essential for the postulated Voice Phrase, and in consequence, for the presence of sie), so the verbs with internal arguments only are automatically inappropriate for such structures: this should exclude unaccusatives and middles from the derivation (if such verbs are seen as possessing an exclusively internal argument in their lexical representations). Below we will study these classes as a kind of touchstone for non-appearance of internal argument verbs in ISCs.

# 3.1. Unaccusatives deriving ISCs and inchoatives

As unaccusatives do not contain an external argument in their lexical description, the structures below should not admit them, but they do:

10. Słońcu wzeszło się dziś wcześnie rano 'The Sun has risen early in the morning' 11. Umierało 13 się nam długo i boleśnie 'We were dying long and painfully'

 $<sup>^{12}</sup>$  RAF (2010:707) describe this element very briefly as: 'an index abstracting over the pronoun  $sie_i$ '

<sup>&</sup>lt;sup>13</sup> The verbs *umierać*, *zarastać* and *osłabiać* pass the unaccusativity test as suggested in Cetnarowska (2000:83): they derive characteristic adjectives in *-ly*: *umarł*y 'dead', *zarosły* 'overgrown', *osłabły* 'weakened'. *Wzejść* does not pass the test, but it also does not show cha-

- 12. Zarosło się nam14 'Your hair has grown too long'
- 13. Osłabło mu się w końcu 'He has grown weak at last'

On the other hand it is certainly true that certain classes of unaccussative verbs with definitely non-personal arguments cannot derive ISCs: Typical inchoatives<sup>15</sup> in ISCs are impossible:

- 14.\* *Metalowi topniało się w wysokiej temperaturze* 'Metal melted at a high temperature'
- 15. \*Skórze czerniało się dobrze na słońcu 'The skin blackened well in the Sunshine'
- 16. \*Topniało jej się pod jego dotykiem 'She melted under his touch'

What remains to be explained is the presence of ISCs with some unaccusatives, contrary to our expectations (see sec. 3.3.), against the predicted absence of inchoative predicates, which are a subclass of unaccusatives.

#### 3.2. NO MIDDLES WITH ISCS

Middle verbs should lack ISCs since they either get analyzed as having no external arguments in their lexical representations, or, if we believe that they do have external arguments, the arguments are impersonal, so (see sec. 2 above) these verbs should be excluded from the ISC derivation on both counts:

17. \*Koszulom pierze się łatwo 'The shirts.DAT wash well (by sb.)'

Indeed, (17.) shows that middles behave as predicted. It is interesting, however, to see what happens if the argument present with middles can be interpreted as personal: if we found such derivations grammatical, this

She has discovered that the prefix *na*-requires the presence of the underying object, on the surface realized as the genitive argument. Consequently, the verb must be unaccusative, if it is intransitive, to offer such an object. Our verbs pass this test as well: *Naumieralo ludzi tego roku* 'Many people died this year', *Naslablo luda co niemiara* 'Lots of people fainted', *Naroslo tu chwastów w tym roku mnóstwo* 'Lots of weeds have grown here this year', etc.

racteristics of unergatives, as it does not allow the participial forms in -no, -to: \*Wzeszly, \*wzeszniety, \*wzeszniety, \*wzeszniony, see also Cetnarowska (2002). Another unaccusativity test has been made available by Romanova (2004: 273), who proposes it for Russian, but it can easily be adopted for Polish data. Romanova (2004: 273) gives the following pair of examples, where in a. we deal with an unaccusative, while in b. — we do not. The key element is the prefix na:

<sup>(36)</sup> a. Sobak na-bieża-l-o! 'What a lot of dogs have run here'

b.\*Sobak na-biega-l-o!

<sup>&</sup>lt;sup>14</sup> The real example supplied by an informant has been heard when at the hair dresser's and it was not an ISC strictly speaking: *Zaroslo się*, but the human participant was implied in the concrete situation and we feel it could have been introduced syntactically.

<sup>&</sup>lt;sup>15</sup> For an interesting description of Polish inchoatives see e.g. Szymanek (2010: 179-180).

would speak very strongly in favor of preserving limitation 1., while dispensing with limitation 2.

