

**ON THREE DIFFERENT TYPES OF  
SUBJECTLESSNESS  
AND HOW TO MODEL THEM IN LFG**

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## Abstract

Outside LFG, the term ‘subjectless’ is found referring to a range of phenomena in which the expression of the predicate lacks an overt lexical item (a syntactic constituent) bearing the grammatical function of the subject. In some of these phenomena, for example in *pro*-drop, the architecture of LFG allows us to find the subject at the a-structure and f-structure levels despite there being no categorial element expressing the subject. There are, however, other subjectless constructions for which there are no readily available LFG accounts, and it is not always obvious how they could be analysed adequately. It is constructions of this type – often called ‘impersonal’ in traditional literature – that will be the focus of this paper, exemplified from Polish which is rich in impersonal forms.

I will begin with an overview of all Polish constructions which appear to be subjectless. I will identify three types of construction which lack subjects at some level of analysis: *pro*-drop constructions (including the so-called ‘weather constructions’ and ‘adversity impersonals’), morphologically derived impersonal constructions, and truly subjectless constructions. I will then demonstrate how they differ by highlighting their morphological and syntactic properties and suggest levels of representation at which the different types of ‘null/missing subjects’ can be captured theoretically.<sup>1</sup>

## 1 ‘Subjectless’ constructions in Polish

Polish has a large number of different constructions that appear to be subjectless. As will be demonstrated in the further sections of this paper, their morphosyntactic properties allow them to be grouped into the following categories:

1. *pro*-drop constructions. These include clauses formed from personal predicates with a dropped personal pronoun (such as ‘[He] saw.3SG.MASC that the door was open and [he] went.3SG.MASC in’), and from personal predicates with a dropped indefinite pronoun, both the pronoun referring to humans (‘[Someone] was-writing.3SG.MASC as if [he] wanted.3SG.MASC to warn us’) and the pronoun referring to non-humans, as in ‘weather constructions’ and ‘adversity impersonals’ (‘[Something] was-blowing.3SG.NEUT as if [it] wanted.3SG.NEUT to pull out trees with their roots’, ‘[Something] threw.3SG.NEUT him to the side’). Contrary to the frequently found though unsubstantiated assumption, Polish weather constructions, adversity impersonals and other apparently subjectless clauses involving verbs of physical or psychological states do not lack a syntactic subject, nor do they have a suppressed or other empty category/zero subject. Instead, they result from subject ellipsis, with their omitted subject being the indefinite pronoun referring to non-humans – that is, they are instances of *pro*<sub>INDEF</sub>-drop.

2. Morphologically derived impersonal constructions. These include clauses formed from personal predicates whose fully operational (binding, controlling, available for raising) and interpretable syntactic subject has been ‘suppressed’ by a morphological operation and is not allowed to appear as a constituent in surface syntax. This category includes the so-called ‘-*no/-to* impersonal’ (*Bito Piotra* ‘Beat.IMPERS Peter(MASC).ACC’ meaning ‘[They] beat Peter’) and the reflexive impersonal (*Biło się Piotra* ‘Beat.3SG.NEUT REFL Peter(MASC).ACC’ meaning ‘[One] beat Peter’).

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3. Subjectless constructions. These are formed from predicates without either an overt or an omitted/covert syntactic subject which could participate in syntactic operations such as control or raising. This category includes inherently impersonal predicates (a small class of defective, non-inflecting verbs as in: *Słychać ją* '[One] hear.NON-PERSONAL her.ACC', or '*Było widać łąkę* '[One] was.3SG.NEUT see.NON-PERSONAL meadow(FEM).ACC') and predicates which have lost their subjects as a result of derivation. The latter occurs, for instance, when passivisation is applied to an intransitive predicate.

4. Constructions with non-agreeing subjects. These include predicative adverbial constructions (e.g., *Miło z tobą podróżować* 'Nicely with you travel.INF' meaning 'It is nice travelling with you') or nominativeless clauses with predicates requiring a genitive argument (e.g., *Przybywa wody* 'Becomes-more water(FEM).GEN'). Clauses of this type complete the typology of Polish 'subjectless' constructions, but it is important to realise that their subjectlessness is only apparent. They do not lack subjects, but simply have non-agreeing subjects. Thus, they pattern with other clauses whose subjects have some nominal properties but are nevertheless not appropriate agreement controllers. Such subjects are prepositional phrases, quantifier phrases (with quantifiers requiring their complements to appear in genitive case), clausal subjects (including infinitival subjects), and certain indeclinable subjects such as acronyms and foreign place names. This type of construction will not be taken up further in this paper; for some more discussion and analysis see Kibort (2004:320-340).

The first three types of construction all lack overt subjects but each has different morphosyntactic properties, which will be exemplified in the sections below. I will show that the architecture of LFG makes it possible to identify these different types of subjectlessness at different levels of representation of the predicate, even though the new analyses may require revising some elements of LFG's theory of argument structure. Constructions of **TYPE 1 (*pro-drop*)** fall under the standard LFG analysis of unexpressed pronouns. Constructions of **TYPE 2 (*morpholexical impersonals*)** need a new analysis: they have an unaltered argument structure, but the categorial expression of their fully operational syntactic subject is suppressed. At functional structure level, the covert subject may be analysed as an obligatory PRO analogous to the PRO in arbitrary anaphoric control constructions. Finally, constructions of **TYPE 3 (*truly subjectless predicates*)**, which have no subject at any level of analysis (a-structure, f-structure, or c-structure), provide a strong argument against LFG's Subject Condition ('Every predicator must have a subject'; Bresnan 2001:311).

## 2 TYPE 1: *pro-drop* constructions

The following Polish sentences are not usually associated with the *pro-drop* phenomenon. They exemplify predicates denoting natural or supernatural phenomena including weather phenomena (1-2), the so-called 'adversity impersonals' (3), and predicates denoting physical or psychological states (4):

- (1) *Pada/Świta.*  
rains/dawns  
'It is raining/dawning.'
- (2) *W tym domu straszy.*  
in this house spooks

‘It haunts in this house.’ (meaning: ‘This house is haunted’)

- (3) *Wyrzuciło łódkę na brzeg.*  
threw-out.3SG.NEUT boat(FEM).ACC onto shore  
‘The boat got thrown onto the shore.’
- (4) a. *Mdli/Dusi/Skręca/Ciągnie/Boli/Swędzi/Kłuje mnie.*  
nauseates/chokes/convulses/pulls/aches/itches/stabs me.ACC  
‘[Something] makes me nauseous/choke/convulse/contract my muscles/painful/itch/gives me shooting pains.’
- b. *Mdli/Dusi/Skręca mnie od tego zapachu.*  
nauseates/chokes/convulses me.ACC from this smell  
‘This smell makes me nauseous/choke/convulse.’
- c. *Mdli/Dusi/Skręca mnie z bólu/zazdrości.*  
nauseates/chokes/convulses me.ACC from pain/envy  
‘The pain/envy makes me nauseous/choke/convulse.’

