Topics in copular clauses

### TOPICS IN COPULAR CLAUSES

BY

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A THESIS

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### Abstract

This dissertation investigates syntax and semantics of copular clauses containing two NPs. Since Higgins (1973) four semantically distinct types of copular clauses have been recognized in the literature, i.e. predicational, equative, specificational, and identificational clauses. There are many proposals aiming to reduce the number of copular clause types via collapsing certain types into others. This dissertation contributes to the debate by providing novel evidence from Czech that identificational clauses are predicational and specificational clauses are inverted predicational or equative clauses. Czech provides an excellent tool to investigate copular clauses for three reasons: (i) rich  $\phi$ -feature agreement, (ii) case alternation, (iii) analytical verbal morphology. Using the three properties Czech offers, I argue that specificational clauses are derived via scrambling of a structurally lower NP over a structurally higher NP. Consequently, I support the inversion analysis of specificational clauses (Moro, 1997; Den Dikken, 2006; Mikkelsen, 2006; Heycock, 2012, a.o.). I also argue that specificational clauses may be derived from both, predicational and equative clauses. In contrast, identificational clauses, despite their initial resemblance to specificational clauses, are argued not to involve inversion, therefore providing empirical support for Heller and Wolter (2008). I also present novel empirical data from Czech that show that the interpretation of the pronoun in identificational clauses is restricted by the copular agreement. In order to account for the restriction, I argue that both NPs in identificational

clauses Agree with the copula via a Multiple-Agree chain (see Hiraiwa (2005)).

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## **Chapter 1**

## Introduction

Copular sentences containing two NPs (henceforth, NP-NP copular clauses) received much attention in the literature at least since Higgins (1973). However, even though there is a plethora of proposals analyzing copular structures, there is also a substantial amount of disagreement in the literature. The reason why there seems to be no consensus in analyses of copular clauses, is that, ultimately, copular sentences are challenging structures to investigate. Specifically, copular clauses are very small, and standard syntactic tests that are designed to deal with more complex structures are not suitable for the investigation of copular clauses.

NP-NP copular sentences resemble transitive constructions in that they contain one verb and two arguments, as shown in (1).

- (1) a. Peter is a student.
  - b. Peter hugged a student.

However, intuitively, copular clauses such as the one in (1a) are semantically very different

from sentences with transitive verbs such as (1b). This is because the meaning of the copular verb *be* is rather vague which led some authors to conclude that the copula has no meaning at all (see for instance Den Dikken (2006)). Instead of having a meaning on its own, the copula seems to combine with the post-copular NP and turns it into a semantic predicate that assigns a property to the pre-copular NP. Consequently, the post-verbal NP *a student* has a very different meaning in (1a) compared to (1b). Namely, while in (1b) *a student* refers to an individual, in (1a) *a student* is a nominal predicate.

It is fairly straightforward to determine which one of the NPs in transitive constructions like (1b) is a subject and which one is an object. In English transitive constructions it is always the linearly first NP that is the subject and the post-verbal NP that is the object. Similarly, in (1a), it is clear that the subject is the linearly first NP *Peter* and the predicate is the linearly second NP *a student*. However, it is not always straightforward to determine structural and semantic roles of the NPs in copular clauses. More precisely, there are cases in which the linearly second NP does not seem to be the semantic predicate. Consider the sentences in (2). The post-copular NP in (2a) and (2b) is a proper name, and proper names are argued to be referential to a particular individual, and therefore not suitable predicates.

- (2) a. The teacher is Peter.
  - b. Peter is Hamlet.

The existing literature assumes that semantic roles of arguments, i.e. the subject and the predicate, correlate with structural alignment. For instance, in transitive constructions, it is assumed that the sentential subject which is the linearly first NP is also structurally higher than the sentential object which is the linearly second NP. Similarly, in the literature on copular clauses, it is often assumed that the sentential subject is structurally higher than the

predicate (with the notable exception of Moro (1997) who argues that the subject and the predicate in copular clauses are base-generated as sisters).

Nevertheless, it is not always trivial to determine structural roles of NPs from their semantic roles in copular clauses. For instance, in sentences like (2a) and (2b), the post-copular NP does not seem to be a predicate, is it therefore safe to assume that it is the pre-copular NP that is the predicate? This type of reasoning is ultimately not helpful in the investigation of copular structures. We need other tools to investigate the syntax and semantics of copular clauses. Following many authors dealing with syntax and semantics of copular clauses. Following many authors dealing with syntax and semantics of copular clauses, I argue that we also need to rely on morphological clues in order to determine structural relations in copular clauses (Moro, 1997; Adger and Ramchand, 2003; Pereltsvaig, 2007; Heycock, 2012, among others).

I argue that Czech provides an excellent lab environment to test the syntax of copular clauses because of the amount of morphological clues Czech offers. Concretely, the Czech copula has a rich  $\phi$ -feature agreement, and a complex verbal morphology, and one of the NPs in copular clauses alternates in the morphological realization of case. I argue that a combination of these morphological clues provides an exquisite tool to diagnose structural relations, and by proxy also semantic relations in copular clauses. In the vast majority of Czech sentences, the verb agrees with the structural subject and the structural subject must surface in Nominative case. I argue that morphological realization of verbal agreement and case helps us determine which of the NPs in copular clauses is the structural subject and which one is the predicate. Moreover, I argue that upon determining the structural subject and the predicate, one can investigate structural operations that allow for derivation of particular copular constructions.

In this dissertation, I take as a starting point the taxonomy of semantic types of copular

clauses developed in Higgins (1973). Higgins (1973) divided copular clauses into predicational, equative, specificational, and identificational. Based on novel empirical evidence from Czech, I argue that specificational clauses, such as for example (2a), are derived via the inversion analysis, and consequently, supporting proposals of Moro (1997), Mikkelsen (2005), Den Dikken (2006), Dikken (2007), Heycock (2012), among others. Based on a comparison with other Czech structures, I propose that the derivation of specificational clauses follows the same rules as scrambling as discussed in Kučerová (2007) for Czech. I therefore argue that the inversion in copular clauses is an instantiation of scrambling, and consequently supporting proposals of Bailyn (2004), and Heycock (2012).

Furthermore, I argue that identificational copular clauses, despite their copular agreement pattern, should not be treated analogously to specificational clauses (contra Mikkelsen (2004)). Instead, it will be shown that identificational clauses structurally pattern with predicational clauses, and therefore supporting the proposals of Heller (2005) and Heller and Wolter (2008). Nevertheless, it will also be argued that the copular agreement in identificational clauses proceeds differently compared to copular agreement in predicational clauses. Namely, I argue that while in predicational sentences the copula Agrees with the structural subject, in identificational clauses, the copular agreement is derived via a Multiple-Agree chain established between the structural subject, the copula, and the structural predicate. The Multiple-Agree chain, however, can only be established if the structural predicate is a Nominative NP. As a consequence of the Multiple-Agree chain, the structural subject which is a demonstrative pronoun in identificational copular clauses may refer to an individual. If the Multiple-Agree chain cannot be established in an identificational copular clause, the demonstrative pronoun may only refer to a proposition.

It will also be argued that predicational and equative copular clauses are similar in that

the structural predicate in both types of copular clauses is temporally dependent on the tense of the copula. However, despite this similarity, I argue contra Adger and Ramchand (2003) that predicational clauses and equatives differ from one another in that the structural predicate in predicational clauses has a semantic type different from the structural predicate in equatives.

Concretely, the dissertation is organized as follows. Chapter 2 provides overview of the current literature with emphasis on proposals which are relevant for the proposal argued for in this dissertation. Chapter 3 diagnoses the four types of copular clauses described in Higgins (1973), and establishes some core empirical generalizations with respect to the copular agreement and case. Chapter 4 argues for the inversion analysis of specificational copular clauses. Chapter 5 investigates identificational copular clauses with respect to copular agreement and referential properties of the demonstrative pronoun. Chapter 6 argues that predicational clauses differ from equatives in that the structural predicate in predicational clauses has a different semantic type than the structural predicate in equatives. Chapter 7 argues that the derivation of specificational clauses is driven by givenness in the same way scrambling in other Czech constructions is (Kučerová, 2007). Chapter 8 concludes.

## Chapter 2

## **Literature Review**

In this chapter I discuss the state of affairs in the current literature on copular clauses. Copular clauses, i.e. for the most part, clauses containing two phrases and the copula verb *be*, seem like simple structures at first sight. However, the current literature reports a significant amount of semantic and syntactic differences that hold between one type of a copular clause compared to another. These differences lead many scholars to categorize copular clauses in one way or the other. A prominent categorization of copular clauses is the Higgins (1973)'s taxonomy of copular clauses. Higgins (1973) divided copular clauses into four semantically (and syntactically) different types, i.e. *predicational, equative, specificational*, and *identificational*, as in (1). The semantic properties of the four different types will be discussed in the following chapter.

(1)	a.	Peter is a teacher.	PREDICATIONAL
	b.	Peter is Hamlet.	EQUATIVE
	c.	The teacher is Peter.	SPECIFICATIONAL
	d.	That is a teacher.	IDENTIFICATIONAL

Most of the current proposals take Higgins (1973)'s taxonomy as the point of departure, and they discuss how the individual types of copular clauses differ from one another syntactically and semantically. One notable exception to this is the proposal of Moro (1997) who stays away from Higgins (1973)'s taxonomy. Instead, Moro (1997) follows his own division which will be discussed in the next section. The current chapter aims to review the current literature on copular clauses paying special attention to syntactic properties of copular clauses and syntactic proposals accounting for them. The chapter is organized as follows. In section 2.1, I show some striking syntactic differences between one type of a copular clause compared to another type that have been reported in the literature. In section 2.2, I discuss one particular analysis that has often been proposed in the literature on copular clauses, i.e. the inversion analysis of specificational clauses. In section 2.3, I discuss proposals that were presented for individual pairs of copular clauses from the Higgins (1973)' taxonomy. More precisely, I discuss three pairs of sentences: (i) specificational and equatives, (ii) identificational and predicational, and (iii) predicational and equatives. Finally, section 2.4 presents a proposal of Citko (2008) based on Polish data and discusses some general assumptions I make with respect to the universality of the proposal presented in this thesis. In this chapter, I focus on proposals that are relevant for the proposal presented in this dissertation, and I also discuss how these proposals relate to the present proposal. The aim of this dissertation is to account for copular clauses containing two NPs (henceforth, NP-NP copular clauses). I therefore restrict the present discussion to proposals dealing with NP-NP copular clauses only.