Below, illustrated by the examples in (18.-20.) we will present the results of the search: the middles with personal arguments do not form ISCs. Instead the verbs get re-interpreted as antipassives with external Agentive arguments, and as such they appear in ISCs. This rearrangement, in turn, speaks in favour of limitation 2.:

- 18. *Klasycy czytają się dobrze* 'Classical (authors) read well' (a middle construction with the surface personal external argument = deep internal argument, the Theme of reading)
- 19. *Klasycy czytają dobrze* 'Classical authors can read well' (a transitive structure, external personal argument)
- 20. *Klasykom czyta się dobrze* 'Classical authors read well' (an ISC with an antipassive verb: the interpretation is that the classical authors do the reading <sup>16</sup>).

The examples in (18.-20.) show very clearly that it is both the external and Agentive role we are after for the derivation of ISCs.

The interim findings are as follows:

Some unaccusatives with 'protagonist control' derive ISCs (see 4., 10-13. above), unaccusatives of inchoative character, no matter what their arguments, do not-derive ISCs (see 14.-16.), likewise middles, unless re-analysed as antipassives, do not derive ISCs. This clearly shows that the limitations we are dealing with here cannot be explained solely by the non-existence of an external role (see 4., 10.-13.), nor by human protagonist presence as such (see 16. and 20), nor even by the presence of an Agent with the basic verb (see e.g. 4., 10-13). At this point we are tempted to assume that the derivation of ISCs is random, or in other words, lexically marked for particular predicates. However, in the course of this analysis we will show, after having studied other critical data, that the solution is less inarticulate: We will claim below that it is only the critical predicates that undergo lexical reanalysis, either unergative – for unaccusatives, or antipassive for middles<sup>17</sup> — which will enter the derivation. This, in turn, requires drawing a relevant distinction among unaccusatives: into such that undergo re-analysis, and those that do not. The distinction will be described in the next section.

<sup>&</sup>lt;sup>16</sup> It is also possible to understand that sentence that it is good to read to the classical authors, but it is an unrelated problem.

<sup>&</sup>lt;sup>17</sup> In fact it is one and the same re-analysis which takes the available internal lexical argument and makes it an external one.

### 3.3. DEEP AND SURFACE UNACCUSATIVES (LEVIN AND RAPPAPORT HOVAV (1995))

The least desirable solution draws no principled distinction between those unaccusatives that derive ISCs and the ones that under no circumstances (even with a personal argument) can appear in such constructions. We would like to suggest a different analysis, which avoids some of the unwanted consequences. Namely we assume, after Levin and Rappaport Hovav (1995), the existence of surface and deep unaccusatives (see e.g. pp. 17-18). Surface unaccusatives share many properties with unergatives (which is precisely what we have seen so far for 10.-13.)) and they do not coincide with inchoatives – again the result we have observed in our analysis. Moreover, deep unaccusatives stay unaccusatives for syntactic derivations, and these would include our inchoatives in (14.-16.).

Such a distinction can be indirectly supported by the morphological make-up of Polish inchoatives: They frequently show distinct morphological structure from related, but transitive verbs. So we have the following pairs in the Polish verbal system:

21. Biel-e-ć 'grow white.INCH' vs. biel-i-ć 'make sth. white.TRANS', czerni-e-ć 'grow black.INCH' vs. czern-i-ć 'make sth. black. TRANS', top-nie-ć 'melt.INCH' vs. top-i-ć 'bring sth. to the melting point.TRANS', st-ygnq-ć 'grow cold.INCH' vs. st-udzi-ć 'make sth. cold(er).TRANS', etc.

As these inchoatives are formalny different from transitives, there is a great probability that this formal difference correlates with a structural/ functional difference, i.e. these verbs would not have external arguments available for some syntactic purposes (ISC formation in this case) as opposed to the related transitive verbs in (21.)<sup>19</sup>. What we claim is that these inchoatives at the time when they enter the ISC structures **do not possess an external argument at all**, so they cannot supply the argument for the specifier of Voice position in (9.). On the other hand, the verbs in (10.-13.) would be surface unaccusatives, with external arguments on the surface, available for ISC derivation; hence they would derive ISCs, as unergatives do. Such surface unaccusatives would undergo a lexical operations of re-analysis — unergative re-analysis. As it

<sup>&</sup>lt;sup>18</sup> We cannot present here the material and analyses of Levin and Rappaport Hovav (1995) in any detail, but their findings, extensively supported, seem to dove-tail with the distinction among unaccusatives we need for the purpose of the present analysis.

