# Polish and English specificational copular clauses: An LFG approach

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#### **Abstract**

The aim of this paper is to provide an LFG+Glue analysis of specificational copular clauses in Polish and English (e.g., *The winner is John*). In the proposed account, the English construction is related to its predicational counterpart (*John is the winner*) at the level of s-structure: it represents an alternative mapping of s-structural arguments to grammatical functions, contributing a presupposition about the current Question Under Discussion. In Polish, the same effect arises through simple inversion at the level of c-structure, possible due to flexible word order. The second part of the paper examines the so-called pronominal copula in Polish, aiming to formalise its nuanced syntax and semantics.

#### 1 Introduction

### 1.1 Specificational copular clauses

The classification of copular clauses most widely assumed in generative grammar, tracing back to Higgins (1973/1979), distinguishes between predicational and specificational copular clauses (among others).<sup>†,1</sup> Predicational copular clauses (PCCs), such as (1a), have a referential subject on the left and a non-verbal predicate on the right, expressing a property assigned to the subject. Specificational copular clauses (SCCs), such as (1b), have the more referential phrase (a proper name in (1b)) on the right. Pragmatically, such sentences "[do] not tell us something **about** the referent of the subject NP", but instead they say "**who** or **what** the referent is" (Mikkelsen 2005: 1, emphasis original).

- (1) a. John is a doctor / nice / the winner.
  - b. The winner is John.

The syntax and semantics of SCCs remain a widely debated problem, with no settled consensus – see den Dikken & O'Neill (2017) and Heycock (2021) for survey papers, Barros (2016) and Arregi et al. (2021) for recent semantic analyses, and Mikkelsen (2005), den Dikken (2006) and Bondaruk (2013) for monographs. Despite this extensive debate, a thorough discussion of SCCs from an LFG perspective is notably absent.<sup>2</sup>

The aim of this paper is to offer a first syntactico-semantic analysis of specificational copular clauses in Polish and English. As will be shown, the modular architecture of LFG allows for an insightful account of language-specific properties of such sentences. The central idea is that, to achieve the same pragmatic effect, Polish and English make use of operations at different levels of the LFG architecture. Whereas Polish exploits its flexible word order to topicalise the predicate, English employs two distinct argument mappings. Additionally, the paper discusses the Polish pronominal copula, which seems

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<sup>&</sup>lt;sup>1</sup>The two other types are identificational and equative clauses, to which I return in §4.

<sup>&</sup>lt;sup>2</sup>While analyses of data falling under the SCC label exist within the LFG framework (e.g., Dalrymple et al. 2004 and Alsina et al. 2014), these studies do not involve the theoretical issues central to the aforementioned literature on SCCs.

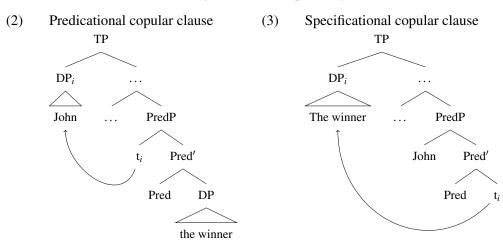
to duplicate the function of standard Polish copular clauses (with instrumental predicates). The analysis aims to shed light on the subtle differences between these constructions.

#### 1.2 Brief overview and adopted assumptions

Although it has been the subject of persistent inquiry, the semantic type of the left-hand NP in SCCs is far from being established, with two prevailing analyses. The first treats the left-hand NP in sentences like (1b) as an (inverted) predicate: *the winner* denotes a property ascribed to the referent of the right-hand NP, and the specific character of the sentence arises pragmatically. The second analysis assumes that *the winner* denotes an intensional object of type  $\langle s, e \rangle$  – a function from worlds to entities (an individual concept). In the process of semantic composition, the world argument is supplied, and sentence (1b) expresses that the particular winner in a given world is identical to John.

In this work, I adopt the view that specificational copular clauses such as (1b) involve inverted  $\langle e, t \rangle$ -type predicates as their left-hand NPs (following, for instance, Mikkelsen 2005; den Dikken 2006; Barros 2016). Barros (2016) demonstrates that existing objections to predicate inversion are confounded and derives key pragmatic properties of SCCs from predicate inversion driven by information-structural principles. In the present work, I adopt his approach, modifying and extending it to capture key generalisations in Polish and reformulating it in the LFG+Glue framework.<sup>3</sup>

The idea that the left-hand NP in SCCs denotes a predicate is typically coupled with the claim that such sentences are structurally related to predicational clauses, with the predicate undergoing movement to the pre-verbal position, instead of the subject of predication. Within the derivational approach, both PCCs and SCCs are derived from the same kind of small clause (Mikkelsen 2005; den Dikken 2006; Barros 2016), typically mediated by a functional head called Pred (Bowers 1993). In PCCs, the specifier of PredP moves to the subject position, whereas in SCCs it is the complement that undergoes this movement, as shown schematically in (2)–(3), respectively.



<sup>&</sup>lt;sup>3</sup>An important limitation of the current proposal is that it does not discuss Arregi et al. (2021), who claim to offer "decisive" arguments for the individual concept analysis of SCCs. A detailed assessment of Arregi et al.'s (2021) arguments is left for future work.

As is well known, SCCs – in contrast to PCCs – have fixed information structure. Namely, the left-hand NP in SCCs cannot be focused, whereas no such restriction applies in PCCs (see Hartmann 2019 for an experimental confirmation). This is illustrated in (4)–(5) (from Mikkelsen 2005: 133).

- (4) Who is the winner?
- (5) What is John?
- a. The winner is JOHN.
- a. #THE WINNER is John.
- b. JOHN is the winner.
- b. John is THE WINNER.

Mikkelsen (2005) argues that it is a syntactically available topic feature that licenses the specificational word order. This idea is later adopted and developed in Barros (2016): due to being linked to the topic feature, SCCs presuppose that they are an answer to a particular Question Under Discussion (QUD, Roberts 2012). That is, the structure in (4a) and (5a) is inherently linked to the QUD *Who is the winner?* For this reason, (5a) is infelicitous, as its inherent QUD conflicts with the actual one, overtly expressed (*What is John?*). PCCs are not intrinsically linked to a particular QUD, allowing for greater flexibility in matching the QUD via prosodic means.

Having outlined the relevant facts, I now turn to the structure of the paper. In §2, I show that an LFG analysis can elegantly capture the underlying sameness of PCCs and SCCs, albeit at different levels of the grammar architecture. In Polish, PCCs and SCCs share the same f-structure, whereas in English, they map to distinct f-structures, but are "derived" from the same s-structure by different mappings to grammatical functions. In §3, I focus on the pragmatics of inversion, formalising the QUD associated with the specificational mapping in English and c-structural inversion in Polish. In §4, I analyse the syntax and semantics of the Polish pronominal copula. §5 concludes the paper, Appendix A formalises the agreement mechanism discussed in §4, and Appendix B contains Glue semantics proofs of some constructions.

# 2 An LFG perspective on the syntax of inversion

#### 2.1 Polish: c-structural reordering

A natural question is whether a unification analysis, analogous to two surface structures derived from the same PredP, can be formulated in non-derivational terms. In this section, I show that both Polish and English exhibit such an underlying level, although it is distinct for each language, reflecting the workings of each language's grammatical system.

Let us begin with the Polish data, for which there is an obvious candidate as for what remains constant between PCCs and SCCs: it is the f-structure. Consider (6a) and (6b).<sup>4</sup>

- (6) a. [Włóczykij]<sub>SUBJ</sub> był [moją ulubioną postacią]<sub>PREDLINK</sub>.