Clauses of this type commonly appear without an overt nominative subject and use verbal forms displaying ‘default’ agreement. They are often treated as impersonal active clauses with covert inanimate subjects – that is, they are taken to contain an empty or ‘zero’ subject. The existence of the ‘zero’ subject is taken to trigger ‘default’ 3SG.NEUT agreement in the verb and impose on the construction an ‘inherent inanimate force’ interpretation.

However, it is straightforward to demonstrate that all predicates used in these constructions can easily appear with an overt nominative subject, whether in the singular or in the plural:

- (5) a. *Padalo. ~ Deszcz padał.*  
rained.3SG.NEUT rain(MASC).NOM rained.3SG.MASC  
‘It was raining. ~ The rain was raining.’
- b. *Świta. ~ Poranek świta.*  
dawns morning(MASC).NOM dawns  
‘It is dawning. ~ The morning is dawning.’
- c. *Często padają tu ulewne deszcze.*  
often rain.3PL here torrential.NONVIR.NOM rains(NONVIR).NOM  
‘Torrential rains often rain here.’
- (6) a. *W tym domu straszy.*  
in this house spooks  
‘It haunts in this house.’ (meaning: ‘This house is haunted’)
- b. *W tym domu coś straszy.*  
in this house something(NEUT).NOM spooks  
‘Something haunts in this house.’ (meaning: ‘This house is haunted by something/some ghost’)
- c. *W tym domu straszy duch pradziadka.*  
in this house spooks ghost(MASC).NOM great-grandfather(MASC).GEN  
‘This house is haunted by the ghost of the great grandfather.’

- (7) a. *Morze wyrzuciło łódkę na brzeg.*  
 sea(NEUT).NOM threw-out.3SG.NEUT boat(FEM).ACC onto shore  
 ‘The sea threw the boat onto the shore.’
- b. *Fale wyrzuciły łódkę na brzeg.*  
 waves(NONVIR).NOM threw-out.3PL.NONVIR boat(FEM).ACC onto shore  
 ‘The waves threw the boat onto the shore.’
- (8) a. *Wszystkie zapachy mnie mdliły. Nawet*  
 all smells(NONVIR).NOM me.ACC nauseated.3PL.NONVIR even  
*zapach kawy mnie mdlił.*  
 smell(MASC).NOM coffee(FEM).GEN me.ACC nauseated.3SG.MASC  
 ‘All smells made me nauseous. Even the smell of coffee made me nauseous.’
- b. *Ból skręcał mnie niemiłosiernie.*  
 pain(MASC).NOM convulsed.3SG.MASC me.ACC mercilessly  
 ‘The pain convulsed me mercilessly.’
- c. *Bolała/Swędziła mnie głowa.*  
 ached/itched.3SG.FEM me.ACC head(FEM).NOM  
 ‘My head ached/itched.’
- d. *Coś mnie dusi. / Duszą mnie*  
 something(NEUT).NOM me.ACC chokes choked.3PL.NONVIR me.ACC  
*te zapachy.*  
 these.NONVIR.NOM smells(NONVIR).NOM  
 ‘Something makes me choke. / Those smells made me choke.’

Furthermore, there are no morphosyntactic restrictions on any of these verbs which would prevent them from agreeing with a subject in a person other than third, e.g.:

- (9) *Głośno wiejesz, wietrze.*  
 loudly blow.2SG wind(MASC).VOC  
 ‘You are blowing loudly, wind.’

All this suggests that these constructions do not lack a subject at any level of abstract representation of the predicate. They are personal predicates and their superficial subjectlessness results from the familiar *pro*-drop phenomenon. Wierzbicka (1966) argued against a *pro*-drop analysis of Polish ‘weather constructions’ assuming that the dropped pronoun would have to be a personal pronoun corresponding in gender to the nominal denoting the particular natural phenomenon, that is: *on* ‘he[MASC]’ for *deszcz* ‘rain(MASC)’ or *wiatr* ‘wind(MASC)’; *ono* ‘it[NEUT]’ for *niebo* ‘sky(NEUT)’ or *powietrze* ‘air(NEUT)’. She assumed that, if the ‘subjectless’ weather sentences were a result of subject ellipsis, the verb would have to display gender agreement with the dropped pronoun corresponding to the nominal denoting the natural phenomenon. Such agreement is indeed not established. However, this hypothesis makes an incorrect assumption about the subject of the weather constructions: the dropped subject is not the personal pronoun, but the indefinite pronoun.

All nouns and pronouns in Polish, whether denoting or referring to people, objects, abstract notions or natural phenomena, bear the feature of inherent grammatical gender:

MASC, FEM or NEUT in the singular, and VIR (masculine human) or NONVIR (all other, i.e. non-masculine human and all non-human) in the plural.<sup>2</sup> The so-called indefinite pronouns *ktoś* ‘somebody’, referring to humans (HUM), and *coś* ‘something’, referring to non-humans (NON-HUM), bear the grammatical features MASC and NEUT, respectively, and these are also the gender agreements that they trigger in the verb.

The following is an example of a definite (and referential) use of the indefinite HUM pronoun *ktoś* which is employed here in order to avoid specifying the gender (and number) of the referent of the agent:

- (10) *Ten                    ktoś                    pisał,                    jakby chciał                    nas*  
 this.MASC.NOM someone(MASC).NOM wrote.3SG.MASC as-if wanted.3SG.MASC us  
*ostrzec.*  
 warn.INF

‘This person was writing as if he/she wanted to warn us [of something].’

If the pronoun is dropped, as in any other familiar case of ellipsis, the resulting sentence is:

- (11) *Pisał,                    jakby chciał                    nas ostrzec.*  
 wrote.3SG.MASC as-if wanted.3SG.MASC us warn.INF

‘He/she was writing as if he/she wanted to warn us [of something].’

Although sentence (11) taken out of context is ambiguous between a gender non-specific (‘he or she’) and a gender specific (‘he’) interpretation of its agent, both examples (10) and (11) show that **3SG.MASC agreement** is used with **unspecified singular human** subjects, whether overt or dropped.

By analogy, the following sentence:

- (12) *Wieje,                    jakby chciało                    powyrywać drzewa z korzeniami.*  
 blows[3SG].NEUT as-if wanted.3SG.NEUT pull-out.INF trees with roots  
 ‘[The wind] is blowing as if it wanted to pull out the trees with their roots.’

illustrates the use of **3SG.NEUT agreement** with an **unspecified non-human** subject. In the sentence above, the subject has remained unexpressed overtly, as in example (11).