<sup>&</sup>lt;sup>19</sup> We would not venture to speculate at this point when and how the external argument eventually present in the surface active sentences with such unaccusatives appears. These problems are much too complex for the limited scope of this paper.

would be a lexical operation, it could affect lexical items at random, on the condition that they are (surface) unaccusatives to start with.

Alternately, the verbs in examples (10.-13.) do not represent unaccusatives, but unergatives after all <sup>20</sup>, but such a solution, created ad hoc for the case at hand and disregarding other unaccusative characteristics of these verbs, seems unsatisfactory.

### 3.4. RE-ANALYSIS OPERATIONS AS LEXICAL PHENOMENA

Let us recapitulate what happens in the cases of middles and inchoatives described above. Inchoatives as deep unaccusatives do not derive ISCs, whether a personal argument is involved or not:

- 22. \*Topniało jej się pod jego dotykiem 'She melted under his touch' (repeated 20.)
- 23. \*Zupie stygło się powoli 'The soup grew slowly colder'

Then, surface unaccusatives (11.-13.) get re-analyzed in the lexicon as possessing external arguments, and those out of the group which take personal arguments (allowing 'protagonist control') may derive ISCs, likewise middles get re-analyzed, so that their personal arguments function as external Agents of antipassives, and ISCs can arise. We assume that both kinds of re-analyses are lexical operations, although this is an issue to be investigated, since in the case of unaccusatives the process is sporadic<sup>21</sup>, while with middles — it is bound to un-do the effect of the middle formation and appears regularly. Notice, however, that both of these re-analyses have properties in common — in both cases the re-analysis moulds some personal argument into the external one, with Agentive properties at least in the case of middles<sup>22</sup>.

#### 4. LIMITATION 3: EXPERIENCER VERBS

With the above analysis that puts in focus non-unaccusative and personal characteristics of the verbs involved in the derivation of ISCs in mind, we will be very interested to see what happens in the case of Experiencer

<sup>&</sup>lt;sup>20</sup> See, however, ftn. 8.

<sup>&</sup>lt;sup>21</sup> But as Levin and Rappaport Hovav (1995:17) claim the surface unaccusatives are a rather random choice of forms.

<sup>&</sup>lt;sup>22</sup> This, incidentally, corroborates the claim, expressed e.g. by RAF (2010), after Kratzer (1996), that the argument external to VP shows predilection to Agentivity if the reflexive element is present.

verbs<sup>23</sup>, where Agentivity is not recognized, and which are associated with the Experiencer role. Before we set out to investigate them in detail, the initial expectation would be to predict that they derive ISC constructions, as there is definitely a personal argument involved (Experiencers are minimally animate), and the argument for ISCs does not have to be the typical Agent as we have shown above (see 1.-5.); also at least in the majority of cases the verbs will be bi-argumental: there must be something to be experienced (Experienced arguments). Consequently Experiencer verbs have more properties in common with personal transitive verbs than with non-personal deep inchoatives and should derive ISCs.

This prediction is not borne out by the data, though. As the analysis below will show we are faced with three groups of Experiencer verbs that behave differently with respect to ISC formation.