  Snufkin.SG.M.NOM was.SG.M my.INS favourite.INS character.SG.F.INS

  'Snufkin was my favourite character.' (Google)
  - b. [Moją ulubioną postacią]<sub>PREDLINK</sub> był [Włóczykij]<sub>SUBJ</sub>. my.INS favourite.INS character.SG.F.INS was.SG.M Snufkin.SG.M.NOM 'My favourite character was Snufkin.' (Google)

<sup>&</sup>lt;sup>4</sup>Throughout §2–§3, *Polish copular clauses* refer to constructions with instrumental predicates, such as (6a)–(6b). Sentences with the pronominal copula are introduced and taken into consideration only in §4.

Although these two sentences differ with regard to linear order, the relevant phrases retain their grammatical functions, as evidenced by their case marking.<sup>5</sup> Thus, the instrumental phrase *moją ulubioną postacią* 'my favourite character.INS' must be analysed as a predicative complement in both (PREDLINK), and *Włóczykij* 'Snufkin.NOM' as the SUBJ.<sup>6</sup> Both sentences map to the same f-structure represented in (7) (ignoring the internal structure of the complex NP and some morphosyntactic information).

Modelling this type of inversion in LFG terms is straightforward: phrase structure rules (by default) do not link syntactic positions in c-structure to grammatical functions. The two word orders exhibited in (6a) and (6b) are constructed by general phrase structure rules presented in (8). Note that these are not special rules for copular constructions: the inversion observed in (6a)–(6b) is pervasive in Polish (and in Slavic more general, see Titov 2024), and is usually referred to as OVS word order. The same default rule will be employed, for instance, in (9a)–(9b), where the instrumental phrase happens to be an object of the verb ZARZADZAĆ 'to manage'.

(8) IP 
$$\rightarrow$$
 NP I'
$$(\uparrow GF) = \downarrow \qquad \uparrow = \downarrow$$
I'  $\rightarrow$  I NP
$$\uparrow = \downarrow \qquad (\uparrow GF) = \downarrow$$

- (9) a. [Janek]<sub>SUBJ</sub> zarządza [najlepszym zespołem]<sub>OBJ</sub>.

  John.NOM manage.3SG best.INS team.INS
  - b. [Najlepszym zespołem]<sub>OBJ</sub> zarządza [Janek]<sub>SUBJ</sub>.
    best.INS team.INS manage.3SG John.NOM
    'John manages the best team.'

Under the analysis in which BYĆ 'to be' and ZARZADZAĆ 'to manage' require two arguments – the former a SUBJ and a PREDLINK, and the latter a SUBJ and an OBJ – (8) will generate the expected two word orders. The GFs must satisfy the verb's subcategorisation requirements, which can be derived from s-structures via mapping constraints, as in Findlay (2016). An application of this mechanism to copular clauses forms a crucial part of the analysis and will be discussed below. Also, (8) will be modified in §3, to associate the marked word order (as in (6b) and (9b)) with particular pragmatic conditions.

<sup>&</sup>lt;sup>5</sup>Agreement is not mentioned, as it is not treated here as an unequivocal diagnostic test of subjecthood; see §4 and Appendix A.

<sup>&</sup>lt;sup>6</sup>I follow Butt et al. (1999) and Attia (2008) in assuming that nominal predicates bear the grammatical function of PREDLINK.

<sup>&</sup>lt;sup>7</sup>For the purposes of this paper, I focus only on the c-structural representation of the examples discussed. I therefore leave aside important issues related to c-structures in Slavic such as *pro*-drop or the possibility of flat structures (see Hristov 2023 for an overview).

#### 2.2 English: alternative mapping

Interestingly, the English counterparts of (6a)–(6b), presented in (10a)–(10b), involve two distinct f-structures.

- (10) a. [Snufkin]<sub>SUBJ</sub> was [my favourite character]<sub>PREDLINK</sub>.
  - b. [My favourite character]<sub>SUBJ</sub> was [Snufkin]<sub>PREDLINK</sub>.

While the SUBJ status of *Snufkin* in (10a) is indisputable, the left-hand NP in (10b) can also be shown to function as the subject (Hartmann & Heycock 2020). For instance, it permits subject-auxiliary inversion:

(11) Is your favourite character Snufkin?

Given that, (10a) will be mapped to f-structure (12), whereas (10b) to its "inversion", presented in (13) (again, assuming that the non-SUBJ grammatical function in binominal copular clauses is uniformly PREDLINK).

Does this mean that English PCCs and SCCs must be treated as entirely separate? Not necessarily. The modular architecture of LFG provides the means to capture their unified status, but at a level deeper than f-structure. Namely, the English case can be seen as involving two distinct argument-mapping configurations, an issue extensively discussed in the LFG tradition (Bresnan & Kanerva 1989; Butt et al. 1997; Kibort 2007; Findlay 2016; Findlay et al. 2023, a.o.). The idea is particularly appealing as it aligns SCCs with English locative inversion, also typically analysed via two different mappings. Intriguingly, locative inversion also exhibits fixed information structure, as shown in (14)–(15) from Bresnan (1994: 86–87).

- (14) a. CANVASSES hung on the wall, but not PAINTINGS.
  - b. Canvasses hung ON THE WALL, but not ON THE EASELS.
- (15) a. On the wall hung CANVASSES, but not PAINTINGS.
  - b. ??ON THE WALL hung canvasses, but not ON THE EASELS.

Indeed, the current proposal is that English PCCs and SCCs arise from two distinct mappings from the level where arguments are represented, that is, from s-structure. Findlay (2016), building on Asudeh & Giorgolo (2012), provides a theory of argument mapping which avoids postulating a separate a(rgument)-structure. On this account, the mapping restrictions determine which s-structural arguments – linked to Glue meaning constructors – can be mapped to which grammatical functions.

The approach presented in Findlay (2016) is couched in the neo-Davidsonian event semantics (Parsons 1990), and it can easily be extended to account for copular clauses. Chierchia (2024) offers a proposal of how to treat copular clauses within this semantic framework.<sup>8</sup> On his approach, nouns denote properties of entities ( $\langle e, t \rangle$ ), but they can

<sup>&</sup>lt;sup>8</sup>Here, I simplify Chierchia's analysis by omitting the world argument (he provides intensional formulae), and also diverge from it by treating definite descriptions in predicative positions as  $\langle e, t \rangle$ -type predicates, following Mikkelsen (2005) and Barros (2016) (see also Coppock & Beaver 2015).

be shifted to properties of states  $(\langle v, t \rangle)$ . Chierchia (2024) encodes this shift using an operator  $^{\Sigma}$  (and the operation I will call  $\Sigma$ -shift). For example, the noun dog denotes a function which is true of *entities* being dogs  $(\lambda x.dog(x))$ , and its  $\Sigma$ -shifted analogue is a function true of *states* of being a dog:  $\lambda s.^{\Sigma}dog(s)$ .

Consequently, the semantic formula for *Snufkin is my favourite character* is as follows:

(16)  $\exists s.^{\Sigma} myFavouriteCharacter(s) \land theme(s, Snufkin)$  'There exists a state of being my favourite character and the theme of this state is Snufkin.'

To compose such a meaning in Glue, an s-structure must be postulated with a STATE argument, analogous to the EVENT argument assumed in Asudeh & Giorgolo (2012) and Findlay (2016) (a.o.). The s-structure of a property-ascribing copular clause will also have THEME and PROPERTY arguments; see (17).