If we choose to specify the number and gender of the agent of the event denoted by the verb, the number and gender agreement corresponding to the unspecified agent is replaced by verbal inflection corresponding to the grammatical number and gender of the subject nominal. Therefore, in case of human agents, we can have, for example:

- (13) *Piotr                    pisał,                    jakby chciał                    nas ostrzec.*  
 Peter.MASC.NOM wrote.3SG.MASC as-if wanted.3SG.MASC us warn.INF  
 ‘Peter was writing as if he wanted to warn us [of something].’

- (14) *Ta                    kobieta                    pisała,                    jakby chciała                    nas*  
 this.FEM.NOM woman.FEM.NOM wrote.3SG.FEM as-if wanted.3SG.FEM us  
*ostrzec.*  
 warn.INF

‘This woman was writing as if she wanted to warn us [of something].’

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<sup>2</sup>This is a simplified view of Polish gender in its interaction with number, but it is sufficient to describe the phenomena discussed in this paper.

Moreover, in case of subject ellipsis, the verb retains its agreement with the ‘dropped *pro*’ denoting a human agent, because personal pronouns are specified for exactly the same features which trigger the agreement as the nominals they correspond to:

- (15) (*On*)                    *pisal*,                    *jakby chciał*                    *nas ostrzec*.  
 (he[MASC].NOM) wrote.3SG.MASC as-if wanted.3SG.MASC us warn.INF  
 ‘He was writing as if he wanted to warn us [of something].’
- (16) (*Ona*)                    *pisała*,                    *jakby chciała*                    *nas ostrzec*.  
 (she[FEM].NOM) wrote.3SG.FEM as-if wanted.3SG.FEM us warn.INF  
 ‘She was writing as if she wanted to warn us [of something].’

In case of overtly expressed non-human agents, the gender and number agreement also corresponds to the grammatical gender and number of the subject nominal, as was shown in sentences to the right of the hyphens in example (5). However, even though *deszcz* ‘rain(MASC)’ or *wiatr* ‘wind(MASC)’ are grammatically masculine, and *niebo* ‘sky(NEUT)’ or *powietrze* ‘air(NEUT)’ are grammatically neuter, it is not possible to replace these nominals with the personal pronouns *on* ‘he[MASC]’ or *ono* ‘it[NEUT]’ unless we personify the natural phenomena in question.

The unacceptability – or, more accurately, the infelicity – of sentences such as:

- (17) a. #*On*                    *padał*.  
           he[MASC].NOM rained.3SG.MASC  
           ‘It [he=the rain] was raining.’
- b. #*Ono*                    *się ochłodziło*.  
           it[NEUT].NOM REFL cooled-down.3SG.NEUT  
           ‘It [=the air] has become colder.’

follows from the fact that, in addition to being specified for number and gender, personal pronouns in Polish conventionally denote human (HUM) agents, while verbs such as ‘rain’, ‘snow’ or ‘cloud over’ imply a non-human (NON-HUM) ‘agent’ or cause.

Since weather verbs in Polish are not normally used with personal pronouns, it is, therefore, not plausible to suggest that weather constructions without an overt subject result from personal pronoun ellipsis. It is, however, reasonable to see them as resulting from the ellipsis of the indefinite pronoun *coś* ‘something’ which is used to achieve the ‘unspecified agent’ interpretation and which triggers 3SG.NEUT agreement. In case of subject ellipsis (*pro*<sub>INDEF-drop</sub>), the 3SG.NEUT verbal agreement is retained. One of the conventional uses of the ‘indefinite’ pronouns, both HUM and NON-HUM, is with a **definite** referent whom/which the speaker chooses not to specify. By omitting the indefinite pronoun *coś* ‘something’, the identity of the ‘agent’ is not questioned, but left unspecified, since it is in most cases understood from the context.<sup>3</sup>

Clauses with *pro*<sub>INDEF-drop</sub> do not present problems for LFG. They fall under the standard analysis of unexpressed pronouns, e.g., Bresnan (2001:144-177). She analyses *pro*-drop as the functional specification of a pronominal argument by the head to which the pronominal inflection is bound, which entails the absence of the structural expression of

<sup>3</sup>For more detailed discussion of the morphosyntax of *pro*<sub>INDEF-drop</sub> constructions in Polish, see Kibort (2004:295-318).

the pronoun as a syntactic NP or DP when the optional semantic and binding features of the pronominal inflection are present.

### 3 TYPE 2: morpholexical impersonals

There are two constructions in Polish whose grammaticalised function is to despecify the principal participant of the predicate: the *-no/-to* impersonal and the reflexive impersonal. The principal participant in these constructions is interpreted as either an unspecified or a generic human agent or experiencer. The constructions have particular morphosyntactic properties and morphological marking. The *-no/-to* impersonal uses a dedicated, uninflecting verb form ending in *-no/-to*, and is restricted to past tense, while the reflexive impersonal uses 3SG.NEUT verb form and the reflexive marker *się*, and can be used in all tenses.

#### 3.1 The *-no/-to* construction

The *-no/-to* construction is exemplified in (18) and (19):

- (18) *Budowano szkołę.*  
 built.IMPERS school(FEM).ACC  
 ‘A/The school was built. / [They] were building a/the school.’

- (19) *Tutaj tańczono.*  
 here danced.IMPERS  
 ‘There was dancing here. / [They] danced here.’

One of the key properties of this construction is that it can be used with both intransitive and transitive predicates, and in the case of transitives the accusative object is retained, as in (18). Another key property is that it can be formed from both unergative and unaccusative predicates, including the habitual/iterative form of the verb ‘be’. It can be formed from passivised predicates, therefore it has to be treated as independent of passivisation. The following example contains an impersonal form of the auxiliary (*bywano*) in a periphrastic passive construction with a passive participle (*bitymi*):

- (20) *Dostawano różne kary i*  
 received.IMPERS various.NONVIR.ACC punishments(NONVIR).ACC and  
*bywano bitymi.*  
 wasITERATIVE.IMPERS beat.PART.PL.INSTR  
 ‘[They/One] received various punishments and were/was beaten.’

The Polish *-no/-to* construction does not, under any circumstances, accept the surface expression of a nominative subject (21-22), nor does it accept the expression of the agent in an oblique phrase as in the passive, (23-24):

- (21) *\*Władze budowano szkołę.*  
 authorities(NONVIR).NOM built.IMPERS school(FEM).ACC  
 ‘(intended) The authorities were building a/the school.’