## 4.1. EXTERNAL EXPERIENCERS

It seems that the first distinction cuts across the class of Experiencer verbs in this way that the verbs with lexically assigned Experiencer to the external argument do not form ISCs. It is strange in the light of (11.-13). What it seems to suggest is that the feature of personal involvement does not suffice to warrant the derivation, and that the verbs do not undergo the antipassive re-analysis, or unergative re-analysis (assumed above). This is to be expected, as they do not resemble either unaccusatives or middles in their structure and syntactic behavior (the first two groups do not passivize), but rather ordinary transitives:

24. Słyszę coś 'I can hear something' — Coś jest słyszane przeze mnie 'Sth. is heard by me'

Consequently, we have to assume that the re-analyses proposed above are after all connected with assigning the Agentive (or some such) role to external arguments they create. This is fairly uncontroversial in the case of middles, which in their basic lexical representation already possess such a semantic function: *Koszula pierze się łatwo (czyimiś rękoma)* 'The shirt washes easily (with sb. else's hands)'. It is much less convincing with surface unaccusatives (11.-13.), reanalyzed as unergatives, where sometimes no Agentivity is apparent (see 5., 10.-13). We have to assume that it is the property of the re-analysis operation to feed it in. If unergative re-analysis is

<sup>&</sup>lt;sup>23</sup> For the original justification of such verbs as a separate group see e.g. Bresnan (1981).

seen as a lexical rule, it very well may add/change semantic content of a thematic role. This is necessary anyway since the re-analyzed verbs are to function as unergatives<sup>24</sup>.

In (25.) below we supply a list, by no means exhaustive, of such Experiencer predicates in Polish with externally assigned Experiencer, which regularly do not form ISCs:

# 25. External Experiencer:

Slyszę 'I can hear.1st SG PRES', kojarzę 'I grasp1st SG PRES', pamiętam 'I remember.1st SG PRES', daruję 'I forgive.1st SG PRES', dostrzegam 'I notice.1st SG PRES', doznaję I experience .1st SG PRES', gardzę 'I abhor', ignoruję 'I ignore .1st SG PRES', uznaję 'I recognize .1st SG PRES', laknę 'I crave .1st SG PRES', wybaczam 'I excuse .1st SG PRES', dopuszczam 'I assume .1st SG PRES', 25

26. \*słyszy mi się, \*pamięta mi się, \*daruje mi się, \*dostrzega mi się, \*doznaje mi się, \*gardzi mi się, \*ignoruje mi się, \*uznaje mi się, \*łaknie mi się, \*wybacza mi się, \*dopuszcza mi się

The examples in (25.) and (26.) illustrate our analysis, where External Experiencer verbs do not derive ISCs because they do not possess an external Agentive role. As such, they do not match the description of the argument dominated by the TP, since it must be filled in by an Agentive element (the structure carries this presupposition).

### 4.2. INTERNAL EXPERIENCERS

At this point we would expect the same behavior with verbs showing Internal Experiencers, as the External Experienced role, which also appears with them, has no personal characteristics written into its description. We may experience objects, forces of nature, etc. Contrary to what we might expect, there is a group of Internal Experiencer verbs that derive ISCs afterall:

<sup>&</sup>lt;sup>24</sup> Recall also Levin and Rappaport Hovav's (1995) suggestion that surface unaccusatives and unergatives possess common characteristics, where one of them very well may be secondary (derived) Agentivity with unaccusatives. This suggestion of course requires a much more extensive research.

<sup>&</sup>lt;sup>25</sup> We may find forms that look exceptional, but in fact they are not. For instance we chave the ISC: *Slucha mi się tego przyjemnie* 'I listen to it with pleasure', which, however, should be viewed as derived from a transitive verb *sluchać*, as opposed to true Experiencer verb: *slyszeć* 'to be able to hear' — \*slyszy mi się. Chce mi się 'I feel like', on the other hand, contains a modal expression with the verb *chcieć*, and not an ISC, which is suggested by the infinitival verb form used after it: Chce mi się pić 'I feel like drinking'.

# 27. Internal Experiencer (Group One)<sup>26</sup>:

a. Coś mnie nudzi 'Sth. bores me' — nudzę się, nudzi mi się 'I am bored', Coś mnie nuży 'Sth. makes me tired' — nużę się, nuży mi się 'I am tired', Coś mnie myli 'Sth. makes me mixed up' — mylę się, myli mi się 'I am mixed up',

There are also structures with such verbs that do not have *się* in their make-up, or show verbs with different than the intended Experiencer meaning ((b) below), or are non-verbal predicative expressions ((c) below):

- b. \*mace sie maci mi sie 'I am mixed up', \*polepszam sie(?)<sup>27</sup> polepsza mi sie 'I am getting better', \* poprawiam sie (?) poprawia mi sie 'I am getting better', \*pogarszam sie (?) pogarsza mi sie 'I am getting worse'
- c. godzi mi się 'It is right for me', uda mi się 'I will manage', nada mi się 'It will be appropriate for me'

On the other hand, there are Internal Experiencer verbs that do not form ISCs.