(17) A minimal s-structure of a property-ascriptional copular clause

$$\begin{bmatrix} \text{STATE} & [ & ] \\ \text{THEME} & [ & ] \\ \\ \text{PROPERTY} & \begin{bmatrix} V & [ & ] \\ R & [ & ] \end{bmatrix} \end{bmatrix}$$

The equations defining such an s-structure (through linking the s-structural attributes to grammatical functions), as well as the meaning constructor referring to it, are contributed in the lexical entry for the copula, presented in (18) (ignoring TAM and other morphosyntactic information):

(18) is I (
$$\uparrow$$
 PRED) = 'BE'

@PROPERTY-ASCRIPTION (semantics)

@DEFAULT-MAPPING  $\lor$  @SPECIFICATIONAL (mappings)

On the proposal assumed here, both PCCs and SCCs have the same core semantics, provided by @PROPERTY-ASCRIPTION, defined in (19).

(19) PROPERTY-ASCRIPTION := 
$$\lambda P \lambda x \lambda s.^{\Sigma} P(s) \wedge theme(s, x)$$
: 
$$[(\uparrow_{\sigma} \text{ PROPERTY V}) \multimap (\uparrow_{\sigma} \text{ PROPERTY R})] \multimap (\uparrow_{\sigma} \text{ THEME}) \multimap (\uparrow_{\sigma} \text{ STATE}) \multimap \uparrow_{\sigma}$$

According to the meaning constructor above, *is* takes an  $\langle e, t \rangle$ -type PROPERTY, takes an e-type theme, and expresses a function of type  $\langle v, t \rangle$ , which is true of states in which the PROPERTY holds of the THEME (existentially closed in the final representation).

<sup>&</sup>lt;sup>9</sup>The names of the attributes in (17) are intended to facilitate the presentation and do not carry much theoretical significance. They could just as well be called EV(entuality), ARG<sub>1</sub> and ARG<sub>2</sub>, as usual. Note also that the non-verbal predicate is treated here as an attribute at the s-structure of the copula (and its projections). Given that copulas are often analysed as raising verbs, having only *one* semantic argument, this treatment may seem questionable. However, on the approach advocated here, the copula genuinely *mediates* the predication: it establishes a relation between the property and the theme and introduces a state argument, as in Chierchia (2024). Crucially, the ability to refer to the s-structure of the property, distinct from that of the copula, is required to derive the argument mappings.

The predicate-internal attributes V and R are abbreviated versions of the common VAR(iable) and RESTR(iction) attributes (see, e.g, Dalrymple et al. 2019: 310).

The English copula allows for two argument mappings, which is expressed by the disjunctive expression @DEFAULT-MAPPING  $\lor$  @SPECIFICATIONAL. The former maps the theme of the state to the SUBJect, and the property to the predicative complement (PCC), whereas the latter does it the other way round; see (20)–(21).

(20) DEFAULT-MAPPING: 
$$(\uparrow \text{SUBJ})_{\sigma} = (\uparrow_{\sigma} \text{THEME})$$
  
 $(\uparrow \text{PREDLINK})_{\sigma} = (\uparrow_{\sigma} \text{PROPERTY})$   
(21) SPECIFICATIONAL:  $(\uparrow \text{SUBJ})_{\sigma} = (\uparrow_{\sigma} \text{PROPERTY})$   
 $(\uparrow \text{PREDLINK})_{\sigma} = (\uparrow_{\sigma} \text{THEME})$ 

The last line of @SPECIFICATIONAL, freezing the information structure of such clauses, will be discussed in §3. Let us now focus on the syntax and semantics of English clauses.

@FOCUS((† PREDLINK))

The phrase structure rules forming English PCCs and SCCs are given in (22). They differ from the Polish ones (shown in (8)) in having particular GFs mapped to c-structural positions.

(22) IP 
$$\rightarrow$$
 NP I'
$$(\uparrow SUBJ) = \downarrow \qquad \uparrow = \downarrow$$
I'  $\rightarrow$  I NP
$$\uparrow = \downarrow \qquad (\uparrow PREDLINK) = \downarrow$$

A few words are needed about the predicate *my favourite character*. As Coppock & Beaver (2015) convincingly argue, possessives – just like definite descriptions – are "fundamentally predicative" (p. 417), that is, of type  $\langle e, t \rangle$ . They can be shifted to type e via a generally available  $\iota$ -shift (crucially, this shift is not contributed by determiners such as *the* or *my*). This approach can be readily incorporated into an LFG grammar: we need to postulate an optional  $\iota$ -shift (defined in (23)), available, for instance, in the phrase structure rules forming NPs, as in (24).

(23) IOTA-SHIFT := (24) NP 
$$\rightarrow$$
 ... N' ...  $\uparrow = \downarrow$  [ $(\downarrow_{\sigma} V) - \circ (\downarrow_{\sigma} R)$ ]  $- \circ \downarrow_{\sigma}$  (@IOTA-SHIFT)

Whether the optional @IOTA-SHIFT provided in (24) will be used depends on the semantic type of N coming from the lexicon (it is blocked for items inherently of type e, such as proper names) and the selectional requirement of the predicate to which the NP serves as an argument. For instance, in *I met my favourite character*, @IOTA-SHIFT must be used, because *met* requires an e-type object. In contrast, in *Snufkin is my favourite character*, @IOTA-SHIFT cannot be used, because the PREDLINK here must be of type  $\langle e, t \rangle$  (via @PROPERTY-ASCRIPTION and @DEFAULT-MAPPING).

Setting aside the formal details of how the predicative NP is composed, 11 the lexical

 $<sup>^{10}</sup>$ In (24), "..." stands for any material an NP can – or must – contain in a given language. On Coppock & Beaver's account, the fact that @IOTA-SHIFT cannot apply to an NP with a(n) is modelled pragmatically, and the obligatory presence of a determiner in English follows from syntactic rules (although they do not provide a full syntactic analysis, including plural or mass nouns).

<sup>&</sup>lt;sup>11</sup>I will rely on the schematic representation of the meaning side of *my favourite character* (i.e.,  $\lambda x.myFavouriteCharacter(x)$ ), since providing an adequate compositional semantics for an NP consisting of a predicational noun, a non-intersective adjective, and a possessive expressing not actual possession but rather an evaluative perspective is far from trivial.

entry given in (18) and the phrase-structure rules in (22) are sufficient to generate the c- and f-structures for English copular clauses such as (10a) and (10b), as well as to derive the semantic representation in (16). The subject must be to the left of the copula, and can provide a semantic resource for the THEME (an entity of type e). In such a case, the PREDLINK must be of type  $\langle e, t \rangle$ , for the semantic formula to compose. @SPECIFICATIONAL allows for mapping an  $\langle e, t \rangle$ -type phrase to the subject, and a theme to the PREDLINK. Crucially, both assert that there exists a state which – in the case of (10a)–(10b) – is a state of being the speaker's favourite character and that the theme of this state is Snufkin (see Figure 1 in Appendix B for the proof). Importantly, the two differ pragmatically, as will be discussed in §3.

By now, it should be clear how the Polish copula differs from the English one. Its lexical entry – ignoring morphosyntactic details – is presented below:

It employs only one mapping, linking the THEME to SUBJ and the PROPERTY to PREDLINK. The last template, pertaining to case assignment, will be important in §4.

## 3 Pragmatics of inversion

As noted above, specificational copular clauses exhibit a fixed information structure: the left-hand NP cannot bear focus. Following Mikkelsen (2005) and Barros (2016), I assume that information structure is strictly tied to inversion. In English, an information-structural constraint is associated with the specificational mapping (see (21)), whereas in Polish, it is linked to word order. The content of this constraint will be discussed below.