- (22) \**Uczniowie tutaj tańczono.*  
 pupils(VIR).NOM here danced.IMPERS  
 ‘(intended) The pupils were dancing here.’
- (23) \**Budowano szkołę przez władze.*  
 built.IMPERS school(FEM).ACC by authorities  
 ‘(intended) A/The school was built by the authorities.’
- (24) \**Tutaj tańczono przez uczniów.*  
 here danced.IMPERS by pupils  
 ‘(intended) The dancing was done here by pupils.’

However, despite being superficially subjectless, the *-no/-to* impersonal appears to have a syntactically active ‘covert’ subject which participates in syntactic control and binding. The *-no/-to* predicate can share its subject with infinitives (25), with deverbal adverbials (26), and in a subject-raising construction (27); the covert subject of *-no/-to* is also capable of binding reflexive and reflexive possessive pronouns when they need to be bound by the subject (28-29):

- (25) *Chciano wyjechać.*  
 wanted.IMPERS leave.INF  
 ‘There was eagerness to leave.’
- (26) *Wsiadając do autobusu pokazywano bilety.*  
 get-on.PART<sub>CONTEMP</sub> into bus showed.IMPERS tickets(NONVIR).ACC  
 ‘On getting on the bus [they]/one showed the tickets.’
- (27) *Zdawano się tego nie dostrzegać.*  
 seemed.IMPERS REFL this.MASC.GEN NEG notice.INF  
 ‘[They] seemed not to notice this.’
- (28) *Oglądano się/siebie w lustrze.*  
 looked-at.IMPERS REFL/self.ACC in mirror  
 ‘[They] looked at [them]selves in the mirror. / One looked at oneself in the mirror.’
- (29) *Oglądano swoje zbiory.*  
 looked-at.IMPERS own[REFL].NONVIR.ACC collections(NONVIR).ACC  
 ‘[They] looked at [their] own collections. / One looked at one’s collection.’

The *-no/-to* impersonal is not agentless, either. Its agent (or experiencer) licenses all sorts of agent-oriented adverbials (e.g., *celowo* ‘on purpose’) and is invariably interpreted as an unspecified but definite human. The human interpretation of the agent/experiencer, which has been grammaticalised in the usage of this construction, overrides any semantic implications to the contrary that may arise from the meaning of the lexical items used in the clause, or from the context. Therefore, the *-no/-to* forms of predicates such as ‘bark’ or ‘build nests’ can only be interpreted as involving human activity.

The covert subject of the *-no/-to* impersonal triggers virile (plural) marking in agreeing (adjectival and nominal) predicative complements. Examples (30) and (31) show that expressions whose referents are, inflectionally, other than virile (plural) are incompatible with the *-no/-to* form and produce ill-formed clauses:

- (30) (example adapted from Dziwirek 1994:222)
- a. \**Pracowano jako nauczyciel.*  
worked.IMPERS as teacher(MASC).NOM
  - b. \**Pracowano jako nauczycielka.*  
worked.IMPERS as teacher(FEM).NOM
  - c. \**Pracowano jako nauczycielki.*  
worked.IMPERS as teachers(NONVIR)[FEM].NOM
  - d. *Pracowano jako nauczyciele.*  
worked.IMPERS as teachers(VIR).NOM  
‘[They] worked as teachers. / One worked as a teacher.’
- (31)
- a. \**Wyglądano na szczęśliwego.*  
looked.IMPERS to happy.MASC.ACC
  - b. \**Wyglądano na szczęśliwą.*  
looked.IMPERS to happy.FEM.ACC
  - c. \**Wyglądano na szczęśliwe.*  
looked.IMPERS to happy.NONVIR.ACC
  - d. *Wyglądano na szczęśliwych.*  
looked.IMPERS to happy.VIR.ACC  
‘[They/One] looked happy.’

There is no off-the-shelf LFG analysis of impersonals, and therefore none to fit the *-no/-to* construction. The *-no/-to* impersonal is not a syntactic variant of the passive: it is neither an ill-behaved passive of the transitive, nor equivalent to the passive of the intransitive. It retains the accusative object, can be applied to unaccusatives, and exists alongside the passive – as was shown in (20), it can be formed from a passivised transitive predicate if the passive subject can be interpreted as human. It is, therefore, a different morpholexical construction to the passive (for more detailed argumentation against a passive analysis of this construction, see Kibort 2001).

The fact that *-no/-to* impersonalisation preserves both the grammatical relations and the internal (lexical) semantic structure of the predicate, but only suppresses the surface realisation of the subject, means that, unlike valency-changing operations, it is argument-structure-neutral – the argument structure of an impersonalised verb is unaltered. Thus, the a-structure representation of the impersonalised transitive verb *czytano* ‘read.IMPERS’ is the same as that of a personal active verb:<sup>4</sup>

- (32) **impersonal of the transitive**     $\langle x \quad y \rangle$   
  |                   |  
  SUBJ            OBJ

<sup>4</sup>In the a-structure representations of impersonalised predicates that I had hypothesised prior to this paper, I placed the symbol  $\emptyset$  under the SUBJ to indicate that this grammatical function was prevented from being mapped onto a categorial argument. Cf. the LMT ‘suppression’ rule which says: ‘Do not map an argument to the syntax’ (e.g., Bresnan 2001:21-22; Falk 2001:111) and is notated with  $\emptyset$ . I understand now that this notation was superfluous. If we accept that the subject of the impersonalised predicate is an (obligatory) PRO (i.e., the impersonal inflection provides the specification ( $\uparrow$  SUBJ PRED) = ‘PRO’ in the f-structure), there can be no other NP that could be the subject at the same time.

The covert subject is not a phonetically empty pronoun (*pro*). It is not a null expletive – Polish does not have expletives at all, and the covert subject has a thematic role. It is not a dropped pronominal subject (VIR), either – the *-no/-to* morphology is not equivalent to normal VIR morphology, and we would have no way of explaining what prohibits the overt expression of the pronominal subject.