28. Internal Experiencer (Group Two):

To mnie krępuje 'It embarrasses me' — Ja się krępuję 'I am embarrassed' — \*krępuje mi się, To mnie wzrusza 'It moves me' — Ja się wzruszam 'I am moved' — \*wzrusza mi się, To mnie uspokaja 'It calms me down' — Ja się uspokajam 'I calm down' — \*uspokaja mi się, To mnie trapi 'It worries me' — Ja się trapię 'I worry' — \*trapi mi się, To mnie cieszy 'It makes me happy' — Ja się cieszę 'I am happy' — \*cieszy mi się

Below we will present two alternative analyses (secs. 4.3 and 4.4) concerning the distinct behaviour of Group One and Group two Experiencer predicates.

#### 4.3. RE-ANALYSIS PROPOSAL FOR INTERNAL EXPERIENCERS

We would like to claim that Group One (27.) has undergone the unergative re-analysis as well (just like surface unaccusatives discussed above) with all its consequences, i.e. they derive ISCs and their external roles get Agentive interpretation. What could speak in favor of such a re-analysis is the fact that, as the lists in (a-c) show, the group is varied, with random characteristics. If we think of unergative re-analysis as a lexical rule, then the erratic character of this group would be expected.

<sup>&</sup>lt;sup>26</sup> Się verbs can be seen as derived from bi-argumental structures, where the Experiencer is identified with the internal argument.

<sup>&</sup>lt;sup>27</sup> The forms marked with (?) are possibly acceptable as they are used in medical jargon about a patient getting (respectively) better or worse, but they show highly specialized meanings.

Group Two (28.) is much more uniform in their behavior, as no lexical reanalysis applies to these forms. They regularly show derived External Experiencers and these clash with the expected External Agentives in ISCs. Consequently, the derivation is ungrammatical (like for 25.-26.).

Alternately, if we assume that the Experiencer remains in the object position, then *się* element in the external position must bear the same role, and the derivation still crushes.

The above analysis of the possible mechanics in Experiencer verb ISCs does not explain why some Internal Experiencer verbs undergo the re-analysis and others do not. This remains unexplained at this point (see however section 6.). We can only repeat the platitude that changes that lexical items undergo in the Lexicon are random.

However, why such a direction the re-analyses take is possibly not that random: If we assume after Perlmutter and Postal (1984) *The Universal Alignment Hypothesis*, then we may expect that certain predicates that assign their thematic roles in non-prototypical way may want to rectify the situation. This is what happens in the case of the proposed re-analyses: the configuration of argument assignment where the internal argument bears personal characteristics and the external argument does not constitutes the 'un-preferred' situation. Our re-analyses change the order of assignment to be more natural; external arguments get to be human and possibly Agentive.

#### 4.4. PUNCTUAL AND NON-PUNCTUAL EXPERIENCERS

Below we will present a way to account for the difference between (27.) and (28.), which, however, concerns only the Experiencer verbs. Thus they would not be part and parcel with unaccusatives, the result we wanted to achieve in sec. 4.3. This solution has been prompted by a distinction among Experiencer verbs introduced in Marín and McNally (2011).

They analyze two classes of Experiencer verbs (called *reflexive psychological verbs*). These classes are represented by (p.469) *aburrirse* 'get bored' and *enfadarse* 'get angry' respectively. We are not going to review their findings but the problem they encounter is similar: these two classes of verbs behave differently with respect to certain language phenomena and the authors set out to find out why. They write about (p. 474) *aburrirse* — non punctual (durative) class and *enfadarse* — punctual class (non-durative).

First of all they hint that punctual verbs, represented by *enfadarse*, may be connected with getting into a state very quickly (p. 475), while non-punctual — *aburrirse* — over a considerable period of time<sup>28</sup>.