On Barros's (2016) account, a definite NP, such as *the president* in *The president is Jack*, presupposes that the Question Under Discussion (QUD; Roberts 2012) is *Who is the president?* This accounts for the fact that the dialogue (26) is infelicitous: the presupposed QUD conflicts with the overtly expressed question.

(26) A: What is Jack? B: #THE PRESIDENT is Jack.

Here, however, I would like to show that it is not the obligatorily *topical* status of the left-hand NP that is responsible for the presupposition, but the obligatorily *focal* status of the right-hand NP. The first argument for that is conceptual, and is related to the workings of the QUD theory. In short, according to Roberts (2012), the focal part of a sentence must correspond to the *wh*-part of a (possibly implicit) QUD for a discourse to be congruent. By assuming that the right-hand NP in SCCs must be focused, we naturally derive the required QUD. It seems to be less stipulative than assuming that a topical phrase X in such clauses presupposes a QUD of the form *Who is X?* 

However, there is another argument for postulating that the inherent presupposition in SCCs is related to the *focal* status of the right-hand NP, which is based on Polish inversions. Above, I analyse inverted instrumental predicates on par with simple OVS

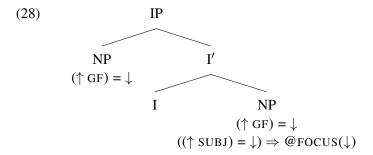
sentences, such as (9b), repeated below as (27). I argue that the structural mechanisms underlying these inversions are the same – in fact, both can be labelled under the broader term "XVS word order".

(27) [Najlepszym zespołem]<sub>OBJ</sub> zarządza [Janek]<sub>SUBJ</sub>. best.INS team.INS manage.3SG John.NOM 'John manages the best team.'

Note that the pragmatic analysis proposed in Barros (2016) cannot be applied to such sentences. When applied to (27), it predicts that the topical phrase – *Najlepszym zespołem* – presupposes the QUD *Who/What is the best team?*, which is obviously not the case: the presupposed QUD in (27) is *Who manages the best team?* 

However, given that the XVS word order has received a unified syntactic treatment (in §2.1), we can attempt to model its pragmatic interpretation in a unified way. In fact, the correct QUD presupposition follows in inverted copular clauses and OVS sentences such as (27) alike when linked to the *obligatorily* focal status of the right-hand NP.

The @FOCUS(X) template (to be defined below), in English associated with the @SPECIFICATIONAL mapping, can be incorporated into phrase-structure rules for Polish. The rules in (8) need to be modified as in (28), presented in the form of a tree:



According to (28), when the subject appears in the final position, it must be interpreted as focal. As shown below, this yields the correct presupposed QUD for both SCCs and run-of-the-mill OVS.<sup>12</sup>

Now we can get back to the template @FOCUS(X), called in (21) and (28):

(29) FOCUS(X) := 
$$\lambda Q_{\langle e, \ Vt \rangle}.Q: \forall H.[X_{\sigma} \multimap H] \multimap [X_{\sigma} \multimap H]$$
  
**Presupposition**: the current QUD is  $\{\exists s'.Q(z)(s') \mid z \in D_e\}$ 

(29) is a modifier taking an  $\langle e, vt \rangle$ -type function and returning a function of the same type: an identity function at the level of assertion, but introducing a presupposition.

Let us illustrate how this presupposition works by analysing (10b), repeated as (30a), step by step. <sup>13</sup> The core semantic formula of this sentence – without the QUD presupposition – is shown in (30b). The meaning of the copula is repeated in (30c).

<sup>&</sup>lt;sup>12</sup>This is an idealisation that neglects some Polish psych verbs which naturally occur with final subjects, and do not have fixed information structure. For instance, the unmarked word order of sentences with BOLEĆ 'hurt' places the non-subject argument (expressing the experiencer) in the pre-verbal position, and the nominative subject (expressing the theme) in the final position.

<sup>&</sup>lt;sup>13</sup>The full proof is presented in Figure 2. By convention, in the full proof, the presupposition is encoded between the lambda operator (or the existential quantifier) on the left side, and the dot on the right side. Importantly, because the colon has its own important function in Glue, I use three vertical dots to separate the presupposition on the left side instead of the usual colon.

- (30) a. [My favourite character]<sub>SUBJ</sub> is [Snufkin]<sub>PREDLINK</sub>.
  - b.  $[(30a)] = \exists s.^{\Sigma} my Favourite Character(s) \land theme(s, Snufkin)$
  - c.  $\lambda P \lambda x \lambda s$ .  $\Sigma P(s) \wedge theme(s, x) : [(\uparrow_{\sigma} \text{ PROPERTY V}) \multimap (\uparrow_{\sigma} \text{ PROPERTY R})]$  $-\circ (\uparrow_{\sigma} \text{ THEME}) \multimap (\uparrow_{\sigma} \text{ STATE}) \multimap \uparrow_{\sigma}$

Recall that the template @SPECIFICATIONAL (see (21)) contributed by the copula includes the template @FOCUS((↑ PREDLINK)) and links the PREDLINK to the THEME argument at s-structure. Consequently, (29) is instantiated as (31a) and, via the mapping specified by @SPECIFICATIONAL, as (31b) (still ignoring the presupposition for now).

(31) a. 
$$\lambda Q.Q : \forall H.[(\uparrow \text{ PREDLINK})_{\sigma} \multimap H] \multimap [(\uparrow \text{ PREDLINK})_{\sigma} \multimap H]$$
  
b.  $\lambda Q.Q : \forall H.[(\uparrow_{\sigma} \text{ THEME}) \multimap H] \multimap [(\uparrow_{\sigma} \text{ THEME}) \multimap H]$ 

The meaning constructor that can be consumed by (31b) (i.e., that is of type  $\langle e, vt \rangle$  and has the correct Glue part) is shown in (32): it is generated by the copula consuming the semantics contributed by the property.

(32) 
$$\lambda x \lambda s.^{\Sigma} my Favourite Character(s) \wedge theme(s, x) :$$
  $(\uparrow_{\sigma} \text{ THEME}) \multimap (\uparrow_{\sigma} \text{ STATE}) \multimap \uparrow_{\sigma}$ 

By consuming (32), the meaning constructor provided in (29) yields (33) (now presented *with* the presupposition).

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(33) \lambda x \lambda s.^{\Sigma} my Favourite Character(s) \wedge theme(s, x) : (\uparrow_{\sigma} \text{ THEME}) \multimap (\uparrow_{\sigma} \text{ STATE}) \multimap \uparrow_{\sigma} Presupposition: the current QUD is: \{\exists s'.^{\Sigma} my Favourite Character(s') \wedge theme(s', z) \mid z \in D_e\}
```

Assuming that the denotation of a question is the set of possible answers (Hamblin 1973; Karttunen 1977), we derive the correct QUD: a set of propositions of the form *z* is my favourite character. In a model in which the only characters in the domain are Snufkin, the Groke and Little My, the QUD presupposed in (33) is explicitly presented below:

(34) **Presupposition**: the current QUD is:

```
\{\exists s'.^{\Sigma} myFavouriteCharacter(s') \land theme(s', Snufkin), \exists s'.^{\Sigma} myFavouriteCharacter(s') \land theme(s', TheGroke), \exists s'.^{\Sigma} myFavouriteCharacter(s') \land theme(s', LittleMy)\}
```

Let us now move to the Polish case. Recall that the Polish copula always links THEME to SUBJ, and when SUBJ appears in the final position, it calls @FOCUS( $\downarrow$ ). This effectively yields the same result as in English SCCs.

Regarding the XVS word order beyond copular clauses, let us examine (27). The meaning constructor contributed by zarzadza 'manage.3SG.M' is given in (35a). Although not presented here, its ARG<sub>1</sub> is mapped to SUBJ, as formalised in Findlay (2016), with the crucial part being ( $\uparrow$  SUBJ) $_{\sigma} = (\uparrow_{\sigma} ARG_1)$ . Consequently, the meaning constructor introducing the focal presupposition consumes (35b) and returns the same formula, now equipped with the presupposition (35c). The latter is the expected semantics of the QUD: a set of propositions of the form z manages the best team.

 $<sup>^{14}</sup>$ I assume that the verb ZARZĄDZAĆ 'manage', in the aspectual version considered here, denotes a set of states rather than events. However, nothing important depends on that, since both events and states fall under the general category of eventualities (type v). The only potential issue with applying (29) to event-denoting verbs is cosmetic: it introduces the variable s' (implicitly suggesting a state) instead of e'.

```
(35) a. \lambda x \lambda y \lambda s.manage(s) \wedge agent(s,y) \wedge theme(s,x): (\uparrow_{\sigma} ARG_2) \multimap (\uparrow_{\sigma} ARG_1) \multimap (\uparrow_{\sigma} EVENT) \multimap \uparrow_{\sigma}
b. \lambda y \lambda s.manage(s) \wedge agent(s,y) \wedge theme(s,\iota x.bestTeam(x)): (\uparrow_{\sigma} ARG_1) \multimap (\uparrow_{\sigma} EVENT) \multimap \uparrow_{\sigma}
c. \{\exists s'.manage(s') \wedge agent(s',z) \wedge theme(s',\iota x.bestTeam(x))\} \mid z \in D_e\}
```

As we have shown, what Polish achieves through a marked word order (which we can call *shallow reorganisation*), English does with an f-structural recomposition (that is, alternative mapping – *deep reorganisation*). Both, however, are related to the same pragmatic interpretation, forcing the right-hand NP to be focused. In Polish, it is induced by the phrase-structure rules, whereas in English, it is a restriction linked to the marked mapping. In fact, utilising this kind of language-specific strategy to obtain the same effect is exactly in line with Bresnan (1994: 92), who, in discussing locative inversion, notes that "in languages where syntactic functions are less rigidly linked to specific word order and phrase structure configurations, the effects of presentational focus could be accomplished by simple reorderings, without altering the syntactic functions of the theme and locative."

## 4 Pronominal copula

Polish has another structure that can be considered a translational equivalent of the English examples recurring in this paper (see (36)–(37) and their translations). These constructions employ the so-called pronominal copula *to*. <sup>15</sup> Note that the right-hand NP in (36)–(37) controls agreement, regardless of its function in the sentence.

- (36) Włóczykij to była moja ulubiona postać.

  Snufkin.SG.M.NOM TO was.SG.F my favourite character.SG.F.NOM
  'Snufkin was my favourite character.'
- (37) Moja ulubiona postać to był Włóczykij. my favourite character.SG.F.NOM TO was.SG.M Snufkin.SG.M.NOM 'My favourite character was Snufkin.'

Primarily, the word *to* is a proximal demonstrative, but it also serves multiple discourse functions (e.g., acting as a topic or focus marker). The analysis presented here, which focuses on its use in copular clauses, aims to account for the full range of uses of *to* in constructions such as (36)–(37) and to capture a subtle difference between SCCs with the instrumental predicate (analysed in §2–§3) and constructions like (37).

One of the core assumptions related to the syntax of (36) and (37), which I adopt from previous work and cannot justify further here, is that the left-hand NP in such sentences is dislocated, anaphorically bound by *to* (Hentschel 2001; Rutkowski 2006). Note that the relevant structure can be used without the left-hand NP, where *to* contributes referential meaning (through anaphora or deixis), as in (38)–(39).

(38) To był Włóczykij. (39) To była moja ulubiona postać.

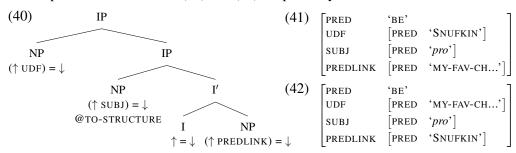
TO was.M Snufkin.M.NOM
'It was Snufkin.'

TO was.F my favourite character.F.NOM
'{She / He / It} was my favourite character.'

<sup>&</sup>lt;sup>15</sup>Polish does have another copula construction linking two nominative NPs without *to*, but this construction is rare and restricted to expressive predicates (e.g., *Janek jest cham!* 'John is a jerk!') and so will not be discussed further here.

It seems uncontroversial that sentences such as (38)–(39) gave rise to the emergence of the pronominal copula (that is, structures like (36)–(37)), since such items often grammaticalise from structures in which a pronoun refers to a hanging topic (Li & Thompson 1977; Diessel 1999). Although the left-hand NP is no longer a hanging topic (e.g., in (36), *Włóczykij* can receive prosodic prominence and function as a focus), it retains its dislocated status and, for this reason, cannot control agreement. I further assume that in (36)–(39), the demonstrative functions as SUBJ, while the right-hand NP is PREDLINK. Of course, this raises the question of how agreement operates. The analysis presented here follows Bobaljik (2008) (and Bresnan 1994: 118) in assuming that agreement is controlled by the highest accessible phrase in the domain of agreement. This means that SUBJ – the highest grammatical function – controls agreement only if it is "accessible" (that is, if it bears the nominative case). In (36)–(37), the subject is *caseless* (as will be discussed below), and hence is inaccessible. Consequently, the highest accessible phrase is the nominative PREDLINK – see Appendix A for a formalisation.<sup>16</sup>

Let me first present the c-structure and f-structures of (36)–(37), and then discuss the analysis step by step.<sup>17</sup> (40) is a schematic c-structure of (36) and (37), and (41) and (42) are simplified f-structures for (36) and (37), respectively.



<sup>16</sup>Treating *to* as the SUBJ even when another phrase clearly controls agreement is compatible with the case-driven theory of agreement adopted here (see Appendix A; Bobaljik 2008), but it may nonetheless appear unconventional to the LFG community. An anonymous reviewer asks for further motivation for this choice, which I provide here by pointing to binding facts (although a fuller discussion would of course be desirable). The right-hand predicate can contain a reflexive pronoun, like in (i). If a dislocated (UDF) status of the left-hand NP is warranted (as argued in Hentschel 2001 and Rutkowski 2006), then this NP can bind the pronoun only indirectly: *to*, as the SUBJ, binds the reflexive, and the left-hand NP merely does so by virtue of being co-indexed with *to*. Note that if we were to try to avoid treating *to* as the subject by assuming the left-hand NP in these constructions is the subject instead (directly binding the reflexive), this will do nothing to avoid dissociating subjecthood and agreement, since in such clauses it is the right-hand NP that controls agreement. Moreover, one can readily construct sentences in which *to* unambiguously binds the reflexives, such as (ii), although such examples are slightly less natural than those with an NP to the left.

- (i) Premier<sub>i</sub> to<sub>i</sub> jest swój<sub>i</sub> najlepszy rzecznik prasowy. PM TO is REFL best spokesman press 'The Prime Minister is his own best spokesman.' (Bondaruk 2013: 227)
- (ii) To jest swój najlepszy terapeuta.

  TO is REFL best therapeutist
  - '{He / She} is {his / her} own best therapeutist.'

On the other hand, if we treat the right-hand predicate as SUBJ, analogous non-trivial decisions arise concerning the grammatical functions of *to* and the left-hand NP. Although various mappings could be considered (e.g., with *to* being a PREDLINK and the left-hand NP a UDF), the binding facts support the analysis proposed in the main text.

<sup>17</sup>One syntactic fact that I ignore here is that in the structure with to, the verbal copula can be ellided in the present tense (but not in the past and future). This can be captured with the  $\epsilon$  rule (Dalrymple et al. 2004), providing the content of the copula to the f-structure without having a c-structural representation.

Zawada (2024) argues that *to* in sentences such as (38)–(39) is *not* a noun, and postulates a separate category of demonstrative identifiers (following Diessel 1999: Ch. 4.3). However, as argued in Zawada & Przepiórkowski (2025), a more insightful option is available, capturing the relevant properties of *to* discussed in Zawada (2024). It treats *to* in such sentences as a *caseless* noun. This approach, also adopted here, makes it possible to elegantly capture the agreement pattern: a caseless item is unable to control agreement, which makes the nominative PREDLINK the highest accessible phrase.

Importantly, in contrast to what is typically observed in Polish at the clausal level, the word order of the sequence TO-V-NP is fixed (\*Włóczykij był to). 18 Various idiosyncratic properties of this structure justify a correspondingly specialised analytical treatment. The idiosyncratic elements that we need are (i) a phrase structure rule – annotated in a way accounting for the peculiarities of this structure, including binding of the left-hand NP (if present) – and (ii) the ability of the noun to to appear without case. The relevant phrase structure rule (see (43)) provides a SUBJ in Spec,IP (and thus fixes the word order), which is annotated with the template @TO-STRUCTURE, defined in (44).

(43) IP 
$$\rightarrow$$
 NP I'  $(\uparrow \text{SUBJ}) = \downarrow$   $\uparrow = \downarrow$  @TO-STRUCTURE

(44) TO-STRUCTURE := 
$$\neg(\downarrow CASE)$$
 (@EQUATIVE) (@ANT-BINDING)

The first equation in (44) specifies that only a caseless noun can occur in that position. There is one such item in Polish (to), whose lexical entry is provided in (45). <sup>19</sup> It provides the pronominal PRED and carries pronominal semantics (see (46), an extremely simplified, variable-free treatment, sufficient for our purposes). <sup>20</sup>

(45) 
$$to$$
 N ( $\uparrow$  PRED) = ' $pro$ ' @PRONOMINAL

(46) PRONOMINAL := 
$$\lambda x.x: (\uparrow_{\sigma} \text{ ANTECEDENT}) \multimap \uparrow_{\sigma}$$

Note that in contrast to standard copular clauses with nominal predicates, the structure with *to* requires a nominative (and not instrumental) PREDLINK. This is included in the lexical entry for the copula, repeated below as (47). The previously ignored template @NOMINAL-PREDLINK-CASE, defined in (48), assigns INS to the PREDLINK and NOM to the SUBJ; if this assignment is not possible, the PREDLINK is nominative, and the SUBJ remains caseless.<sup>21</sup> Note that nouns other than *to* require case. Hence, if they are subjects, the first disjunct in (48) must apply.

<sup>&</sup>lt;sup>18</sup>Being a pronoun, *to* can appear as an enclitic attached to the verb (*Był to Włóczykij*), similarly to personal pronouns. This word order will not be addressed here.

<sup>&</sup>lt;sup>19</sup>This suggests that other nouns *require* case, which can be modelled by equipping them with the existential ( $\uparrow$  CASE) constraint.

<sup>&</sup>lt;sup>20</sup>For more detailed analyses of pronouns in Glue, see Asudeh (2012); Dalrymple et al. (2018); Dalrymple et al. (2019: Ch. 14).

<sup>&</sup>lt;sup>21</sup>@NOMINAL-PREDLINK-CASE also captures case assignment in understudied copular clauses with prepositional subjects of predication and nominative PREDLINKs, such as (i). Given that the PP is not able to receive case, (48) correctly assigns the nominative case to the PREDLINK.