However, it is possible to analyse the covert subject of the *-no/-to* impersonal as a pronominal anaphor analogous to the null, or shared, subject of non-finite clauses in syntactic control contexts (PRO). In constructions involving arbitrary anaphoric control the reference of the pronominal element in the clause is not determined syntactically, but the controlled argument finds it referent in a way similar to an ordinary pronoun. Thus, the f-structure of *czytano* ‘read.IMPERS’ could be represented as in (33), with the c-structure appropriately lacking the node for the categorial expression of the subject:

(33)

$$f: \left[ \begin{array}{l} \text{PRED} \quad \text{'czytano } \langle (f \text{ SUBJ})(f \text{ OBJ}) \rangle \\ \text{TENSE} \quad \text{PAST} \\ \text{SUBJ} \quad \left[ \begin{array}{l} \text{PRED} \quad \text{'PRO'} \\ \text{HUMAN} \quad + \\ \text{NUM} \quad \text{PL} \\ \text{GEND} \quad \text{VIR} \end{array} \right] \\ \text{OBJ} \quad \left[ \begin{array}{l} \vdots \end{array} \right] \end{array} \right]$$

The [PRED ‘PRO’] subject is introduced by the impersonal *-no/-to* inflection. The impersonal PRO differs from the pronominal anaphor of non-finite clauses in that it is clearly finite, and never syntactically controlled. The subject of the *-no/-to* impersonal is always interpreted as an **unspecified** human, but it is by no means always arbitrary – it may have either an unspecified arbitrary referent, or, very commonly, an unspecified definite referent. Furthermore, the human interpretation of the subject of the *-no/-to* impersonal cannot be overridden as it can be in infinitival clauses with the ‘optional control’ of the PRO by a superordinate non-subject argument: e.g., English *It’s all too common to bark (at your kids/\*in the dogpound)*, but: *It’s all too common for all the dogs to bark all at once in the dogpound*. Finally, when the PRO<sub>arb</sub> in Polish uncontrolled (i.e., arbitrarily controlled) infinitivals has an adjectival complement, the adjective has to be masculine (singular), while the covert subject of the *-no/-to* impersonal is compatible only with predicate adjectives which are virile (plural); compare examples (31) and (34):

(34) (example from Lavine 2005:97, ft. 26)

*Jest ważne być szczęśliwym / \*szczęśliwymi.*  
 is important.NEUT be.INF happy.MASC.INSTR / happy.PL.INSTR

‘It is important to be happy.’

I understand that it is possible to draw all these properties of the *-no/-to* subject from the fact that it is introduced in a different way to the subject of non-finite clauses: here, it is the impersonal inflection itself that provides the (obligatory) [PRED ‘PRO’] for its subject together with any other gender and number specifications that are required.<sup>5</sup>

<sup>5</sup>I would like to thank the participants of the LFG06 conference for a helpful discussion of the options of how to analyse the *-no/-to* subject, and for inclining to adopt this one as the most promising. Special thanks

### 3.2 The reflexive impersonal

The morphosyntactic behaviour of the Polish reflexive impersonal mirrors that of the *-no/-to* impersonal. It can be used with both intransitive and transitive predicates, and it retains accusative objects:

- (35) *Budowało się szkołę.*  
built.3SG.NEUT REFL school(FEM).ACC  
'A/The school was built. / One was building a/the school.'
- (36) *Tańczyło się.*  
danced.3SG.NEUT REFL  
'One danced.'

It can also be formed from both unergative and unaccusative predicates, and from passivised predicates, for example:

- (37) *Było się żebrakiem.*  
was.3SG.NEUT REFL beggar(MASC).INSTR  
'One was a beggar.'
- (38) *Było się bitym przez kaprala.*  
was.3SG.NEUT REFL beat.PART.MASC.INSTR by corporal  
'One was beaten by the corporal.'

The Polish reflexive impersonal does not, under any circumstances, accept the surface expression of a nominative subject (39-40), nor does it accept the expression of the agent in an oblique phrase as in the passive, (41-42):

- (39) *\*Władze budowało się szkołę.*  
authorities(NONVIR).NOM built.3SG.NEUT REFL school(FEM).ACC  
'(intended) The authorities were building a/the school.'
- (40) *\*Uczniowie tańczyło się.*  
pupils(VIR).NOM danced.3SG.NEUT REFL  
'(intended) The pupils were dancing.'
- (41) *\*Budowało się szkołę przez władze.*  
built.3SG.NEUT REFL school(FEM).ACC by authorities  
'(intended) A/The school was built by the authorities.'
- (42) *\*Tańczyło się przez uczniów.*  
danced.3SG.NEUT REFL by pupils  
'(intended) The dancing was done by pupils.'

The covert subject of the reflexive impersonal is also syntactically active and participates in syntactic control and binding. The reflexive impersonal can share its subject with infinitives (43), with deverbal adverbials (44), and its covert subject is capable of binding reflexive and reflexive possessive pronouns when they need to be bound by the subject (45-46):

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to Rachel Nordlinger for further clarifying some issues to me.

- (43) *Chciało się wyjechać.*  
 wanted.3SG.NEUT REFL leave.INF  
 ‘There was eagerness to leave.’
- (44) *Wsiadając do autobusu pokazuje się bilet.*  
 get-on.PARTCONTEMP into bus shows REFL ticket(MASC).ACC  
 ‘On getting on the bus one shows the ticket.’
- (45) *Maluje się całego siebie od stóp do głów.*  
 paints REFL whole.MASC.ACC self.ACC from feet to heads  
 ‘One covers oneself with paint from head to foot.’
- (46) *Nie niszczyło się swoich dokumentów.*  
 NEG destroyed.3SG.NEUT REFL OWN[REFL].NONVIR.GEN documents(NONVIR).GEN  
 ‘One did not destroy one’s documents.’

Like the *-no/-to* impersonal, the reflexive impersonal has an agent (or experiencer) which licenses agent-oriented adverbials (e.g., *celowo* ‘on purpose’) and which has a ‘default’ human interpretation. However, unlike in the *-no/-to* impersonal, this default interpretation can be exceptionally overridden by providing a different referent for the unspecified agent somewhere in the context, for example:

- (47) *Gdy się jest bocianem, gniazdo buduje się wysoko.*  
 when REFL is stork(MASC).INSTR nest(NEUT).ACC builds REFL high-up  
 ‘When one is a stork, one builds the nest high up.’

Furthermore, the reflexive impersonal verb form does not seem to impose the same inflectional requirements on its predicative complements as the *-no/-to* form. That is, if the context provides a specific agent/undergoer as the referent of the covert subject, agreeing (nominal and adjectival) predicative complements of the reflexive impersonal may carry any number and person markers corresponding to the features of the referent of this covert subject:

- (48) a. *Pracowało się jako nauczyciel /nauczycielka*  
 worked.3SG.NEUT REFL as teacher(MASC).NOM /teacher(FEM).NOM  
*/nauczyciele /nauczycielki.*  
*/teachers(VIR).NOM /teachers(NONVIR).NOM*  
 ‘One worked as a teacher. / [We] worked as teachers.’
- b. *Wyglądało się na biednego studenta /biedną*  
 looked.3SG.NEUT REFL to poor.MASC.ACC student(MASC).ACC /poor.FEM.ACC  
*studentkę /biednych studentów /biedne*  
*studentki, to i wpuszczali za darmo.*  
*students(NONVIR).ACC so and let-in.3PL.VIR for free*  
 ‘One looked like a poor student, so one was let in for free. / [We] looked like poor students, so [we] were let in for free.’