We have chosen here for the exposition *nudzć się* and *cieszyć się*, but they stand for Group One and Group Two verbs respectively.

## 4.4.1. Characteristic One: the speed of getting into a state

The behavior of *nudzć się* and *cieszyć się* shows that there might be a similar diversity involved as in the case of Spanish Experiencer verbs: like the Spanish verbs, also the Polish ones suggest the distinction with respect to the speed of getting into the situation specified by them, as the data in (29.) below suggest:

29. Cieszył się (see 28. — Group Two) nagle i nagle przestawał 'He was getting happy suddenly and he suddenly stopped'

Wzruszał się (Group Two) nagle i nagle przestawał 'He was getting moved suddenly and he suddenly stopped' 29

VS.

?Nudził się (27. — Group One) nagle i nagle przestawał 'He was getting bored suddenly and stopped suddenly'

?Nużył się (Group One) nagle i nagle przestawał 'He was getting tired suddenly and stopped suddenly' 30

As the examples in (28.) seem to suggest, Group Two verbs are punctual, while Group One predicates are not. If this distinction can be sustained then the difference between the two groups with respect to ISC formation may be seen through the light of this distinction.

Below we will study this distinction in greater detail, though not all of Marín and McNally's (2011) tests apply to the Polish language as they are

<sup>&</sup>lt;sup>28</sup> Marín and McNally (2011: 475) stress that: '... it is not immediately obvious by looking at the verbs in isolation what the members of each class have in common ...' An apparent lack of striking unifying characteristic is also visible in our data (see e.g. 27.).

<sup>&</sup>lt;sup>29</sup> Notice, however, that his semantic characteristic is not always satisfactory as e.g. \**Krę-powal się nagle I nagle przestawal* 'He got embarrassed suddenly and suddenly stopped' does not sound convincing in Polish. Either we are dealing with an exception here, or the verb does not belong to the punctual class afterall.

<sup>&</sup>lt;sup>30</sup> In some of these cases we deal with homophonic forms with different meanings and characteristics, so it is important to focus on psychological reflexive meaning only. For instance the sentence: *Mylil się nagle i nagle przestawal* is quite grammatical, but with the interpretation 'He made mistakes' and not 'He was mistaken', which we are after here, as the first verb does not belong to the group we investigate.

mainly based on the behavior of Spanish verbs in the progressive, unavailable in Polish. Instead, we will also devise our own tests, as the one below, in *Characteristic Two*.

# 4.4.2. Characteristic two: morphological diagnostics

Another characteristic is morphological and comes from within the complex system of Polish prefixation<sup>31</sup> with verbs: Notice that the perfective aspect constructions with these verbs are formed with distinct prefixes: z- for non-punctual  $nudzi\acute{c}$  —  $znudzi\acute{c}$  —  $znudzi\acute{c}$  się, but u- for punctual  $cieszy\acute{c}$  —  $ucieszy\acute{c}$  —  $ucieszy\acute{c}$  się. When we investigate the whole group of the verbs that interest us, we perceive that all non-punctual sie verbs form their perfectives in this, most neutral in Polish, way<sup>32</sup>. The fact that these two groups of verbs have distinct markers for their perfective forms speaks very strongly in favor of treating them as representing distinct verb classes.

Let us analyze the morphological intricacies involved in the formation of the perfective forms of the predicates that interest us in more detail here. Punctual predicates from (28.) either do not form the perfective word-forms or show irregular patterns. And so *krepuję się³³*, *trapię się³³* simply do not have such forms and belong to imperfectiva tantum (Szymanek 2010:131); both *wzruszyć się* 'be moved', and *uspokoić się* 'get calm' (with imperfective *wzruszać się* and *uspokajać się* respectively) are examples of paradigmatic stem-formation,³⁵ with no prefixation involved; *zgorszyć się* and *zdziwić się* seem to be exceptional since they form their perfectives as non-punctual verbs do. There is a possibility, however, that the prefix *z*- that we have here is not just a perfective marking suffix, but another, word forming one, carrying with it apart from unmarked perfective meaning, also the meaning of (Szymanek 2010:176) '... high intensity of a given action, with the implication that it is exhausting, from the point of [+ human] Agent/ Experiencer.' This would explain why they take *z*- without making any state-

<sup>&</sup>lt;sup>31</sup> For a recent analysis of interesting aspect of Polish verbal prefixation see e.g. Wiland (2011).