```
(47) jest I (↑ PRED) = 'BE'

@PROPERTY-ASCRIPTION (semantics)

@DEFAULT-MAPPING (mapping)

@NOMINAL-PREDLINK-CASE (case assignment)

(48) NOMINAL-PREDLINK-CASE :=

CAT((↑ PREDLINK), {NP}) ⇒

{ (↑ SUBJ CASE) = NOM (↑ PREDLINK CASE) = NOM }

{ (↑ PREDLINK CASE) = INS
```

Before turning to semantics, consider Table 1, intended to guide the reader through the analysis by previewing the templates used for each type of copular clause with *to* (the third type – equative – will be introduced).

Type	Example	Templates (besides @PROPERTY-ASCRIPTION)
predicational	Włóczykij to była moja ulubiona postać 'Snufkin was my favourite character'	@ANT-BINDING
specificational	Moja ulubiona postać to był Włóczykij 'My favourite character was Snufkin'	@ANT-BINDING @SPECIFICATION @EQUATIVE
equative	Cyceron to jest Tulliusz 'Cicero is Tullius'	@ANT-BINDING @EQUATIVE

Table 1: Copular constructions with to

It is known that Polish *necessarily* employs *to* to express equative semantics – that is, to indicate that two NPs denote the same object. As shown in (49) (from Bondaruk 2013: 313–314), the instrumental structure cannot be used in such contexts.

(49) a. Dr Jekyll to (jest) pan Hyde.
Dr. Jekyll.NOM TO is Mr.NOM Hyde
'Dr. Jekyll is Mr. Hyde'
b. #Dr Jekyll jest panem Hyde.
Dr. Jekyll.NOM is Mr.INS Hyde

Since *to* must be used in equative clauses (as shown in (49)), equative semantics can be directly linked to the structure at hand, as defined in (50) and invoked in (44) (see Geist 2008 for an analogous analysis of Russian *èto*).

(50) EQUATIVE := 
$$\lambda x \lambda y. y = x : (\uparrow_{\sigma} \text{ PREDLINK}) \multimap [(\uparrow_{\sigma} \text{ PREDLINK V}) \multimap (\uparrow_{\sigma} \text{ PREDLINK R})]$$

The template above represents the IDENT shift from Partee (1987). It takes a PREDLINK of type e (an individual) and shifts it into a property of being equal to that individual.

'Paulina (lit. of Paulina) was quite a rascal.' (Polish Web 2019)

Note also that (48) is restricted to *nominal* PREDLINKs. Case assignment in adjectival predicates is considerably more complex and requires a separate analysis (see, e.g., Przepiórkowski & Patejuk 2012).

This allows the verbal copula to consume the semantic resource of the PREDLINK, now of the expected  $\langle e, t \rangle$ -type. Importantly, this template is optional, which accounts for the fact that predicational clauses with to – such as (36) – are also possible. If @EQUATIVE is not used, a predicative PREDLINK (that is, carrying an  $\langle e, t \rangle$ -type semantics by itself, from the lexicon) is required for the verbal copula to compose.<sup>22</sup>

Polish and Russian allow for an NP to the left of the demonstrative. If this NP is taken to be co-referential with the demonstrative (Hentschel 2001; Rutkowski 2006, as well as Geist 2008; Seres & Espinal 2019 for Russian), a natural conclusion is that these languages have developed a binding constraint licensing this left-peripheral NP and thereby satisfying the Extended Coherence Condition (Bresnan et al. 2016: 62–63); see (51). It is optional, since structures without an NP – like (38)–(39) – are also acceptable.

(51) ANT-BINDING := 
$$(\downarrow_{\sigma} \text{ ANTECEDENT}) = (\uparrow \text{ UDF})_{\sigma} \lor @\text{SPECIFICATION}$$

As shown in (51), the pronoun can either inherit the semantics of its antecedent (if the latter is of type e) or invoke the @SPECIFICATION template, defined in (52) (not to be confused with the mapping constraint on the English copula, @SPECIFICATIONAL).

(52) SPECIFICATION := 
$$\lambda P.\iota x.P(x)$$
 :  $[((\uparrow \text{UDF})_{\sigma} \text{ V}) \multimap ((\uparrow \text{UDF})_{\sigma} \text{ R})] \multimap (\downarrow_{\sigma} \text{ANTECEDENT})$ 

Presupposition: the current QUD is  $\{\exists s'.^{\Sigma} \lambda y.[y=z](s') \land theme(s',\iota x.P(x)) \mid z \in D_e\}$ 

Recall that to can be used with the pragmatics of a specificational copular clause (see (37)). Similarly to English SCCs and Polish SCCs with an instrumental predicate, (37) has fixed information structure. As I argue below, this structure arises through the combination of the @EQUATIVE semantics and @SPECIFICATION: the ability to take an  $\langle e, t \rangle$ -type property on the left and shift it into an entity ( $\iota$ -shift). It consumes the semantics of the UDF, e.g.,  $\lambda x.dog(x)$ , and returns the unique entity satisfying this predicate (in a given context, which is ignored here), e.g.,  $\iota x.dog(x)$ , as ANTECEDENT.

Importantly, the presupposition responsible for the fixed information structure is contributed in (52). If the simpler disjunct of @ANT-BINDING is used – which happens when the UDF is of type e – no QUD presupposition is present: the pre-verbal item in equatives can be focused, as illustrated in (53) with the classic example *Cicero is Tully*. By contrast, a structure with to and specificational pragmatics does not permit pre-verbal focus, as shown in (54).

- (53) A: I have read Cicero's works for the exam, and now I still have Tullius left.
  - B: Ale właśnie CYCERON to jest Tulliusz... (@EQUATIVE) but precisely Cicero TO is Tullius 'But it is precisely Cicero who is Tullius...'
- (54) A: How is Janek related to you?
  - B: #MÓJ BRAT to jest Janek. (@EQUATIVE + @SPECIFICATION)
    my brother TO is John
    Intended: 'John is my brother.'

<sup>&</sup>lt;sup>22</sup>According to Geist (2008), the analogous Russian item (*èto*) is used *exclusively* in equative contexts. If so, the @EQUATIVE template is not optional in Russian, but obligatory.

The application of the templates in various types of copular clauses with to (as listed in Table 1) is determined by semantic types of the UDF and PREDLINK. In predicational copular clauses, to must bind its antecedent, with all other aspects following from the semantics of the verbal copula (@PROPERTY-ASCRIPTION). In equative clauses, the @EQUATIVE template shifts the denotation of the PREDLINK (Tullius) into a property (a property of being equal to Tullius). An additional step is needed in the third type (specificational clauses with to): the property-denoting UDF is shifted into an entity. For these most complex clauses, the proof is presented in Figures 3a and 3b in Appendix B.

Under the presented analysis, sentences (6b) and (37) – repeated below as (55) and (56) – have distinct semantics, presented in (57a) and (57b), respectively.