- c. *Było się często bitym /bitą*  
 was.3SG.NEUT REFL often beat.PART.MASC.INSTR /beat.PART.FEM.INSTR  
*/bitymi.*  
 /beat.PART.PL.INSTR  
 ‘One was often beaten.’
- d. *Było się kiedyś szczęśliwym /szczęśliwą*  
 was.3SG.NEUT REFL in-the-past happy.MASC.INSTR /happy.FEM.INSTR  
*/szczęśliwymi.*  
 /happy.PL.INSTR  
 ‘Once, one was happy.’

Like *-no/-to* impersonalisation, reflexive impersonalisation also preserves both the syntactic and semantic valency of the predicate, but suppresses the surface realisation of the subject. Therefore, the reflexive impersonal *czytało się* ‘read.3SG.NEUT REFL’ can be represented with the same a-structure as the *-no/-to* impersonal *czytano* ‘read.IMPERS’:

- (49) **impersonal of the transitive**     $\langle x \quad y \rangle$   
   |            |  
   SUBJ        OBJ

The reflexive impersonal has the same morphosyntactic properties as the *-no/-to* impersonal, therefore it can also be analysed as having an obligatory [PRED ‘PRO’] subject, but its subject has different inflectional properties. Instead of the specific number and gender features, the agreement features of the reflexive impersonal’s subject could be represented by the metavariable [*agr*  $\alpha$ ]. Thus, the f-structure of *czytało się* ‘read.3SG.NEUT REFL’ could be represented as in:

(50)

$$f: \left[ \begin{array}{l} \text{PRED} \quad \text{'czytało-się } \langle (f \text{ SUBJ})(f \text{ OBJ}) \rangle \text{' } \\ \text{TENSE} \quad \text{PAST} \\ \text{SUBJ} \quad \left[ \begin{array}{l} \text{PRED} \quad \text{'PRO'} \\ \text{agr} \quad \alpha \end{array} \right] \\ \text{OBJ} \quad \left[ \begin{array}{l} \vdots \end{array} \right] \end{array} \right]$$

Note that the exponent of the impersonal inflection introducing the ‘PRO’ subject in this construction is analytic, consisting of ‘3SG.NEUT marker + *się*’.

#### 4 TYPE 3: truly subjectless predicates

There are two types of Polish nominativeless clauses which genuinely do not have syntactic subjects – that is, do not contain elements omitted only from surface syntax, whether due to ellipsis (*pro*-drop) or suppression (as in impersonalisation). They can be formed with two types of predicates which do not have subjects at a-structure as well as at f-structure and c-structure: a small class of defective (non-inflecting) verbs, and passives of intransitives. The existence of these predicates calls into question LFG’s Subject Condition and similar principles expressed in other syntactic frameworks, such as GB’s ‘Extended

Projection Principle’ and RG’s ‘The Final 1 Law’. Because the subject function is assumed to be universally required in clauses, subjects – including null or shared subjects – are standardly considered obligatory, and truly impersonal predicates do not feature in any standard syntactic analyses.

#### 4.1 Inherently impersonal predicates

These clauses do not result from any derivation, and do not contain elements omitted only from surface syntax. Predicates which make these clauses are inherently subjectless – that is, their argument structures inherently lack the first argument.

The class of Polish inherently impersonal predicates is very small and comprises only a few defective (non-inflecting) verbs such as *widac* ‘see.[NON-PERSONAL]’, *slychać* ‘hear.[NON-PERSONAL]’, *czuć* ‘feel.[NON-PERSONAL]’, *stać* ‘afford.[NON-PERSONAL]’, *znać* ‘know.[NON-PERSONAL]’. The form of these verbs resembles the infinitive, but their distribution and morphosyntactic behaviour are not like those of infinitives – they function in the clause as main verbs, resembling personal predicates. Here are examples of typical clauses with these verbs:

- (51) a. *Slychać*                      *ją*        / *jakieś*                      *mruczenie*.  
 hear.[NON-PERSONAL] her.ACC    some.NEUT.ACC murmuring(NEUT).ACC  
 ‘One can hear her/some murmuring.’
- b. *Było*                      *widac*                      *łąkę*.  
 was.3SG.NEUT see.[NON-PERSONAL] meadow(FEM).ACC  
 ‘One could see a/the meadow.’
- c. *Czuć*,                      *że się wygina*.  
 feel.[NON-PERSONAL] that REFL bends  
 ‘One can feel that it is bending.’

As exemplified in the sentences above, all these verbs take complements in the form of an accusative noun/pronoun, a gerund or a finite clause.

If a sentence with a defective verb is meant to refer to the present, the verb may be used with or without the present auxiliary (*jest* ‘is’). In the past, as in sentence (b) above, all these verbs require the past auxiliary (*było* ‘was.3SG.NEUT’) which carries tense marking.

The fact that these predicates are truly impersonal does not seem to be contested in any Polish grammars since, as phrased by Fisiak et al. (1978:24), ‘there is no reconstructable noun phrase which can be regarded as being the deleted subject of sentences [with these predicates]’ (see also Nagórko 1998:267 for a similar remark).

I suggest that impersonal predicates formed with defective verbs have lexically impersonal argument structures which, in the intransitive variants, may be represented simply as empty argument frames:

- (52) **inherently impersonal predicate**

⟨                      ⟩

while in the transitive variant they additionally include an object argument (apart from the unoccupied first argument position):

(53) **inherently impersonal predicate with an object**



In an argument structure like (53) it is normally expected that the first argument of the predicate is assigned the grammatical function of the subject (as in the canonical anticausative, for example). However, in defective verbs the underlying object ([−r]) is preserved as a syntactic object [+o]<sup>6</sup>, which makes these verbs somewhat similar to morpholexical impersonals.

In contrast with morpholexical impersonals, defective verbs do not have a covert syntactic subject which would participate in syntactic control and reflexive binding, nor do they have an active agent which would control agent-oriented adverbials. On the other hand, they use the same lexical roots as the corresponding personal verbs which have agents/experiencers: *słyszeć* ‘hear’, *widzieć* ‘see’, *czuć* ‘feel’, etc. For this reason, despite being ‘impersonal’ at every level of argument structure (i.e. despite being subjectless, argumentless, and agentless), they are used exclusively in situations which involve animate (typically human) participants as agents/experiencers and they are interpreted accordingly. This might be the reason why they are exceptionally allowed to preserve their structural objects. There does not seem to be any other motivation for such a mapping, and the construction does not result from a productive derivational rule. On the contrary, the class of defective verbs in Polish is indeed very small and their morphosyntactic behaviour seems to be unusual.