<sup>&</sup>lt;sup>32</sup> See Szymanek (2010: sec 2.4.1) for aspect intricacies of Polish. His analysis shows very clearly that there may be correspondences between the semantic verb class and the prefixes that the class accepts (sec.2.4.).

<sup>&</sup>lt;sup>33</sup> But *Poczuł się skrępowany* 'He felt uneasy'.

<sup>&</sup>lt;sup>34</sup> But *Byl strapiony* 'He was worried'. Both the participles (ftn 30, 31) show the perfective aspect absent with the verbs.

<sup>&</sup>lt;sup>35</sup> See Szymanek (2010:133).

ment about their non-punctual character<sup>36</sup>, and without any change in their inability to form ISCs.

Our non-punctual *nudzić się* verbs all have *z*- formations — *znudzić się*, *znużyć się*, *zmylić się*, *zmącić się*, otherwise they have no corresponding *się* verbs at all: *uda*, *nada*, *godzi*<sup>37</sup>, or alternately the verbs have already in their make up a word formational prefix that marks a subclass of non-punctual verbs: *polepszać się*, *poprawiać się*, *pogarszać się*. These verbs belong to the inchoative class – see Szymanek (2010: 180), and by their very inchoative (change of state) nature are non-punctual.

As we have argued above, Group One and Group Two Experiencer verbs are differenciated as to morphological processes (prefixation in particular) involved with them, which again may testify to their non-punctual and punctual character respectively.

## 4.4.3. Characteristic three: non-iterative non-punctuals vs. iterative punctuals

Returning to the characteristics observed by Marín and McNally (2011), it can be noticed that if their punctual and non-punctual verbs are used with the modification *durante* 'during', the non-punctual ones retain their non-iterative meaning, while the ones which are punctual become iterative.

We think that the same is observable in Polish:

- 30. Nudził się przez cały tydzień 'He was bored the whole day' (continuously)
- 31. Cieszył się przez cały tydzień 'He was cheerful the whole day' (repeatedly)

We believe that in Polish, like in Spanish, the event described in (30.) is continuous, while the one in (31.) really represents a whole series or reiterated happenings. If so, then the distinction between non-punctual and punctual verbs is supported for the Polish data as well: Hence the two subclasses may behave differently with respect to ISC formation.

# 4.4.4. Characteristic four: punctuals are only onsets, non-punctuals—onsets and continuations

Marín and McNally (2011 p.488) state that *arburrirse* verbs refer to the onset of some eventuality and some portion of that eventuality, but *en-*

<sup>&</sup>lt;sup>36</sup> See also Wiland (2011) for an extensive discussion of syncretism among verbal prefixes in Polish.

<sup>&</sup>lt;sup>37</sup> *Godzi się* with the intended meaning 'It is right' exists, but only as an impersonal expression: *Godzi się tak uczynić* 'It is right to perform the deed'.

fadarse ones — to the onset of some eventuality only. Below we will adopt their test to see whether this distinction holds for the Polish data:

32. Zawsze kiedy Anna zdawała egaminy cieszyła się 'Whenever Anna was taking exams she became happy'

The situation described in (32.) can be interpreted in such a way that the onsets of the two activities, i.e. taking or passing exams and becoming happy coincide in time (or even there is a stimulus — outcome relationship between them), while when we analyze a similar structure with a non-punctual verb like in (33.) below, we see that Anna could have been bored prior to taking (or even passing) the exam, or indeed she could have been bored all along:

33. Zawsze kiedy Anna zdawała egzaminy, nudziła się 'Whenever Anna was taking exams she was bored'

So we might conclude that the verbs that allow ISCs are non-punctual verbs, including in their semantics just the beginning of the state and the state itself, and the ones which do not derive ISCs are punctual ones and include just the beginning of the eventuality.