I discuss properties of copular clauses that have been reported in the literature to motivate certain syntactic proposals. Some of the properties discussed in this review will not be addressed by my analysis. I include the properties and various syntactic phenomena in the present survey because they have been important for the previous proposals, and they are indicative of the special syntax of these constructions. One of the properties discussed in the following section is directly relevant and will be addressed by my analysis, namely, the agreement in copular clauses. My analysis follows previous proposals motivated by some of the syntactic properties discussed in the following section, and adopts the inversion analysis discussed in section 2.2 (Moro, 1997; Adger and Ramchand, 2003; Moro, 2006; Mikkelsen, 2005; Den Dikken, 2006; Dikken, 2007; Heycock, 2012, among others).

### 2.1 Syntactic differences

Some of the striking syntactic differences between distinct types of copular clauses reported in the literature are: (i) copular agreement asymmetries (Moro, 1997, 2006; Heycock, 2012, among others), (ii) connectivity effects in specificational pseudoclefts (Higgins, 1973; Jacobson, 1994; Sharvit, 1999; Heycock and Kroch, 1999; Heller, 2002, among others), and (iii) extraction asymmetries and embedding (Moro, 1997, 2006).

As was already mentioned, the proposal of Moro (1997) does not discuss the syntactic phenomena in copular clauses with respect to the Higgins (1973) taxonomy. Instead, Moro (1997) adopts a particular analysis of copular clauses and labels the types of copular clauses with regards to the analysis. Namely, Moro (1997) argues that there are only two types of copular clauses and they are both derived from the same base-generated structure. This analysis is called the inversion analysis and the labels Moro (1997) uses are *canonical*, and *inverse* copular clauses. Example of Moro (2006)' canonical and inverse copular clause are in (2).

(2) a. A picture of the wall is the cause of the riot. *Canonical* 

b. The cause of the riot is a picture of the wall. *Inverse* [Moro (2006)]

#### 2.1.1 Copular agreement

Moro (2006) shows that while in English inverse copular clauses, the copula always agrees with the linearly first NP, as is shown in (3), this is not the case for all languages.

(3) a. Some pictures of the wall \*is /are the cause of the riot. Canonical
b. The cause of the riot is/\*are some pictures of the wall. Inverse
[Moro (2006)]

Namely, Moro (2006) shows that in Italian, the copula agrees with the linearly second NP in inverse copular clauses as is shown in (4).

(4) La causa della rivolta sono/ \*è alcune foto del muro. the cause of-the riot are/ is some pictures of-the wall
'The cause of the riot is some pictures of the wall.' *Inverse*[Moro (2006)]

As was already mentioned, Moro (2006) does not discuss examples like (4) with respect to the Higgins (1973) taxonomy. However, several authors report that the pattern Moro (2006) discusses for Italian can be seen in specificational clauses as defined in Higgins (1973), and not just in Italian. For instance, Heycock (2012) shows that in German specificational clauses, the copula also agrees with the linearly second NP, as can be seen in (5). It will be shown in the following chapter, that the same holds for Czech specificational clauses.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>However, Béjar and Kahnemuyipour (2017) show that agreement with the linearly second NP does not occur only in specificational clauses.

(5)a. Das eigentliche Problem sind /\*ist deine Eltern. the real problem be.PRES.3PL /be.PRES.3SG your parents 'The real problem is your parents.' SPECIFICATIONAL Die Königin von England bin /\*ist b. ich. the queen of England be.PRES.3PL /\*be.PRES.3SG I.1SG.NOM 'The queen of England is me.' SPECIFICATIONAL

[Heycock (2012)]

#### 2.1.2 Connectivity effects

Another syntactic phenomenon reported in copular clauses is the so-called connectivity effects. Higgins (1973), Jacobson (1994), Sharvit (1999), Heycock and Kroch (1999), Heller (2002), among others argue that connectivity effects are characteristic to specificational pseudoclefts, while they do not happen in predicational clauses. The term connectivity effects refers to cases of grammatical sentences in which one would expect violations of binding principles. One instance of connectivity effects is an unexpected non-violation of the Binding Principle A. The definition of the Binding Principle A is in (6).

#### (6) **Binding Principle A:**

An anaphor must be locally bound.

Binding is defined with respect to c-command, i.e. an anaphor must be c-commanded by its binder. Romero (2005) shows that while in the pseudocleft in (7c), which has a predicational reading, the Binding Principle A cannot be violated, the pseudocleft in (7a) with a specificational reading is grammatical despite the violation of the Binding Principle A. More precisely, even though the anaphor *himself* is not c-commanded by its binder *John* in (7a), the pseudocleft still has a grammatical specificational reading. The unclefted version of the sentence in (7b) obeys the Binding Principle A because *John* c-commands himself.

- (7) Binding Theory Principle A:
  - a. Specificational (reading): What John<sub>1</sub> is is a nuissance to himself<sub>1</sub> /  $*him_1$ .
  - b. Unclefted version of (a): John<sub>1</sub> is a nuissance to himself<sub>1</sub> /  $*him_1$ .
  - c. Predicational (reading): What John<sub>1</sub> is is a nuissance to \*himself<sub>1</sub> / him<sub>1</sub>.
     [Romero (2005)]

Similarly, Romero (2005) discusses grammatical cases of specificational clauses in which one would expect a violation of variable binding, as is shown in (8a).

- (8) Variable binding:
  - a. Specificational: The woman no man<sub>1</sub> hates is  $his_1$  mother.
  - b. Unclefted version of (a): No man<sub>1</sub> hates  $his_1$  mother.
  - c. Predicational: \* The woman no man<sub>1</sub> danced with last night was interested in him<sub>1</sub>.
     [Romero (2005)]

In variable binding, the pronoun must also be c-commanded by its binder at LF. Quantifiers can not normally raise outside of an NP-island, and consequently, the pronoun *him* cannot be bound by the NP *no man* in a predicational clause such as (8c). However, in the specificational clause in (8a), the quantifier can bind the pronoun even though the configuration is analogous to the predicational clause in (8a). More precisely, even though the quantifier *no man* is in an NP island *the woman no man hates*, the quantifier nevertheless binds the possessive pronoun *his* in (8a). In the unclefted version in (8b) the quantifier phrase *no man* c-commands *his*, and therefore the variable binding is not violated in (8b).

#### 2.1.3 Extraction asymmetries and embedding

Moro (2006) discusses another syntactic difference between canonical and inverse copular clauses, namely, the extraction asymmetry. While it is possible to extract the subject NP in a canonical copular clause, as is shown in (9a), it is not possible to extract the same NP in an inverse copular clause, as can be seen in (9b).

- (9) a. Which picture of the wall do you think (\*that) [<sub>IP</sub> t is the cause of the riot]?
   *Canonical*
  - b. \*Which picture of the wall do you think that [<sub>IP</sub> [<sub>DP</sub> the cause of the riot] is t]? *Inverse* [Moro (2006)]

Moro (2006) also shows that an extraction of the post copular NP is not possible even in canonical sentences, as is shown in (10).

(10) \*[Which cause of the riot] do you think that a picture of the wall is t? [Moro (2006)]

Interestingly, in canonical copular clauses, an extraction from the subject NP is not possible, while extraction from the post-copular NP is, as is shown in (11).

- (11) a. \*[Which wall] do you think that [a picture of t] is the cause of the riot?*Canonical* 
  - b. [Which riot] do you think that a picture of the wall is [the cause of t]?
     *Canonical* [Moro (2006)]

Even though, Moro (2006) does not discuss the extraction asymmetries with respect to the types of copular clauses described by Higgins (1973), other extraction issues have been

reported to appear in equatives. Heycock and Kroch (1999) report that in equative clauses, such as, for example (12), none of the NPs may be extracted, as is shown in (13).

- (12) Your attitude towards Jones is my attitude towards Davies.[Heycock and Kroch (1999)]
- (13) a. \*[Whose attitude toward Davies]<sub>i</sub> would you say your attitude toward Jones is  $t_i$ ?
  - b. \*[Whose attitude toward Jones]<sub>i</sub> would you say t<sub>i</sub> is my attitude toward Davies?
     [Heycock and Kroch (1999)]

Moro (2006) also reports asymmetries in sentences where copular clauses are embedded under the verb *consider*. As is shown in (14), in a canonical copular clause embedded under the verb *consider*, the copula can be omitted.

a. John considers [a picture of the wall to be the cause of the riot]. *Canonical*b. John considers [a picture of the wall the cause of the riot]. *Canonical*[Moro (2006)]

In contrast, in inverse copular clauses, the copula must be present, as can be seen in (15).

a. John considers [the cause of the riot to be a picture of the wall] Inverse
b. \*John considers [the cause of the riot a picture of the wall] Inverse
[Moro (2006)]

With respect to Higgins (1973)'s taxonomy, Rothstein (1995) argues that the copula can only be omitted in predicational copular clauses. Mikkelsen (2011) offers the examples in

(16) to show that copula omission is only available in predicational clauses.

(16)	a.	I consider [Sylvia my best friend].	PREDICATIONAL
	b.	I consider [my best friend *(to be) Sylvia].	SPECIFICATIONAL
	c.	I believe [that *(to be) Sylvia].	IDENTIFICATIONAL
	d.	I believe [her *(to be) Sylvia].	EQUATIVE
		[Mikkelsen (2011)]	

The asymmetries and unexpected syntactic phenomena discussed in this section have not always been reported to hold in particular types of copular clauses as described in Higgins (1973). However, some of the asymmetries have been used as either motivations or consequences of a particular analysis, i.e. the inversion analysis of copular clauses (Moro, 1997; Adger and Ramchand, 2003; Moro, 2006; Mikkelsen, 2005; Den Dikken, 2006; Dikken, 2007; Heycock, 2012, among others).<sup>2</sup>

### 2.2 The Inversion analysis

In copular clauses containing two NPs, each NP has a different status. The authors often discuss this distinction using the terms *subject* and *predicate* to refer to structural relations. For the current discussion I follow this terminology in order to show how the individual proposals differ from each other. However, throughout the thesis I refrain from using the term *predicate* in a syntactic sense. Instead, in Chapter 4, I label the "*predicate*" NP as NP<sub>2</sub>.