If the a-structures above are accepted, the f-structure representation of the inherently impersonal verb *widać* ‘see.[NON-PERSONAL]’ with an object could be:

(54)

$$f: \left[ \begin{array}{ll} \text{PRED} & \text{‘widać } \langle (f \text{ OBJ}) \rangle \text{’} \\ \text{TENSE} & \text{PRESENT} \\ \text{OBJ} & \left[ \begin{array}{c} \vdots \\ \vdots \end{array} \right] \end{array} \right]$$

## 4.2 Passives of intransitives

The impersonal variant of the periphrastic passive results from the application of the passive rule to an intransitive predicate regardless of whether the predicate originally subcategorised for one argument only, or whether it happened to be an intransitive use of a potentially transitive predicate. It is, therefore, a derived construction which does not have a subject (either overt or covert), though it does, arguably, still have the original agent which can be mapped onto an oblique (as in examples (56) and (57) below).

Below are some examples of Polish impersonal passives:

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<sup>6</sup>This argument is associated with a *primary*, not secondary, patientlike role, therefore I hypothesise that instead of being pre-specified as [+o], it is pre-specified as [−r] and then allowed to increase in markedness ([+o]) in order to be linked to OBJ. This operation can be referred to as ‘object preservation’ and it may be found in other types of clauses, e.g. the common (personal) active with a subject instrument that may not be conceptualised as an agent (Kibort 2004:368-372).

- (55) *Wchodzisz i czujesz, że było palone.*  
 come-in.2SG and feel/smell.2SG that was.3SG.NEUT smoke.PART.SG.NEUT  
 ‘You come in and you can smell that there has been smoking [here].’
- (56) *Czy na tej ulicy już było sypane (przez kogokolwiek)?*  
 INTERROG on this street already was.3SG.NEUT throw/spread.PART.SG.NEUT (by anyone)  
 ‘Has there already been spreading [of grit] on this street (by anyone)?’
- (57) *Nie widać, żeby tutaj było sprzątane przez firmę.*  
 NEG see.[NON-PERSONAL] COMPL.[3SG] here be.-Ł-PART.SG.NEUT tidy-up.PART.SG.NEUT by company  
 ‘It doesn’t look as if this place was cleaned by a [professional] company.’
- (58) *Będzie ci wybaczone, jeśli przeprosisz.*  
 be.FUT.3SG you.2SG.DAT forgive.PART.SG.NEUT if apologise.FUT.2SG  
 ‘[It] will be forgiven you if you apologise.’

The personal passive of the transitive can be represented in the following way (e.g., Bresnan 2001:26):

- (59) **passive of the transitive**      $\langle x \quad y \rangle$   
   |            |  
   (OBL)       SUBJ

When the passive operates on an intransitive predicate, the result can be diagrammed as follows:

- (60) **passive of the intransitive**      $\langle x \quad \rangle$   
   |  
   (OBL)

If the predicate does not subcategorise for any other arguments apart from the one being downgraded to oblique, there is no possibility of promoting any other argument to the status of syntactic subject. On the other hand, the mere presence of another argument does not guarantee its promotion either. In Polish, only ‘underlying’ objects, expressing patients/themes, but not beneficiaries or locatives, can become subjects. Although the same general rule applies in English passives, in the appropriate syntactic circumstances, the downgrading of the first argument may result in an oblique location argument being mapped onto syntactic subject.<sup>7</sup>

Locative inversion, described at length particularly in Bresnan & Kanerva (1989) and Bresnan (1994) can be exemplified by the following pair of sentences in English:

<sup>7</sup>As for English beneficiaries, when they are mapped onto passive subjects they occupy the second, direct object, position in the argument structure not the third position of the indirect object. See Kibort (2004:78-90) for discussion.

- (61) a. *Those visitors came to the village.*  
 b. *To the village came those visitors.*

Bresnan (1994) demonstrates that, despite lacking the nominal morphology (and hence the agreement features) of subjects, inverted locatives in English have the properties of syntactic subjects as grammatical relations. Therefore, in sentence (61b) the nominal denoting the ‘village’ is a syntactic subject, while the nominal denoting the ‘visitors’ is a syntactic object.

The final mappings of arguments after locative inversion in a predicate such as *come* can be represented as in:

- (62) **locative inversion**     $\langle x \quad z \rangle$   
   |            |  
   OBJ        SUBJ

Viewing locative inversion as downgrading of the highest argument to a lower grammatical function (in a similar way to passivisation) predicts correctly that locative inversion may be found with predicates which subcategorise for only one argument:

- (63) a. *And then, those visitors came.*  
 b. *And then – came those visitors.*

As in the passive, the downgrading of an argument in (locative) inversion involves a concomitant promotion of another (lower) argument only if there is something to be promoted. If there is no argument available to become subject, (locative) inversion results in another subjectless construction, analogous to the impersonal passive of the intransitive:

- (64) **(locative) inversion**     $\langle x \quad \quad \rangle$   
   |  
   OBJ

The demotional (rather than promotional) analysis of both passivisation and locative inversion reveals that, when the two constructions are considered together, they emerge as complementary processes which are part of a larger system of operations occurring in the argument structure of predicates. It has been observed that there are crosslinguistic restrictions on the applicability of both passivisation and locative inversion which are based on the distinction between unergative and unaccusative predicates: passivisation applies only to unergatives, while locative inversion only to unaccusatives. In this way, the two operations apply to two complementary classes of predicates, and they essentially serve the same purpose: they both target the highest argument of the predicate in order to downgrade it to a lower grammatical function (the oblique, and the object, respectively).<sup>8</sup>

It has been noted that the overt expression of the downgraded agent in impersonal passives in Polish is not as easily acceptable as in personal passives. This may be due to the fact that passivisation of intransitive predicates yields clauses which structurally resemble and functionally pattern with unspecified-agent constructions.<sup>9</sup> If a predicate has only one argument, the agent, it can either be specified and appear in a personal clause, or be unspecified through a variety of means. Some of the means of despecifying the agent do not

<sup>8</sup>For detailed discussion of these operations, and references, see Kibort (2001; 2004).

<sup>9</sup>Blevins (2003:489) remarks that ‘[s]ubjectless passives often have an implicitly human interpretation, which suggests that this interpretation is associated with subjectless forms of personal verbs, irrespective of the syntactic source of that subjectlessness’.

make the clause subjectless: these are the use of lexical items with unspecified/generic reference (e.g., the English *one*, *people*, or *they*), or the use of conventionally interpreted verbal agreement (e.g., 3PL in Polish). If, however, the agent is despecified through impersonalisation or passivisation, the clause lacks a surface subject. Reintroducing the downgraded agent into an impersonal passive would contradict the intention to despecify it in the first place. Although it is syntactically legitimate in Polish, it is often more readily acceptable if the agentive phrase is an afterthought or addition to the main utterance, as in:

- (65) *Dzisiaj było już sprzątane –przez sprzątaczkę.*  
 today was.3SG.NEUT already clean.PART.SG.NEUT by cleaners  
 ‘The cleaning has already been done today – by cleaners.’