- (55) [Moją ulubioną postacią]<sub>PREDLINK</sub> był [Włóczykij]<sub>SUBJ</sub>. my.INS favourite.INS character.SG.F.INS was.SG.M Snufkin.SG.M.NOM
- (56) [Moja ulubiona postać]<sub>UDF</sub> [to]<sub>SUBJ</sub> był [Włóczykij]<sub>PREDLINK</sub>.

  my favourite character.SG.F.NOM TO was.SG.M Snufkin.SG.M.NOM

  'My favourite character was Snufkin.'
- (57) a.  $\exists s.^{\Sigma} my Favourite Character(s) \land theme(s, Snufkin)$ b.  $\exists s.^{\Sigma} \lambda y. [y = Snufkin](s) \land theme(s, \iota x. my Favourite Character(x))$

Needless to say, this semantic difference requires justification, since both can be used to say *My favourite character was Snufkin*. To begin with, note that whenever there is a unique object satisfying the property of being someone's favourite character, (57a) and (57b) are truth-conditionally equivalent, and hence both can be used to convey the relevant meaning. However, there is a semantico-pragmatic factor that differentiates the structure with an instrumental predicate from the structure with *to*. Specifically, there are contexts in which only one structure can be used. For example, to express *The price of milk is 3.99* or *The current temperature is 30 degrees*, the structure with *to* must be used (examples based on Arregi et al. 2021):<sup>23</sup>

- (58) a. #Ceną mleka jest 3.99. price.INS milk.GEN is 3.99
  - b. Cena mleka to (jest) 3.99. price milk TO is 3.99 Intended: 'The price of milk is 3.99.'
- (59) a. #Obecną temperaturą jest 30 stopni. current.INS temperature.INS is 30 degrees
  - b. Obecna temperatura to (jest) 30 stopni.
     current temperature TO is 30 degrees
     Intended: 'The current temperature is 30 degrees.'

If the two structures had identical representations, there would be no way to account for (58)–(59). But can the unacceptability of instrumental predicates in these contexts follow from the fact that these contexts require an equality relation (and instrumental predicates do not contribute it)? This connection is not immediately obvious. Note, however, that contexts such as stating a price or reporting the temperature permit verbs

 $<sup>^{23}</sup>$ In the structure with to, the verbal copula is optional in the present tense, as mentioned in fn. 17.

whose meaning is 'be equal to', unlike contexts involving identifying one's favourite character (see (60)–(61)). This suggests that such "numerical" environments are indeed more deeply connected to equative semantics.<sup>24</sup>

- (60) a. Cena testu równa się 800 PLN.

  price.NOM test.GEN equals REFL 800 PLN

  'The price of the test equals 800 PLN.'(Polish Web 2019)
  - Średnia roczna temperatura równa się 8°C.
     average year temperature.NOM equals REFL 8°C
     'The average annual temperature equals 8°C.'(Polish Web 2019)
- (61) #Moja ulubiona postać równa się Włóczykij. my favourite character.NOM equals REFL Snufkin.NOM Intended: 'My favourite character equals Snufkin.'

To summarise, the rationale for postulating the difference illustrated in (57a)–(57b) is as follows: there is independent evidence that to is associated with equative semantics (see (49)). Accordingly, it is a reasonable and parsimonius hypothesis to assume that whenever the right-hand NP in constructions with to is of type e (e.g., a proper name or a number), the equative meaning is invoked. Furthermore, some sentences that look like SCCs (analogous to English *The price of milk is 3.99*) can be expressed *only* with to, indicating that such specificational clauses with to are different in some respect from those with inverted instrumental predicates. This suggests postulating two distinct semantico-pragmatic strategies, which are sometimes indistinguishable: *specification by inverted predication* (as in (55)/(57a)) and *specification by equation* (as in (56)/(57b)).

#### 5 Conclusion

The present paper is the first attempt to account for predicational and specificational copular clauses within LFG, taking advantage of the LFG modular architecture to capture language-specific differences between English and Polish. The syntactic analysis is connected to a compositional semantico-pragmatic account of SCCs within Glue semantics, drawing extensively on Barros (2016) and Chierchia (2024). English predicate inversion is modelled as an alternative mapping, associated with a particular QUD presupposition. In Polish, the same effect is achieved through c-structural inversion, with SCCs (with instrumental predicates) representing an instance of the pervasive Slavic XVS word order. Additionally, the paper examines Polish copular clauses with to, offering an intricate analysis deriving various readings of such constructions.

Hopefully, this paper will stimulate further research on copular clauses in LFG. Many issues related to SCCs (leaving aside other copular clauses) are not addressed here at all, such as connectivity effects or the structure of pseudo-clefts (see den Dikken & O'Neill 2017 and Heycock 2021 for an overview of such intriguing problems). Also, the paper positions itself within a particular strand of research in which the left-hand NPs in SCCs are treated as  $\langle e, t \rangle$ -type predicates. The other strand – arguing that the left-hand NP is an individual concept (e.g., Arregi et al. 2021) – is not considered here. Of course, a more

<sup>&</sup>lt;sup>24</sup>Importantly, this observation is not meant to imply that sentences which *cannot* occur with *równa się* – like (61) – are consequently blocked with *to*. As a comparison of (61) and (56) shows, they are not.

comprehensive analysis must carefully consider the arguments for each approach and, hopefully, provide conclusive evidence in favour of one of them.

## A Case-driven agreement

In this short appendix, I provide an LFG formalisation of an agreement mechanism operating in line with Bobaljik (2008), postulating that agreement is controlled by the highest accessible phrase in the domain of agreement, not necessarily by the SUBJect.

On that account, verbal forms are accompanied by the template @AGREE, defined in (62). For instance, the Polish form *byt* 'was.3SG.M' is accompanied by the following template: @AGREE(3, SG, M). This template states that one of its grammatical functions is its agreement controller (using the local name %GOAL) and assigns the values of person, number and gender to that goal.