<sup>&</sup>lt;sup>2</sup>None of the syntactic phenomena discussed in this section may be straightforwardly accounted for with the inversion analysis in and of itself. Moreover, the inversion analysis may help resolve only a subset of issues discussed here. For instance, as Heycock and Kroch (1999) pointed out, the inversion analysis does not account for connectivity effects in any straightforward way. The detailed accounts of the individual syntactic phenomena is outside of the scope of the current chapter.

The proposals implementing the inversion analysis differ from one another in multiple ways. However, most of them have one thing in common, namely, they argue that a predicate NP moves past a subject NP in copular clauses that are derived via the inversion analysis. More precisely, all proponents of the inversion analysis argue that one base-generated structure allows for two syntactic derivations, i.e. one in which a subject NP surfaces at the left-periphery (in the Spec, TP) (henceforth *Type A derivation*), and another in which the predicate NP surfaces at the left-periphery (henceforth *Type B derivation*).

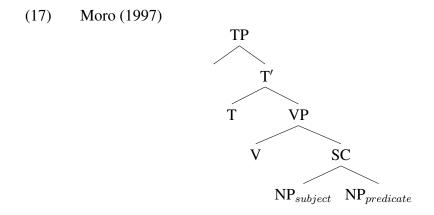
The proposals differ from each other in at least three aspects: (i) the base-generated syntactic structure they propose, (ii) the reasons for the inversion, or more precisely, why does *Type B derivation* happen, and (iii) which types of copular clauses correspond to the *Type A derivation*, and which correspond to the *Type B derivation*.

#### 2.2.1 The base-generated structure

The proposals that argue for the inversion analysis differ from each other with respect to what base-generated structure of a small clause they assume. The proposals may be divided into two groups, the first one assigns a symmetrical structure to a small clause (Moro, 1997), the second group of proposals assumes an asymmetrical structure for small clauses (Adger and Ramchand, 2003; Mikkelsen, 2005; Den Dikken, 2006; Dikken, 2007; Heycock, 2012).

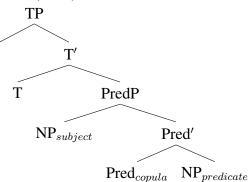
Moro (1997) argues that both NPs in a copular clause, i.e. the subject and the predicate, are base-generated in a symmetrical small clause, i.e. as sisters, and the small clause is a sister of the verb. This is schematized in (17). The two types of derivation are accomplished via movement of one of the two NPs into the Spec, TP (Moro, 1997). Namely, if the subject NP raises into the Spec, TP, the resulting derivation is a Type A derivation, while if it is the

predicate NP that raises into the Spec, TP, the result is a Type B derivation.

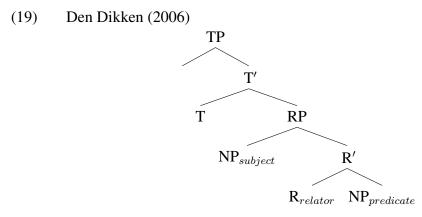


The majority of the proposals arguing for the inversion analysis argue that the two NPs are base-generated in an asymmetrical small clause, i.e. as projections of a functional head (Adger and Ramchand, 2003; Mikkelsen, 2005; Den Dikken, 2006; Dikken, 2007; Heycock, 2012). Crucially, the NPs are base-generated in hierarchically distinct syntactic positions. Namely, the subject is in a specifier of the functional projection, and the predicate is a complement of the head of the functional projection. For instance, Adger and Ramchand (2003) argue that the functional projection of a small clause is a PredP, as is shown in (18).

(18) Adger and Ramchand (2003)



Den Dikken (2006) argues that the functional projection of a small clause is an RP and the copula has a function of a vacuous relator between a subject and a predicate. The scheme of the copular clause structure Den Dikken (2006) assumes can be seen in (19).



Most of the remaining proposals argue for the base-generated small clause structure similar to the one of Adger and Ramchand (2003). The authors who assume the asymmetrical small clause structure allow for the inversion in a sense similar to that of Moro (1997). Namely, when the subject NP moves to the Spec, TP, the result derivation is the Type A derivation, while when the predicate raises to TP, the result is the Type B derivation. Note that the Type A derivation is the canonical derivation in which a subject TP raises to the Spec, TP, presumably, to satisfy EPP. Type A derivation therefore mirrors the derivation of ordinary subject-verb-object constructions. It is the Type B derivation that requires more attention because it derives the linear order predicate-copula-subject. If the Type A derivation mirrored the SVO order derivation, the Type B derivation would correspond to an OVS derivation which is in languages like English, an impossible derivation, as is shown in (20b).

(20) a. Peter ate an apple.

b. #An apple ate Peter.

It is therefore important to address the following question: What are the conditions that allow for the Type B derivation in copular clauses? Or in other words: Why does the predicate raise in some cases?

#### 2.2.2 Type B derivation

The proposals differ from one another significantly in what they assume to be the underlying cause of the Type B derivation. The fact that there is no consensus in the literature on why the predicate NP moves over the subject NP suggests that this is a non-trivial question.

For Moro (1997), the reason is almost exclusively theoretical. Namely, Moro (1997) argues that the reason why an NP has to move from the symmetrical small clause structure is that it needs to break the structural symmetry. Furthermore, Moro (1997) assumes that it can be any of the two NPs that may move and break the symmetry, i.e. the subject or the predicate. Moro (1997) himself pointed out that his proposal over-generates because not every copular clause has a grammatical equivalent with the reversed order of NPs. In other words, not all copular clauses allow for the Type B derivation, as is shown in (21b).

- (21) a. John is a fool.
  - b. \*A fool is John. [Moro (1997)]

In order to account for the impossibility of the Type B derivation in (21b), Moro (1997) stipulates that the predicate is not allowed to raise to the Spec, TP if D in the predicate DP contains an indefinite article. However, it has since been pointed out that this is not the correct generalization because some indefinite predicates may raise into the Spec, TP. For

instance, Milway (2016) reports the example in (22b).

- (22) a. Robarts is a building on campus no-one likes.
  - b. A building on campus no-one likes is Robarts. [Milway (2016)]

Mikkelsen (2005) points out an interesting contrast in copular clauses, and she illustrates this contrast with the question-answer pairs in (23)-(26). While (23) which is in Mikkelsen (2005) argued to be the Type A derivation of the copular clause, may serve as an answer to both questions, (25) and (26). The Type B derivation of the same copular clause in (24) may only serve as an answer to the question in (25).

- (23) John is the mayor.
- (24) The mayor is John.
- (25) Who is the mayor?  $\sqrt{(23)}\sqrt{(24)}$
- (26) Who/What is John?  $\sqrt{(23) \# (24)}$ [Mikkelsen (2006)]

Based on the data like (23)-(26), Mikkelsen (2005) argues that the reason why the predicate moves to Spec, TP in some cases is that the predicate is a sentential topic. She derives the Type B derivation in the following way: (i) T carries an uninterpretable Topic feature, and (ii) the predicate NP carries an interpretable Topic feature, (iii) the predicate NP raises to the Spec, TP in order to interpret the uninterpretable Topic feature on T. In Mikkelsen (2005)'s system, one of the NPs, i.e. the subject or the predicate must move to the Spec, TP in order to satisfy EPP. This makes both, the subject NP and the predicate NP, eligible

to move to the Spec, TP in copular clauses. Mikkelsen (2005) also assumes that feature checking proceeds efficiently, i.e. if there are more possible syntactic operations one of which results in checking more features, this operation is preferred over the one that results in checking less features. Consequently, in cases in which T carries the uninterpretable Topic feature and the predicate NP carries the interpretable Topic feature, it is the predicate NP that moves to Spec, TP simply because it is the NP which can check more features on T, EPP and Topic. An approach similar to the one of Mikkelsen (2005) is also adopted in Bondaruk (2013). Szczegielniak (2014) in his review of Bondaruk (2013)'s book points out why such an approach to inversion is problematic. Namely, assuming that a predicate NP may in some cases carry an interpretable Topic feature over-generates because any NP may in principle carry an interpretable Topic feature. More precisely, such approach is unfalsifiable because it stipulates that some NPs may and some NPs may not, carry a Topic feature. Ultimately, this approach is unhelpful in determining what are the conditions for an NP to have a Topic feature.

In that sense, the issue Moro (1997)'s proposal has which was already mentioned above, does not disappear in proposals like that of Mikkelsen (2005). Namely, in Mikkelsen (2005)'s proposal nothing prevents us from having a Topic feature on an indefinite NP such as  $a fool^3$ , and consequently moving this NP to the Spec, TP. Mikkelsen (2005) is also aware of this issue, and similarly to Moro (1997), she assumes that the reason why (21b) is an impossible derivation is that the indefinite NP a fool is not a suitable Topic. However, in light of analyses of topics such as Reinhart (1981), and Endriss (2009), indefinite NPs may

<sup>&</sup>lt;sup>3</sup>However, as Kahnemuyipour (PC) poitned out, it might be possible that only a particular type of an NP may carry a Topic feature, for instance only an NP that is syntactically a DP. In that case, an indefinite NP such as *a fool* might be prevented from carrying a Topic feature. My proposal works with the definition of topicality from Reinhart (1981) who shows that even some indefinite NPs may be sentential topics and I therefore do not to commit to any particular syntactic representation of an NP that may or may not carry a Topic feature.

function as aboutness topics in other constructions. Consider, for instance, the example in (27) from Milway (2016). For Reinhart (1981), and Endriss (2009), the NP *a doctor* would be an indisputable sentential topic of (27), even though, it is an indefinite NP.

(27) A doctor came to dinner last night. [Milway (2016)]

To summarize, Mikkelsen (2005) argues that Type B derivation happens because the fronted predicate is a sentential topic and she bases this argument on solid data. Nevertheless, her proposal fails to straightforwardly explain why (21b) cannot be derived from (21a).

Another proposal that is built on observations about information structure properties of sentences is the one of Heycock (2012). Heycock (2012) bases her proposal on data from German and she argues that, at least in German copular clauses, inversion is driven by scrambling. More precisely, Heycock (2012) argues that the Type B derivation is an instantiation of scrambling. Heycock (2012) shows that a similar restriction to the one pointed out by Mikkelsen (2005), and discussed here in the examples (23)-(26) arises in German ditransitive structures. As in English, the default order of the indirect and the direct object in the ditransitive construction in (28) is as in (28a). The example in (28b) shows the same construction as (28a), however, in (28b), the direct object scrambled above the indirect object.