Reintroducing the agent into surface syntax as an oblique evidently does not pose the same kind of problem in personal passives. This may be because the prime motivation behind personal passives may be the need to locate the syntactic pivot on the initial object of the predicate, and not the need to despecify the agent of the predicate. Impersonal passives do not have the capacity to provide a different syntactic pivot for the clause. Therefore, unless the agent of an intransitive predicate needs to be unspecified, it will simply be kept as the subject of the personal active sentence rather than downgraded from this position only to be reintroduced to surface syntax as an oblique constituent.

Due to the lack of a syntactic subject, impersonal passives show ‘default’ impersonal agreement – that is, the verbs appear in 3SG neuter form. Recall that the same inflectional form is used in the Polish reflexive impersonal which does not have its own dedicated verbal morphology (the personal verb form is simply accompanied by the multifunctional marker *się*).

If the a-structures of the subjectless variants of the passive (60) and the (locative) inversion construction (64) are accepted, the f-structure representations of the impersonal passive *sprzątane* ‘cleaned, tidied-up’ and the inverted impersonal *came* could be, respectively:

(66)

$$f: \left[ \begin{array}{ll} \text{PRED} & \text{'sprzątane } \langle (f \text{ OBL}) \rangle \\ \text{OBL} & \left[ \begin{array}{c} \vdots \end{array} \right] \end{array} \right]$$

(67)

$$f: \left[ \begin{array}{ll} \text{PRED} & \text{'came } \langle (f \text{ OBJ}) \rangle \\ \text{TENSE} & \text{PAST} \\ \text{OBJ} & \left[ \begin{array}{c} \vdots \end{array} \right] \end{array} \right]$$

## 5 Conclusions

The range of Polish subjectless constructions seems to constitute a useful set for testing any syntactic theory. There is large number of constructions which appear to lack the subject, which have distinct morphosyntactic properties, and whose subjectlessness can therefore be attributed to different phenomena identified at different levels of representation that should

be posited for a predicate. In order to be properly distinguished, the constructions need to be handled by a correspondence-based model, and it appears that LFG can successfully provide one.

I have shown that two types of Polish constructions: morpholexical impersonals (TYPE 2) and truly subjectless constructions (TYPE 3) require new analyses.<sup>10</sup> I have suggested that morpholexical impersonalisation could be analysed as the provision of an obligatory PRO for the predicate's subject. As for truly subjectless predicates, once it is accepted that they have a valency slot that is unavailable for grammatical function mappings, the behaviour of their remaining arguments is not unusual. However, this analysis indicates that the 'Subject Condition' should be eschewed.

This last suggestion may not be as drastic as it seems because the Subject Condition may, in fact, be seen as simply redundant. The Mapping Principles of LMT (Bresnan 2001:311) appeal to the markedness hierarchy in (69) derived from the grouping of the grammatical functions into natural classes based on their features, where the highest syntactic function is the least marked:

(68) MAPPING PRINCIPLES

(a) Subject roles:

(i) a [-o] argument is mapped onto SUBJ when initial in the argument structure;<sup>11</sup> otherwise:

(ii) a [-r] argument is mapped onto SUBJ.

(b) Other roles are mapped onto the lowest (i.e. most marked) compatible function on the markedness hierarchy.

(69) MARKEDNESS HIERARCHY OF SYNTACTIC FUNCTIONS

[-o]/[-r] SUBJ > [-r]/[+o] OBJ, [-o]/[+r] OBL<sub>θ</sub> > [+o]/[+r] OBJ<sub>θ</sub>

In order to make full use of the markedness hierarchy, the Mapping Principles could be reformulated to a single one as follows:

(70) MAPPING PRINCIPLE

The ordered arguments are mapped onto the highest (i.e. least marked) compatible function on the markedness hierarchy.

<sup>10</sup>The passive (not discussed here, but see Kibort 2004 for details) would also benefit from a slightly revised analysis, specifically that it is an instance of alternative (non-default) mapping of grammatical functions onto the arguments of the predicate by means of which the underlying subject is downgraded to an optional oblique.

<sup>11</sup>The actual LFG formulation of this mapping principle is as follows: '  $\hat{\theta}_{-o}$  is mapped onto SUBJ when initial in the a-structure' (Bresnan 2001:311), where  $\hat{\theta}_{-o}$ , referred to as the 'logical subject', is defined as 'the most prominent semantic role of a predicator' (ibid.:307). However, this formulation seems to contain superfluous information. Specifically, due to the Subject Condition, LFG excludes the formation of predicates without any core arguments; according to the principles of semantic classification of thematic roles for function, LFG allows only those thematic roles which will map onto 'subjective' (core) or oblique (non-core) functions to be classified as [-o]; and finally, due to the thematic hierarchy (and the Subject Condition), thematic roles which will map onto oblique functions can never be initial in the argument structure or higher than the 'subjective' role. It follows from this that a [-o] argument which is *initial* in the argument structure (i.e. has position adjacent to the left bracket; see also Falk 2001:108) can *only* be the most prominent thematic role, and it can never be an oblique participant. Thus, the formulation of the subject mapping principle in (68a)(i) is in fact just a more concise, but still faithful, version of the LFG principle.

The new formulation derives the principles of argument to function mapping directly from the markedness hierarchy, without the in-built condition that the first encountered argument has to be pre-specified as either [-o] or [-r], and without having to resort to the Subject Condition at any point. In other words, it is now the markedness hierarchy itself which determines the default mapping of arguments to surface grammatical functions. Thus, with the unergative transitive verb *clean*, the Mapping Principle in (70) ensures that its first ([-o]) argument is linked to SUBJ, and its second ([-r]) argument is linked to OBJ. Similarly, with the unaccusative intransitive verb *come*, the Mapping Principle ensures that its first ([-r]) argument is linked to SUBJ because this is the grammatical function which is the highest compatible one on the markedness hierarchy in (69).

The new formulation achieves correct mappings for various classes of predicates discussed in the literature (including unaccusatives and ditransitives, for example), but avoids stipulating specific principles where their result is already partially determined by the markedness hierarchy. In this way, it avoids redundancy both in the account of the mapping itself, as well as in the formulation of any conditions or constraints pertaining to the subject. Since it makes redundant the Subject Condition, it enables LMT to handle inherently impersonal predicates and other constructions that may have posed problems of analysis due to their non-standard behaviour with respect to the subject.

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