```
(62) AGREE(PV, NV, GV) := (\uparrow GF) = \%GOAL

@HIGHEST-ACCESSIBLE(%GOAL)

(%GOAL PERS) = PV

(%GOAL NUMB) = NV

(%GOAL GEND) = GV
```

Crucially, the %GOAL must satisfy the set of constraints invoked in the template @HIGHEST-ACCESSIBLE:

The first template in (63) requires the %GOAL to be accessible. For Polish, this means that the controller of agreement must be nominative:<sup>25</sup>

```
(64) ACCESSIBLE(X) := (X CASE) =_c NOM
```

The second restriction in (63) – a negated conjunction – states that there cannot be another phrase (call it %RUNNER-UP) which is also accessible and outranks %GOAL in the hierarchy of grammatical functions (according to a typically assumed hierarchy – see Bresnan et al. 2016: 217 – but augmented with PREDLINK). Consequently, if there is more than one accessible phrase in a clause, the highest one controls agreement.

A similar approach to agreement, but within the LFG+OT framework, is presented in Alsina & Vigo (2017). See also Belyaev (2013) and Sadler (2016) for analyses of agreement in this vein, but postulating a separate grammatical function for the agreement controller: the PIVOT.

<sup>&</sup>lt;sup>25</sup>The accessible case is the unmarked case; hence, in ergative-absolutive languages, the absolutive is accessible. It has also been shown that two cases – the unmarked and the dependent – can be accessible, as in Nepali (Bobaljik 2008: 309–312), but the theory makes the prediction that there should be no language where the dependent case is accessible while the unmarked case is not.

## **B** Proofs

In Figures 1 and 2, the linear logic parts in the meaning constructors refer to mnemonically labeled s-structures (with c for the clausal s-structure). For the proofs in Figures 3a and 3b, the s-structure with labels – as well as the corresponding f-structure and c-structure – is explicitly provided.

Figure 1: Proof of Snufkin is my favourite character and My favourite character is Snufkin (ignoring the QUD presupposition)

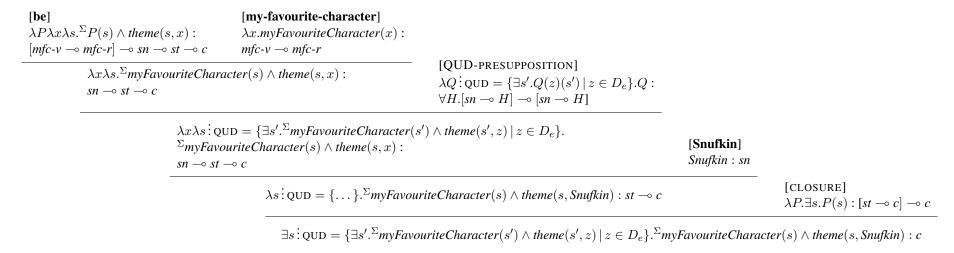


Figure 2: Proof of My favourite character is Snufkin (with the QUD presupposition)

(65) Moja ulubiona postać to był Włóczykij. my favourite character.SG.F.NOM TO was.SG.M Snufkin.SG.M.NOM 'Snufkin was my favourite character.'

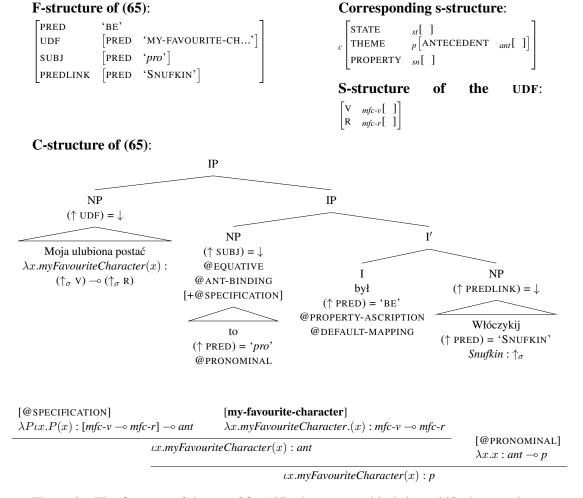


Figure 3a: The first part of the proof for (65): the pronoun binds its  $\iota$ -shifted antecedent

```
[@EQUATIVE]
                                            [Snufkin]
\lambda x \lambda y.y = x:
                                            Snufkin: sn
sn \multimap [sn-v \multimap sn-r]
                                                                          \lambda P \lambda x \lambda s.^{\Sigma} P(s) \wedge theme(s, x):
       \lambda y.y = Snufkin : sn-v \multimap sn-r
                                                                          [sn-v \multimap sn-r] \multimap p \multimap st \multimap c
                                \lambda x \lambda s.^{\Sigma}[\lambda y.y = \mathit{Snufkin}](s) \wedge \mathit{theme}(s,x) :
                                                                                                                                         [from Fig. 3a]
                               p \multimap st \multimap c
                                                                                                                                         \iota x.myFavouriteCharacter(x): p
                                                                                                                                                                                                          [CLOSURE]
                                                       \lambda s.^{\Sigma}[\lambda y.y = \mathit{Snufkin}](s) \wedge \mathit{theme}(s, \iota x.\mathit{myFavouriteCharacter}(x)):
                                                                                                                                                                                                          \lambda P.\exists s.P(s):
                                                       st \multimap c
                                                                                                                                                                                                          [st \multimap c] \multimap c
                                                                                 \exists s. ^{\Sigma} [\lambda y. y = \mathit{Snufkin}](s) \land \mathit{theme}(s, \iota x. \mathit{myFavouriteCharacter}(x)) : c
```

Figure 3b: The second part of the proof for (65) (ignoring the QUD presupposition)

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