(28)	a.	Peter hat der	Katze das	Futter gegeben.	
		Peter has the.DA	T cat the.AC	C food given.	
		'Peter has given	the cat the food	1.'	Default
	b.	Peter hat das	Futter der	Katze gegeben.	
		Peter has the.AC	C food the.DA	T cat given.	
		'Peter has given	the food (to) th	e cat.'	Scrambled
		[Heycock (2012	)]		

In a similar way as in the English copular clauses above, the sentence in (28a) with the default ordering of the indirect and direct object, may serve as an answer to both, (29a) and (29b). However, (28b) with the scrambled ordering may only serve as an answer to (29a).

(29)	a.	who.DA	hat Peter das T has Peter the.AC	C food given	
		'Who ha	as Peter given the f	food?'	$\checkmark$ (28a) $\checkmark$ (28b)
	b.		hat Peter der CC has Peter the.DA as Peter given the	U	√(28a) #(28b)
		[Heycod	ck (2012)]		

Based on the data from German scrambling, Heycock (2012) argues that, at least in German, inversion is scrambling. Furthermore, Heycock (2012) follows De Hoop (1992), and Diesing (1992) in that NPs that scramble must be interpreted as strong. Consequently, Heycock (2012) argues that only strong NPs may scramble, and therefore only in copular clauses with strong NP predicates, the Type B derivation is allowed.

This Heycock (2012)'s generalization was challenged in Milway (2016). Milway (2016) follows Milsark (1974) in that the weak and strong NP distinction is also present in English and may be observed on quantifier phrases with as *some* and *sm*. Namely, Milsark (1974) argues that QPs with *some* are strong while QPs with *sm* are weak. The example in (30) shows that Milsark (1974)'s weak QPs may easily raise from the predicate position to derive the Type B derivation. Based on examples such as (30), Milway (2016) argues against Heycock (2012) because if her generalization was correct, we would not expect a weak QP to appear as the linearly first NP in specificational clauses.

(30) Sm side-effects are drowsiness and blurred vision.

In this dissertation, I follow the intuition in Heycock (2012), and I argue that inversion is an instantiation of scrambling. However, contra Heycock (2012), I argue that the Type B derivation as well as other instantiations of scrambling in Czech, are driven by givenness (see Kučerová (2007)). More precisely, I argue that Type B derivation takes place if the predicate NP is given and the subject NP is new.

#### 2.2.3 Types of copular clauses

The authors who argue for the inversion analysis of copular clauses also substantially disagree on the categorization of the types of copular clauses discussed in Higgins (1973) with respect to the Type A and Type B derivations. Moro (1997) does not explicitly commit to any particular division of Higgins (1973) four types of copular clauses with respect to his canonical (Type A) and inverse (Type B) copular clauses. Most of the remaining proposals commit to such division.

According to Adger and Ramchand (2003), Mikkelsen (2005), and Den Dikken (2006), the Type A derivation gives rise to predicational copular clauses. In constrast, Heycock (2012) argues that Type A derivation corresponds to equative copular clauses. The majority of proposals argue that the Type B derivation corresponds to specificational copular clauses.<sup>4</sup> For Den Dikken (2006), the Type B derivation also corresponds to equative copular clauses. It is clear from this brief list that it is far from straightforward to assign one or the other type of derivation a particular type of a copular clause. This is so either because the relevant data has not been discovered yet or the two types of derivations are more fluid with respect to the types of copular clauses described in Higgins (1973). More precisely, most of the proposals discussed here assumed that there is a one-to-one mapping between,

<sup>&</sup>lt;sup>4</sup>With the exception of Adger and Ramchand (2003) who do not assign the Type B derivation a particular class of copular clauses.

for instance, the Type A derivation and one semantic type of a copular clause. However, the lack of consensus in the literature suggests that this might be a questionable assumption. More precisely, it might be the case that, for instance, two semantic types of copular clauses are similar with respect to syntactic structure, and syntactic processes such as derivation. In my analysis, I argue that the Type A derivation gives rise to both, predicational, and equative clauses.

#### 2.2.4 Inversion in general

Most of the proposals mentioned above discuss the inversion analysis with respect to copular clauses only. More precisely, authors following the inversion analysis often argue that the inversion analysis derives one type of copular clauses from Higgins (1973)'s taxonomy from another. However, there are proposals in the current literature that argue that the inversion analysis is suitable for other constructions as well (Collins, 1997; Bailyn, 2004). For instance, Collins (1997) argues that the inversion analysis applies in English also in cases of the so-called locative inversion. An example of English locative inversion is in (31b). Specifically, Collins (1997) argues that the sentence in (31b) is derived from the sentence in (31a) via inversion. The PP object *down the hill* moves past the NP subject *John* to Spec, TP.

(31) a. John rolled down the hill.

b. **Down the hill** rolled John. [Collins (1997)]

English, however, does not have many constructions in which inversion is argued to apply. Authors studying languages that allow for scrambling provide substantial evidence for the inversion analysis in constructions other than copular clauses. For instance, Bailyn (2004) argues that Russian has seven constructions in which inversion takes place, i.e. OVS word order, locative inversion, adversity impersonals, PP inversion, bad-health verbs, dative experiencers, and quotative inversion.

For instance, Russian is an SVO language but the word order OVS is also allowed, as is shown in (32). The linearly first NP *this book* in (32) is the object of the sentence as witnessed by the Accusative case. The post-verbal Nominative NP *Ivan* is the structural object in (32).

(32)	[étu knigu]	čitaet Ivan	(často).
	[this book].ACC	reads Ivan.NOM	(often)
	'Ivan reads this	book often.'	

[Bailyn (2004)]

Bailyn (2004) argues that the Accusative NP A-scrambled to the Spec, TP in the sentence in (32). Note that Bailyn (2004) also argues that in order for (32) to be derived, the verb needs to move to T. Based on the Russian constructions like (32) and many others, Bailyn (2004) argues that inversion is the same as A-scrambling. The inversion/A-scrambling according to Bailyn (2004) proceeds as follows: (i) the verb moves to T, and (ii) the object NP moves to Spec, TP.

In this dissertation, I argue that specificational clauses are derived in exactly the same manner as proposed in Bailyn (2004). The idea that specificational clauses are derived via scrambling has already been put forward in Heycock (2012) who argues that in German, the derivation of specificational clauses is driven by the same mechanism as scrambling. Heycock (2012), however, argues that specificational clauses are derived from equatives. My proposal differs from the one in Heycock (2012) in that I argue that specificational clauses may be derived from predicational clauses as well as equatives. Moreover, I argue contra Heycock (2012) that the underlying property that drives scrambling is givenness and

not the distinction between strong and weak NPs.

# 2.3 Higgins (1973)'s taxonomy and syntactic proposals

As was already mentioned, most of the current proposals compare the individual copular clause types as defined in Higgins (1973), and argue for particular analyses with regards to syntactic differences observed between the individual types. In this section, I discuss the main disagreements in the literature I aim to address in this dissertation. Concretely, I discuss three pairs of Higgins (1973)'s types of copular clauses, in order to show where the current literature disagrees, and I state where the proposal presented in this dissertation stands with respect to these disagreements.

### **2.3.1** Specificational clauses versus equatives

Authors dealing with copular clauses disagree on what is the relation between specificational and equative copular clauses. This disagreement is partly due to the fact that some proposals dealing with specificational clauses argue that they are not derived via the inversion analysis (Heycock and Kroch, 1998; Sharvit, 2003; Romero, 2004; Heller, 2005; Romero, 2005, among others). Instead, these authors argue that specificational clauses belong to the category of equatives. According to these proposals, the hierarchical relations between the two NPs in specificational clauses reflect the linear word order. More precisely, according to these analyses, the linearly first NP *the mayor* in the example (33) is the base-generated subject, while the linearly second NP *John* is the base-generated structural predicate.

(33) The mayor is John.

SPECIFICATIONAL

Most of the authors who argue for the inversion analysis, also argue that specificational clauses are derived from predicational clauses. One notable exception to this is the proposal in Heycock (2012), who argues that specificational clauses are derived from equatives. Another point of view is offered in Den Dikken (2006) who argues that inverted copular clauses are equatives, as well as specificational.

In this dissertation, I argue that specificational clauses are structures derived from predicational and equative copular clauses via scrambling. I therefore do not commit to specificational clauses constituting its own special type. In the model presented here, specificational clauses are simply scrambled copular clauses.

### 2.3.2 Identificational clauses versus predicational clauses

In Higgins (1973)'s taxonomy, both types of copular clauses in (34) are considered to be identificational copular clauses. In the first type of identificational clause in (34a) the linearly first NP is a demonstrative pronoun, while in the second type in (34b), the linearly first NP is a lexical NP with a demonstrative pronoun.

- (34) a. That is Susana.
  - b. That woman is Susana.

Mikkelsen (2004) argues that the two clauses in (34) are substantially syntactically different. Namely, she argues that while (34a) should be analyzed analogously to specificational clauses, sentences like (34b) should be treated as equatives. As an evidence for such account, Mikkelsen (2004) provides data from pronominalization. According to Mikkelsen (2006), referential NPs pronominalize as *she* or *he* while non-referential NPs pronominalize as *it*. Consider the tag questions after specificational and predicational clauses in (35). (35) a. The director is Susana, isn't \*she /it? [SPECIFICATIONAL]
b. Susana is the director, isn't she? [PREDICATIONAL]
[Mikkelsen (2006)]

Mikkelsen (2006), and the literature cited there, argue that the type of the pronoun that is part of the tag question depends on the type of the subject of the tagged clause. While the subject of the predicational clause in (35b) pronominalizes as *she*, the subject of the specificational clause in (35a) pronominalizes as *it*. Mikkelsen (2006) takes the pronominalization data as evidence that specificational clauses are derived via inversion from predicational clauses. In her work on identificational clauses, Mikkelsen (2004) shows that in the first type of identificational clauses in (34a), the demonstrative pronoun pronominalizes as *it*, as is shown in (36a), in the same way as in the specificational clauses in (34b), pronominalizes as *she*, as can be seen in (36b). Mikkelsen (2004) therefore argues that the identificational clauses of type (34a) should be analyzed analogously to specificational clauses.