Now there arises an important question why these verbal characteristics should affect ISC formation at all. The answer, we think, is prompted by the very name of these constructions, i.e. involuntary state constructions are bound to describe states. Punctual verbs are incongruous with state reading as they describe, to put it crudely<sup>38</sup>, only beginnings of actions. The non-punctual verbs go beyond just beginnings and include the states which are evoked and consequently they may derive ISCs.

There remains the key question why ISCs out of their very nature should be associated with state-like meaning. We think that this results from the fact that at all levels of the proposed ISC structure we are dealing with the same participant, whether it is the dative argument introduced by the modal (or applicative head) or the external argument under TP or the resumptive sie. The repetition of co-indexed arguments at all vital argumental positions results in Involuntary state interpretation and only the verbs allowing for such semantics in their lexical representations can be admitted into ISCs. Otherwise incongruity cannot be avoided.

<sup>&</sup>lt;sup>38</sup> For niceties of semantic description see Marín and McNally (2011:491-492). The system of semantic description they use is very complex and goes much beyond the limits of this paper. We have tried to sum-up their findings in a simplistic fashion.

We do not think that all the relevant conditions can be rendered with the use of syntactic or syntactic-like structures present in the lexicon or produced by lexical operations. This shows that ISCs constitute a very intricate body of data, where some limitations on their production can be accounted for structurally, some with the use of lexical representations and rules, while some others have to be taken care of by semantic information.

#### 5. CONCLUSION

In this paper we have considered various groups of verbs as potential sources of ISC constructions in Polish. We have described and analyzed various limitations on the formation of these structures. Some of the limitations seem to result from the syntactic representations ascribed to such structures, and to how these structures translate into meaning, but a number of the conditions have different sources. We have suggested that to account for some major limitations re-analysis rules operating in the lexicon are necessary, in other cases careful analysis of the semantics of the relevant predicates is required as it may be its incompatibility with the syntactic schema that makes the derivation crush.

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## OGRANICZENIA KONSTRUKCJI NIEZAMIERZONEGO STANU W JĘZYKU POLSKIM – MIĘDZY STRUKTURĄ A SEMANTYKĄ

#### Streszczenie

Konstrukcje niezamierzonego stanu w języku polskim, tworzone za pomocą formy klitycznej się, stanowią bardzo złożony materiał z pogranicza morfologii, słownika i syntaksy. Ostatnio zyskały ciekawy, oryginalny opis, w którym ich cechy charakterystyczne i ograniczenia są tłumaczone za pomocą charakterystycznej struktury syntaktycznej, będącej pochodną zaproponowanych w ostatnich latach konstrukcji aplikatywnych.

W artykule staram się wykazać, że podejście czysto strukturalne nie pozwala na wyjaśnienie wszystkich ograniczeń dotyczących produkcji tych struktur. Omawiam szczegółowo ograniczenia dotyczące jednoargumentowych predykatów w kontekście kontroli sytuacji przez czynnik ludzki. Ich nieregularne zachowanie tłumaczę istnieniem reguł reanalizy, które są operacjami leksykalnymi, a nie syntaktycznymi, być może powiązanymi z ogólniejszymi tendencjami panującymi w leksykonie, a dotyczącymi przypisywania ról tematycznych argumentom. Inne ograniczenie

dotyczy predykatów psychologicznych, których zachowanie wyjaśniam również działaniem tych samych reguł. Rozważam również możliwość istnienia rozróżnienia wśród predykatów psychologicznych, podobnego do rozróżnienia opisanego dla języka hiszpańskiego, które może tłumaczyć, w połączeniu z proponowaną syntaktyczną strukturą, dlaczego tylko predykaty odnoszące się do kontynuacji mogą derywować konstrukcje, którymi się zajmuję.

Streściła Anna Malicka-Kleparska

**Key words:** morphology, semantics, valency, unaccusatives, unergatives, psychological predicates, involuntary states, Polish.

**Słowa kluczowe:** morfologia, semantyka, walencja, czasowniki nieakuzatywne, czasowniki nieergatywne, czasowniki psychologiczne, konstrukcje stanu niezamierzonego, polski.