- (36) a. That is Susana, isn't \*she /it?
  - b. That woman is Susana, isn't she? [Mikkelsen (2004)]

However, according to some scholars an NP does not have to be a structural predicate in order to pronominalize as *it*. Some types of referential NPs suitable to be structural subjects, may pronominalize as *it* as well. More precisely, Romero (2005) who does not assume that the fact that an NP pronominalizes as *it* demonstrates that the NP is nonreferential, or predicational. Romero (2005) argues that intensionally referential NPs of a semantic type  $\langle s, e \rangle$  pronominalize as *it*. If only syntactic predicates were pronominalized as *it*, we would not expect NPs outside of copular clauses to pronominalize as *it*. However, as Romero (2005) shows, NPs denoting concealed questions also pronominalize as *it*, as is shown in (37).

(37) John guessed the winner of the Oscar for best actress before I guessed it / \*her.

The argument that if an NP pronominalizes as *it*, the NP must be non-referential or predicative as presented in Mikkelsen (2004), and Mikkelsen (2006) therefore seems to be too strong. The contrast in (36) would be explained following Romero (2005) as follows: both of the tag questions, i.e. *it*, and *she*, are referential to referential NPs. However, in (36a), *that* is an intensionally referential NP, or more precisely, the NP is dependent on a situation, while in (36b), *that woman* is an extensionally referential NP. Nonetheless, according to Romero (2005), both NPs in (36) are suitable structural subjects.

Another piece of evidence Mikkelsen (2004) presents in favor of treating the first type of identificational copular clauses as specificational clauses is data from non-restrictive modifiers. Namely, Mikkelsen (2004) provides the minimal pair in (38), where the pronoun in the first type of identificational clauses cannot be modified by a non-restrictive relative clause, as in (38a). In contrast, the NP with the demonstrative in the second type of identificational clauses can be modified by a non-restrictive relative clause, as in (38b).

- (38) a. \*That, who everybody can see clearly, is Susan.
  - b. That woman, who everybody can see clearly, is Susan.

In Chapter 5, I argue that the Czech version of the demonstrative pronoun in identificational clauses is a weak/deficient pronoun. Weak/deficient pronouns are argued to be restricted with respect to phrases that can modify them (Cardinaletti and Starke, 1994). I therefore assume that what the contrast in (38) shows does not have to be attributed to referentiality

versus non-referentiality of NPs. Instead, the impossibility of the pronoun to be modified by a non-restrictive relative clause may be due to a structural deficiency of the pronoun.

Heller (2005), and Heller and Wolter (2008) argue against Mikkelsen (2004) and show that the structure of identificational clauses is analogous to the structure of predicational clauses. The evidence they present to support this proposal comes from diagnostics developed in Higgins (1973) that distinguish predicational and specificational clauses. The simple examples of a predicational and a specificational clause are in (39).

(39) a. Rosa is a doctor. PREDICATIONAL
b. My next-door neighbor is Rosa. SPECIFICATIONAL
[Heller and Wolter (2008)]

According to Higgins (1973), if two predicational clauses are coordinated, the post-copular NP may be deleted, as is shown in (40a). In contrast, in a coordination of two specificational clauses, the post-copular NP cannot be deleted, as is shown in (40b).

(40)	a.	Rosa is a doctor and Matilda is too.	PREDICATIONAL
	b.	*My next-door neighbor is Rosa and your next-do	oor neighbor is too.
		SPECIFICATIONAL	[Heller and Wolter (2008)]

Heller and Wolter (2008) show that identificational clauses pattern with predicational in that the post-copular NP may be deleted in them as well, as is shown in (41).

(41) a. (pointing at pictures) That is Rosa and that is too. IDENTIFICATIONAL
b. That is a woman and that is too. IDENTIFICATIONAL
[Heller and Wolter (2008)]

Similarly, according to Higgins (1973), while the copula may be deleted in a coordination of two predicational clauses, as is shown in (42a), this is not the case for the coordination of two specificational clauses, as is shown in (42b).

(42)	a.	Rosa is a doctor and Matilda - a dentist.	PREDICATIONAL
	b.	*My next-door neighbor is Rosa and your	next-door neighbor - Matilda.
		SPECIFICATIONAL	[Heller and Wolter (2008)]

As the example in (43) shows, identificational clauses again pattern with predicational clauses in that they allow for the deletion of the copula in a coordination of two identificational clauses.

(43)	a.	That is Rosa and that - Matilda.	IDENTIFICATIONAL
	b.	That is a woman and that - a man.	IDENTIFICATIONAL
		[Heller and Wolter (2008)]	

In Chapter 5, I provide more evidence from Czech that identificational clauses should be analyzed analogously to predicational clauses, and therefore support the proposals of Heller (2005), and Heller and Wolter (2008). The discussion in Chapter 5 will, however, be restricted to the type of identificational clauses where the linearly first NP is a demonstrative pronoun, i.e. the sentences like (34a).

## **2.3.3** Predicational clauses versus equatives

Another large disagreement in the literature on copular clauses is the relation between predicational clauses and equatives. While one proposal explicitly argues that predicational clauses are the same as equatives (Adger and Ramchand, 2003), many proposals argue that

EQUATIVE

predicational clauses substantially differ from equatives (Rapoport, 1987; Heycock and Kroch, 1998; Geist, 2008; Pereltsvaig, 2007; Bondaruk, 2012, among others).

Adger and Ramchand (2003) argue that even though proper names are by default referential, when they appear in the post-copular predicate position, they are predicates of a semantic type  $\langle e,t \rangle$ . Consequently, according to Adger and Ramchand (2003) the two sentences in (44) are syntactically and semantically analogous.

- (44) a. Peter is a doctor. PREDICATIONAL
  - b. Peter is Hamlet.

Many other authors do not share this view and they argue that predicational clauses and equatives are syntactically and/or semantically different (Rapoport, 1987; Heycock and Kroch, 1998; Geist, 2008; Pereltsvaig, 2007; Bondaruk, 2012, among others)<sup>5</sup>. The individual proposals differ from one another rather substantially. In the present discussion I only consider proposals that relate to my proposal. More precisely, I discuss proposals that are based on data from Slavic languages other than Czech (Pereltsvaig, 2007; Bondaruk, 2012). It will be shown that even though the two proposals are justified by the data from other Slavic languages, Czech either does not replicate the relevant data or provides different data that do not support the empirical generalizations behind the proposals.

The proposals of Pereltsvaig (2007), and Bondaruk (2012) are rather similar, however, they use different data patterns to argue for these proposals. Namely, Pereltsvaig (2007) justifies her proposal with Russian data from sentences with different case patterns. Bondaruk (2012) provides evidence for her proposal from Polish data exhibiting Person Case Constraint (henceforth, PCC) effects. Specifically, Pereltsvaig (2007), and Bondaruk (2012)

<sup>&</sup>lt;sup>5</sup>However, note that most of the sentences Rapoport (1987) discusses as equative are in fact specificational as described in Higgins (1973)

argue that while equative clauses involve a symmetrical structure in the sense of Moro (1997), predicational clauses involve an asymmetrical structure similar to Adger and Ramchand (2003).

Pereltsvaig (2007) argues that Nominative and Instrumental NPs fundamentally differ from each other in that the former is a DP, while the latter is an NP. In her argumentation, Pereltsvaig (2007) follows Zamparelli (2000)'s observation that noun phrases of a different structure cannot be coordinated, as is shown in (45).

(45) ??Mark Twain is Samuel Clements and a writer. [Zamparelli (2000)]

Pereltsvaig (2007) shows that while it is possible to coordinate two Nominative NPs, as in (46c), and two Instrumental NPs, as in (46d), it is never possible to coordinate an Instrumental NP with a Nominative NP, as is shown in (46a) and (46b).

- a. \*Mark Tvejn byl Samuèl Klements i amerikanskim Mark Twain was Samuel.NOM Clements.NOM and American.INSTR pisatelem. writer.INSTR
   '\*Mark Twain was Samuel Clements and an American writer.'
  - b. \*Aleksandr Porfir'evič Borodin byl professor ximii i Alexander Porfirevich Borodin was professor.NOM chemistry and kompozitorom. composer.INSTR intended: 'Alexander Porfirevich Borodin was a professor of chemistry and a composer.'
  - c. Aleksandr Porfir'evič Borodin byl professor ximii i Alexander Porfirevich Borodin was professor.NOM chemistry and kompozitor.
     composer.NOM

'Alexander Porfirevich Borodin was a professor of chemistry and a composer.'

 Aleksandr Porfir'evič Borodin byl professorom ximii i Alexander Porfirevich Borodin was professor.INSTR chemistry and kompozitorom. composer.INSTR 'Alexander Porfirevich Borodin was a professor of chemistry and a composer.' [Pereltsvaig (2007)]

Based on the data in (46), Pereltsvaig (2007) argues that Nominative and Instrumental NPs are structurally different. Namely, she argues that Nominative NPs are DPs while Instrumental NPs lack the determiner layer, and are therefore just NPs. Pereltsvaig (2007) furthermore argues that Russian copular clauses with the Nominative-Nominative pattern are syntactically symmetrical, and semantically equatives. In contrast, according to Pereltsvaig (2007) copular clauses with the Nominative-Instrumental pattern are syntactically asymmetrical, and semantically predicational clauses.

Even though Czech replicates the data in (46), as is shown in (47), I argue that the conclusion Pereltsvaig (2007) draws from the data is too strong.

- (47) a. \*Mark Twain byl Samuel Clements a americkým Mark Twain was Samuel.NOM Clements.NOM and American.INSTR spisovatelem. writer.INSTR
   '\*Mark Twain was Samuel Clements and an American writer.'
  - \*Aleksandr Porfirevich Borodin byl professor chemie a Alexander Porfirevich Borodin was professor.NOM chemistry and skladatelem. composer.INSTR intended: 'Alexander Porfirevich Borodin was a professor of chemistry and a

composer.'

- c. Aleksandr Porfirevich Borodin byl professor chemie a Alexander Porfirevich Borodin was professor.NOM chemistry and skladatel.
   composer.NOM
   'Alexander Porfirevich Borodin was a professor of chemistry and a composer.'
- Aleksandr Porfirevich Borodin byl professorem chemie a Alexander Porfirevich Borodin was professor.INSTR chemistry and skladatelem. composer.INSTR 'Alexander Porfirevich Borodin was a professor of chemistry and a composer.' [modelled after Pereltsvaig (2007)]

Firstly, if it was true that Nominative NPs were always DPs, we would expect that coordination of two Nominative NPs is always possible. In other words, we would expect that the original example from Zamparelli (2000) becomes grammatical when the two coordinated NPs appear in Nominative. This is not the case, however, as the example in (48) shows. More precisely, the example in (48a) shows that it is not the morphological case that causes the ungrammaticality of the coordination of the two NPs in (47a). However, as the example in (48b) shows, both of the Nominative NPs may predicate over *Mark Twain* in separate sentences without the coordination.

 (48) a. \*Mark Twain byl Samuel Clements a americký Mark Twain was Samuel.NOM Clements.NOM and American.NOM spisovatel. writer.NOM '\*Mark Twain was Samuel Clements and an American writer.'  b. Mark Twain byl Samuel Clements. Mark Twain byl Mark Twain was Samuel.NOM Clements.NOM. Mark Twain was americký spisovatel. American.NOM writer.NOM 'Mark Twain was Samuel Clements. Mark Twain was an American writer.'

Another piece of evidence against the generalization that Nominative NPs are always DPs comes from kind-denoting NPs. Most of the current semantic literature agrees that kind-denoting NPs are bare NPs (Krifka, 2003). If bare NPs could only surface in Instrumental, we would expect kind-denoting NPs to surface in Instrumental and not in Nominative. However, contrary to the expectations, as Uličný (2000) pointed out for Czech, kind-denoting NPs such as for example *savec* must surface in Nominative and they cannot appear in Instrumental as is shown in (49).<sup>6</sup>

(49) Kočka je savec /\*savcem.cat is mammal.NOM /mammal.INSTR'A cat is a mammal.'

Moreover, according to Pereltsvaig (2007), there is a straightforward one-to-one mapping between the type of the copular clause and the case pattern. Namely, while the Nominative-Nominative pattern corresponds to Russian equatives, the Nominative-Instrumental pattern corresponds to Russian predicational clauses. If that was the case we would have never expected an equative clause to have the Nominative-Instrumental pattern, and a predicational clause to have the Nominative pattern. However, this is not attested in Czech as the following data shows. Consider the example in (50) with the Nominative-Nominative pattern. The post-copular NP *a doctor* is a property denoting NP, and the copular clause

<sup>&</sup>lt;sup>6</sup>I am very grateful to Ivona Kučerová who suggested this example to me.

in (50) is predicational. In other words, the NP *Peter* and *a doctor* are not equated in (50), instead, the Nominative NP *a doctor* is predicated over the NP *Peter*. The sentence in (50) can be paraphrased as: *Peter has a property of being a doctor*. If (50) was an equative clause, it would be paraphrased roughly as: *Peter and a doctor are one and the same individual*, however, this interpretation is unavailable in (50).

(50) Petr je lékař. Peter.NOM is doctor.NOM 'Peter is a doctor'

Similarly, the example in (51) shows that the Nominative-Instrumental pattern may be attested in equative clauses. A defining characteristic of equative copular clauses is that they contain two proper names. If the Nominative-Instrumental pattern was only possible in predicational clauses, we would have never expected this pattern to appear in copular clauses with two proper names.

(51) Petr je Hamletem. Peter.NOM is Hamlet.INSTR 'Peter is Hamlet'

As was already mentioned, Bondaruk (2012) argues for a proposal similar to the one of Pereltsvaig (2007), however, she bases it on data from Polish. Namely, Bondaruk (2012) bases the difference between a symmetrical equative clause and an asymmetrical predicational clause on data from copular clauses containing the Polish dual copula 'to być'. Bondaruk (2012) argues that while predicational clauses with 'to być' exhibit the so-called Person Case Constraint, equative copular clauses do not.

The Person Case Constraint (henceforth, PCC) was shown to arise in many languages. An example from French is given in (52). As is shown in (52), the direct object cannot be realized by the second person clitic 'te'. PCC was described in Bonet (1991) as in (53).<sup>7</sup>

- (52) Je le /\*te lui ai présenté.
  I him.3SG.ACC /\*you.2SG.ACC her.3SG.DAT have presented
  'I introduced him/\*you to her.' [Béjar and Rezac (2003)]
- (53) The \**me lui*/I-II Constraint: In a combination of a direct object and an indirect object, the direct object has to be third person [Bonet (1991)]

Bondaruk (2012) argues that the same constraint is exhibited in the Polish predicational copular clauses. Concretely, she argues that PCC effects arise between the subject and the predicate when the Polish dual copula 'to być' is present. The dual copula consists of a pronominal copula 'to', and a verbal copula 'być' in Polish. Bondaruk (2012) shows that in present tense, the verbal part of the copula, i.e. 'być' is omitted, and she only shows the relevant cases in present tense. All of the following data therefore only contain the pronominal copula, and not the verbal part of the copula. As is shown in (54), when the post-copular NP is in 3rd person, the subject cannot be the 1st person pronoun 'ja' or the 2nd person pronoun 'ty', instead, it can only be the 3rd person pronoun 'on'.

(54) \*Ja /\*ty /on to dyrektor. I.1SG you.2SG he.3SG TO manager 'I/you/he am/are/is a manager.'

[Bondaruk (2012)]

Interestingly, as Bondaruk (2012) pointed out, PCC effects do not arise in equative copular clauses. As is shown in (55), if both, the subject and the predicate are referential NPs, i.e. either both pronouns, as in (55a), or a pronoun and a proper name, as in (55b), the PCC

<sup>&</sup>lt;sup>7</sup>Note that I only give the first part of the original generalization because only the first part is relevant for the current discussion.

effect goes away.

- (55) a. Ja to ty. I.1SG.NOM TO you.2SG.NOM 'I am you.'
  - b. Ja to Andrzej. I.1SG.NOM TO Andrew.3SG.NOM 'I am Andrew.'

[Bondaruk (2012)]

According to Bondaruk (2012), the PCC effect also goes away if the predicate in the copular clause is definite, i.e. pre-posed by a demonstrative pronoun. The relevant minimal pair is shown in (56). Bondaruk (2012) argues that the predicate NP 'ten dyrektor' is referential in (56b), and therefore (56b) is an equative copular clause.

- (56) a. \*Ja to dyrektor. I.1SG.NOM TO manager 'I am a manager.'
  - b. Ja to ten dyrektor. I.1SG.NOM TO this manager 'I am this manager.'

In order to account for the fact that PCC effects arise in predicational clauses, but not in equatives, Bondaruk (2012) proposes that predicational clauses have a syntactic structure different from equatives. Namely, according to Bondaruk (2012), equatives have a symmetrical structure similar to the one proposed in Pereltsvaig (2007) in the sense of Moro (1997). In contrast, predicational clauses have an asymmetrical structure adopted from Citko (2008), and in line with Adger and Ramchand (2003).<sup>8</sup>

The data presented in Bondaruk (2012) are intriguing. Czech, however, does not exhibit

<sup>&</sup>lt;sup>8</sup>How exactly Bondaruk (2012) models the PCC effects is not relevant for the current discussion.

such patterns because Czech does not have a variation of the Polish dual copula 'to być'. More precisely, Czech has no pronominal copula.

Interestingly, Czech has a demonstrative pronoun 'to' that frequently appears in copular clauses. In Chapter 3, I show that the copular clauses where the Czech 'to' appears are analogous to English identificational clauses, such as for example (57).

(57) That was a doctor.

#### IDENTIFICATIONAL

The syntactic status of the Czech 'to' is, nevertheless, very different from the syntactic status of the Polish 'to'. Namely, while the Polish 'to' functions as a pronominal copula, the Czech 'to' substitutes one of the NPs in a copular clause, as is shown in (58).

(58) To byl lékař. TO was doctor 'That was a doctor.'

As is shown in (59), while the Polish 'to' may surface in a copular clause with two NPs and the verbal copula, the Czech 'to' cannot appear in such constructions.

(59)	a.	Jan to był mój najlepszy przyjaciel.	
		Jan TO was my best friend	
		'Jan was my best friend.'	[Citko (2008), Polish]

b. \*Jan to byl můj nejlepší přítel.
 Jan TO was my best friend
 Intended: 'Jan was my best friend.'

As was shown in (55b), repeated here as (60a), the Polish 'to' may surface with just two NPs in a present tense equative clause. However, the Czech 'to' can never substitute the verbal copula, as is shown in (60b).

(60) a. Ja to Andrzej. I.1SG.NOM TO Andrew.3SG.NOM 'I am Andrew.'

[Bondaruk (2012), Polish]

b. \*Já to Ondřej. I.1SG.NOM TO Andrew.3SG.NOM Intended: 'I am Andrew.'

In this dissertation, specifically, in Chapter 6, I argue contra Adger and Ramchand (2003) that predicational clauses differ from equative copular clauses. However, I argue that the locus of the difference is the semantic type of the structural predicate. Czech does not provide evidence for substantially different structures of predicational and equative clauses. More precisely, the skeleton of predicational clauses and equatives may or may not be the same. In the following section, I discuss the proposal of Citko (2008) who argues that Polish copular clauses employ distinct syntactic structures, however, there does not seem to be any straightforward mapping of one structure to one particular semantic type of copular clauses. Following Citko (2008), I assume that the structural differences are not reflective of the distinct semantic types of copular clauses. Instead, I assume that the structural distinctions presented from Polish (and possibly also from Russian) may be due to additional morpho-syntactic material Czech lacks.

## 2.4 Polish copular clauses and the proposal of Citko (2008)

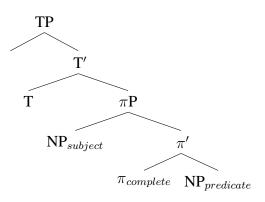
The Polish dual copula constructions have also been the focus of the proposal in Citko (2008). More precisely, Citko (2008) compared three types of Polish copular clauses, *verbal copula clauses*, *pronominal copula clauses*, and *dual copula clauses*. The different types of Polish copular clauses are shown in (61)

(61)	a.	Jan jest moim najlepszym przyjacielem. Jan is my best friend 'Jan is my best friend.'	verbal copula clauses
	b.	Jan to mój najlepszy przyjaciel. Jan TO my best friend 'Jan is my best friend.'	pronominal copula clauses
	c.	Jan to jest mój najlepszy przyjaciel. Jan TO is my best friend 'Jan is my best friend.' [Citko (2008)]	dual copula clauses

Citko (2008) argues that pronominal copula clauses should be treated analogously to dual copula clauses because they exhibit similar syntactic and semantic behaviour. Note that Bondaruk (2012) also treats the two analogously because according to Bondaruk (2012), pronominal copula clauses are dual copula clauses in present tense with a zero verbal copular morpheme. According to Bondaruk (2012), the different pattern with respect to PCC effects arises only with respect to the referential status of the structural predicate. Namely, Bondaruk (2012) argues that there are two different copular structures in Polish, the first of which corresponds to predicational clauses, the second of which corresponds to equatives.

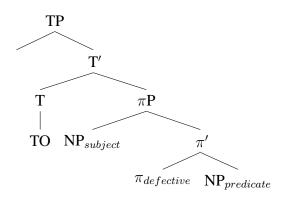
Citko (2008) argues that there are two (slightly) different structures in Polish, however, she denies that the two structures are mapped to the distinction between predicational and equative clauses. Namely, according to Citko (2008), while pronominal copula clauses and dual copula clauses have the same structure, verbal copula clauses have a slightly different structure. The structure of verbal copular clauses is schematized in (62).

(62) Citko (2008) - Polish verbal copula clauses



According to Citko (2008), the main difference between verbal and pronominal/dual copula clauses is the featural make up of the predicational head. Namely, while in verbal copula clauses, the predicational head, which she calls  $\pi$ , is complete, it is defective in pronominal/dual copula clauses. More precisely, while according to Citko (2008), the complete  $\pi$  carries uninterpretable  $\phi$ -features, and an optional EPP feature, the defective  $\pi$  lacks independent syntactic features. Consequently, the defective  $\pi$  is only a mediator between a specifier and a complement. The defective/complete  $\pi$  distinction accounts for restrictions Polish pronominal/dual copular clauses show in comparison to verbal copular clauses. For instance, while in pronominal copular clauses, there is a parallelism requirement, i.e. both phrases, the one that appears in the specifier and the one in the complement. The structure Citko (2008) assumes for pronominal/dual copular clauses is schematized in (63).

(63) Citko (2008) - Polish pronominal/dual copula clauses



Some scholars argue that a pronominal copula is an equative copula (see (Doron, 1983; Rapoport, 1987; Rothstein, 1995) for the account of Hebrew pronominal copula). Citko (2008) argues against these proposals. Concretely, Citko (2008) argues that if the pronominal copula was equative, we would not expect it to surface in predicational copular clauses. This is not the case though, as Citko (2008) shows. Specifically, Citko (2008) shows that even though the pronominal copula is implausible in sentences containing stage-level predicates, as is shown in (64a), it is plausible in sentences with individual-level predicates, as is shown in (64b).

- (64) a. #Jan to (jest) zbieg. Jan TO is fugitive 'Jan is a fugitive.'
  - b. Jan to (jest) wieczny zbieg. Jan TO is permanent fugitive 'Jan is a permanent fugitive.' [Citko (2008)]

Based on the data like (64), Citko (2008) concluded that the difference between verbal copula clauses and pronominal/dual copula clauses does not correlate with the predicational versus equative distinction.

The literature on copular clauses contains many proposals arguing that the semantic

types of copular clauses as described in Higgins (1973) correlate with different syntactic structures. Citko (2008)'s proposal offers a different point of view. Concretely, even though there are two copular clause constructions which differ from one another, the difference between them is not attributable to the type of a copular clause. Citko (2008) concludes her article with the following: "The proposal made in this paper raises interesting questions involving the universality of the distinction between the two types of small clauses. For example, is the presence of two distinct copula elements in a language enough to warrant the distinction between two types of small clauses? A positive answer seems conceptually plausible; however, the details of the cross-linguistic implications remain to be worked out." Many languages, including Czech, lack the pronominal copula altogether. Does it mean that only Polish and other languages that have pronominal copula have the structure in (63) while the other languages lack this structure? What would it mean for the principles of UG? A discussion similar to this has been raised by Szczegielniak (2014) in his review on Bondaruk (2013)'s book. While discussing Bondaruk (2013)'s proposal which accepts one structure for Polish equatives but rejects the same structure for English equatives, Szczegielniak (2014) states the following: "Assuming that minimalist theories aim to achieve explanatory adequacy and there is UG in some form or another, then evidence from Polish should be sufficient grounds to propose a similar structure in English, unless there are clear facts to argue against such a unification."

Another instantiation of a similar discussion appears in Partee (1998) who essentially argues that while in Russian, there is enough evidence for the inversion analysis of copular clauses, English, for the most part, lacks such an evidence. Partee (1998) takes as the strongest argument against inversion in English the fact that indefinite NPs which are according to Partee (1998) true predicates, cannot appear in the subject position. The relevant

example has already been mentioned above, and is repeated here as (65).

- (65) a. John is a fool.
  - b. \*A fool is John. [Moro (1997)]

However, Partee (1998) also argues that there is empirical evidence for inversion in Russian. Namely, she takes the fact that in Russian an Instrumental NP may appear in the subject position, even though Russian subjects must be in Nominative. This case pattern is also available in Czech as will be discussed in Chapter 3. However, in Chapter 7, I argue that the argument against inversion in English Partee (1998) gives, may not be Englishspecific. Concretely, I argue that Czech has a similar restriction as English does. Even though Czech does not have definite and indefinite articles, Czech disallows NPs that denote new information to surface in the subject position in specificational copular clauses. I argue that the reason why sentences like (65b) cannot be derived is that the indefinite NP 'a fool' denotes new information.

The central question that Citko (2008), Szczegielniak (2014), and Partee (1998) lead me to ask: How does a proposal presenting evidence from one language apply to other languages?

I follow the reasoning of Szczegielniak (2014) and I assume that the proposal argued for in this dissertation holds for other languages as well. In other words, unless there are empirical reasons to deny my proposal, I assume that it holds universally. With respect to the question of pronominal/dual copular clauses and their analysis as proposed in Citko (2008), I assume that if there is a construction in a language that is not attested in another language, it is not necessary to employ the particular analysis for such language. In other words, I assume that if a language does not have a pronominal/dual copula, it also does not employ the structure in (63) as proposed by Citko (2008).

To summarize, in this chapter I showed that there are many proposals regarding the syntax of copular clauses, as well as many disagreements between these proposals. The present dissertation aims to address some of the main disagreements discussed in this chapter and provide evidence supporting one or the other of the competing proposals. Specifically, with respect to Higgins (1973)'s taxonomy, and various proposals discussed in this chapter, I propose the following. I argue that specificational clauses are derived via the inversion analysis (Moro, 1997; Adger and Ramchand, 2003; Moro, 2006; Mikkelsen, 2005; Den Dikken, 2006; Dikken, 2007; Heycock, 2012, among others), and that inversion is Ascrambling (Bailyn, 2004; Heycock, 2012). Contra proposals arguing that specificational clauses are derived from just one other copular clause type (Mikkelsen, 2005; Heycock, 2012), I argue that specificational clauses may be derived from both, predicational and equative copular clauses. Contra Mikkelsen (2004) I argue that identificational clauses are analogous to predicational clauses (Heller, 2005; Heller and Wolter, 2008). Contra Adger and Ramchand (2003) I argue that predictational clauses differ from equatives in that the structural predicate in predicational clauses has a semantic type different from the structural predicate in equatives.

# **Chapter 3**

# **Czech copular clauses**

The aim of this chapter is to establish some empirical generalizations about syntactic and semantic properties of Czech copular clauses containing two lexical NPs and the copular verb *to be* (henceforth, NP-NP copular clauses). Since Higgins (1973) four semantically distinct types of copular clauses have been recognized in the literature. The four types are: *predicational, equative, identificational,* and *specificational.* The aim of this chapter is to determine whether these four semantically distinct types of copular clauses differ syntactically from one another in Czech.

In predicational clauses, such as for example (1), the linearly second NP, i.e. *a teacher* in (1), ascribes a property to the linearly first NP, i.e. *Peter* in (1). The linearly first NP is referential, i.e. a proper name or a definite description. Throughout this thesis, I adopt the definition of *referential* from Kripke (1972). Namely, referential NPs are rigid designators, i.e. NPs that in every possible world denote the same entity. The sentence in (1) can be paraphrased as: the entity rigidly denoted by the proper name Peter has a property of being a teacher.

#### (1) Peter is a teacher.

#### PREDICATIONAL

The equative clause in (2) establishes an identity relation between two NPs which are both proper names, i.e. *Cicero* and *Tully*. The sentence in (2) can be paraphrased as: the referential entity rigidly denoted by the proper name Cicero is the same as the referential entity rigidly denoted by the proper name Tully.

The sentences in (3) are both examples of identificational copular clauses. The linearly first NP in identificational clauses is a pronoun, either *this* or *that* in English. The linearly second NP may be a non-referential NP, such as the nominal predicate *a teacher* as in (3a), or a referential NP such as the proper name *Peter* in (3b). The meaning of the identificational clause in (3a) could be described as: the pronoun picks an individual from the context and the linearly second NP ascribes a property to the individual. The identificational clause in (3b) may be described as: the pronoun picks and individual from the context and the linearly second NP identifies the individual as the entity rigidly denoted by the proper name *Peter*.

(3) a. This is a teacher.

#### IDENTIFICATIONAL

b. That is Peter.

IDENTIFICATIONAL

The linearly first NP in specificational clauses, such as the one in (4), is usually a definite  $NP^1$  while the linearly second NP is a referential. The meaning of a specificational clause

<sup>&</sup>lt;sup>1</sup>The referential status of the linearly first NP in specificational clauses is not straightforward. Namely, it has been argued in the literature that the NP is either a nominal predicate (Mikkelsen, 2005), and therefore non-referential, or a referential NP (Heycock and Kroch, 1998; Romero, 2005; Heller, 2005; Heycock, 2012). The referential status of the linearly first NP in specificational clauses is going to be discussed in Chapter 6.

can be intuitively described as in Higgins (1973): "the Subject in some way delimits a domain and the Specificational Predicate identifies a particular member of that domain..."

(4) The teacher is Peter.

#### SPECIFICATIONAL

It has been shown that the distinct semantic types of copular clauses differ from each other also syntactically (Higgins, 1973; Rapoport, 1987; Heggie, 1988; Heycock, 2012, among many others). Specifically, specificational clauses have been shown to differ from the other types in some languages. For example, English specificational clauses have been shown to exhibit connectivity effects (Sharvit, 1999).<sup>2</sup> I will focus especially on one phenomenon previously discussed in the literature, i.e. the copular agreement. Namely, while in most types of copular clauses, the copula agrees with the linearly first NP, in specificational clauses, the copula agrees with the linearly first NP, in specificational clauses, theycock (2012) indicates Italian, Catalan, Brazilian and European Portuguese, Spanish, German, Dutch, Icelandic, and Faroese, as such languages.<sup>3</sup>

In this chapter, I provide more evidence from Czech showing that specificational copular clauses indeed syntactically differ from predicational and equative clauses. Namely, as well as in the above mentioned languages, the copula agrees with the linearly second NP in Czech specificational clauses. In order to account for this I argue for the inversion analysis of specificational clauses. Namely, I argue that the reason why the copula agrees

Until then, I will simply refer to to the linearly first NP as a definite NP with no reference to its referential status.

<sup>&</sup>lt;sup>2</sup>The differences between specificational and other clauses are especially notable in a broader range of specificational constructions, for instance, in so called specificational pseudoclefts. Specificational pseudoclefts compared to specificational clauses, contain a cleft instead of the linearly first NP. For example, *What I don't like about Peter is his tie.* is a specificational pseudocleft. The focus of this thesis are copular clauses containing two NPs, I therefore exclude specificational pseudoclefts from the current discussion.

<sup>&</sup>lt;sup>3</sup>However, Béjar and Kahnemuyipour (2017) provide evidence that in Eastern Armenian, the copula agrees with the linearly second NP also in equative clauses.

with the linearly second NP in specificational clauses is that the linearly second NP is basegenerated as the syntactic subject. The agreement pattern then follows from the fact that it is always the syntactic subject that triggers copular agreement in Czech copular clauses. Czech identificational clauses will seem to pattern with specificational clauses but it will be shown in Chapter 5 that this resemblance is a side-product of another phenomena. Namely, it will be shown that the reason why the copula does not agree with the linearly first NP in identificational clauses is that the linearly first NP is a  $\phi$ -feature deficient pronoun. The copula, therefore, gets its  $\phi$ -features valued from the linearly second NP.

However, when comparing specificational clauses with predicational clauses and equatives, the distinct pattern of copular agreement is not the only syntactic difference one can observe in Czech. I argue that Czech provides us with an excellent tool to test for syntactic differences in copular clauses for three reasons: (i) Czech has a rich copular  $\phi$ -feature agreement (the copula may agree with an NP in PERSON, NUMBER, and GENDER), (ii) one NP in Czech copular clauses may alternate in morphological realization of case, i.e. it can surface either in Nominative or in Instrumental, (iii) the Czech copula in past tense has analytical verbal morphology which will allow us to test for some other syntactic properties of copular clauses such as, for example, identify locality domains.

In order to show how the first two syntactic phenomena relate to the distinction between specificational clauses and the other copular clause types, let me first discuss the relevant Czech data in more detail. The role of the analytical verbal morphology in identifying locality domains will be discussed in Chapter 4.

## 3.1 The Czech be ('být') and its agreement properties

As was already mentioned, the Czech *be* may agree with an NP in PERSON, NUMBER, and in some cases also in GENDER. More precisely, the synthetic finite form of the copula *be* agrees in PERSON and NUMBER in Czech. The future and the present copula are synthetic while the past tense copula is analytical. The analytical finite form consists of an auxiliary and a past participle. While the auxiliary *be* agrees in PERSON and NUMBER, the past participle *been* has a partially nominal inflection and it agrees in NUMBER, and GENDER. For ease of exposition, in this section, I demonstrate the basic agreement properties of the Czech copula in predicational copular clauses.

The present and the future *be* is synthetic, as you can see in (5). Notice, that the morphological forms of Czech *be* are suppletive, i.e. the present and the future *be* have different morphological realizations, and so does the infinitive *be*, i.e. 'být'.

- (5) a. Já jsem detektiv. I.1SG am detective.3SG.M 'I am a detective.'
  - b. Já budu detektiv. I.1SG will-be.1.SG detective.3SG.M 'I will be a detective.'

The past *be* is analytical, it is composed of the auxiliary *be* and the past participle *been*. Notice that the auxiliary is null for the 3rd person as is shown in (6). I assume with Veselovská (2004) that the 3rd person auxiliary is syntactically realized as a zero morpheme. However, throughout this thesis I will not indicate the zero morpheme in the examples of 3rd person past tense copular clauses.

(6)	a.	Já jsem byla detektiv.
		I.1SG AUX.1.SG been.SG detective.3SG.M
		'I was a detective.'
	b.	Ty jsi byla detektiv. you.2SG AUX.2SG been.SG detective.3SG.M
		'You are a detective.'
	c.	Ona.3SG.F Ø byla detektiv.
		she AUX.3SG been.SG detective.3SG.M
		'She was a detective.'

The present and the future *be* agree in PERSON, and NUMBER with the linearly first NP, as is shown in (7) for present tense and (8) for future tense.

- b. Ty jsi detektiv. you.2SG are.2SG detective.3SG.M 'You are a detective.'
- c. Ona /On je detektiv. she.3SG.F /he.3SG is.3SG detective.3SG.M 'She/he is a detective.'
- d. My jsme detektivové. we.1PL are.1PL detective.3PL.M 'We are detectives.'
- e. Vy jste detektivové. you.1PL are.2PL detective.3PL.M 'You are detectives.'
- f. Ony jsou detektivové. they.3PL.F are.3PL detective.3PL.M 'They are detectives.'

- (8) Já budu a. detektiv. I.1sg || will-be.1sg | detective.3sg.M 'I will be a detective.' b. Ty budeš detektiv. you.2sg will-be.2sg detective.3sg.M 'You will be a detective.' /On bude c. Ona detektiv. she.3SG.F / he.3SG will-be.3SG detective.3SG.M
  - she.3SG.FJ/he.3SG] will-be.3SG] detective.3S 'She/he will be a detective.'
  - d. My budeme detektivové. we.1PL will-be.1PL detective.3PL.M 'We will be detectives.'
  - e. Vy budete detektivové. you.1PL will-be.2PL detective.3PL.M 'You will be detectives.'
  - f. Ony budou detektivové. they.3PL.F will-be.3PL detective.3PL.M 'They will be detectives.'

As is shown in the example in (9), the auxiliary *be* has the same form as the present *be* in standard Czech.<sup>4</sup> As well as the present *be*, the past auxiliary *be* agrees with the linearly first NP in PERSON, and NUMBER.

(9) Já jsem byla detektiv. a. been.F.SG detective.3SG.M I.1SG AUX.1SG 'I was a detective.' jsi b. Ty byla detektiv. you.2SG AUX.2SG been.F.SG detective.3SG.M You are a detective.'

<sup>4</sup>The forms, however, differ in some Czech dialects (Veselovská and Karlík, 2004).

- c. Ona Ø byla detektiv. she.3SG.F AUX.3SG been.F.SG detective.3SG.M 'She was a detective.'
- d. My jsme byly detektivové. we.1PL AUX.1PL been.F.PL detective.3PL.M 'We were detectives.'
- e. Vy jste byly detektivové. you.2PL AUX.2PL been.F.PL detective.3PL.M 'You were detectives.'
- f. Ony Ø byly detektivové. they.3PL.F AUX.3SG been.F.PL detective.3PL.M 'They were detectives.'

The past participle *been* agrees in NUMBER, and GENDER, as is shown in the example in (10). Notice that in the example in (10) the past participle *been* also agrees with the linearly first NP, i.e. the past participle agrees with the feminine *she* in (10a), the masculine *he* in (10b), and the neuter *baby* in (10c).<sup>5</sup>

(10)Ona byla detektiv. a. she.3SG.F been.F.SG detective.3SG.M 'She was a detective.' b. On byl zdravotní sestra. he.3SG.M been.M.SG health sister.3SG.F 'He was a nurse.' Dítě holčička. bylo c. girl.3SG.F baby.3SG.N || been.N.SG | 'The baby was a girl.'

The past participle cannot agree with the linearly second NP in cases like (10), as is shown

<sup>&</sup>lt;sup>5</sup>In order to show agreement in neuter gender, I used the full lexical NP *baby* instead of the Czech neuter version of the personal pronoun, i.e. 'ono'. The reason is that 'ono' is used rarely in Czech.

in (11).

(11)	a.		byl been.M.SG She was a c	
	b.	L	byla been.F.SG He was a nu	zdravotní sestra . health sister.3SG.F urse.'
	c.	*Dítě baby.3sg.1 'The baby	byla been.F.SC was a girl.'	holčička. g girl.3SG.F

The table in (12) summarizes what  $\phi$ -features the different types of Czech be agree in.

$\phi$ -features	the synthetic be	the auxiliary be	the participle been
PERSON	1	✓	×
NUMBER	1	$\checkmark$	✓
GENDER	×	×	1

(12) The types of Czech *be* and their unvalued  $\phi$ -features

As was shown in the example in (11), the past participle always agrees in  $\phi$ -features with the same NP, the finite *be*, and the auxiliary *be* agree with, i.e. the linearly first NP in predicational clauses. In order to demonstrate which NP the copula agrees with, I use examples with past participle throughout this thesis, and I manipulate the GENDER of the NPs.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup>Note that in most cases I could also use the finite *be* and manipulate the PERSON of the NPs in copular clauses and obtain the same result. However, using the past participle will allow me to demonstrate other structural properties of Czech copular clauses in Chapter 4 (head movement), and Chapter 5 (the copular agreement in identificational clauses where both NPs are 3rd person).

## **3.2** The case alternation

In Czech NP-NP copular clauses, one of the NPs must be in Nominative case (henceforth, NOM), while the other NP may either appear in NOM, or in Instrumental case (henceforth, INSTR), as is shown in (13).

INSTR NPs are restricted to NP-NP copular clauses. In contrast, in copular clauses consisting of just one NP and another phrase (AP or a PP), the NP can only be in NOM and not in INSTR, as can be seen in (14).

In NP-NP copular clauses, it is always the nominal predicate<sup>7</sup> that may alternate in case, and consequently, the NP that may alternate in case will always be interpreted as a property denoting NP.<sup>8</sup> In most cases, the linearly first NP is not a nominal predicate, and therefore, if it appears in INSTR, the copular clause is semantically implausible as is shown in (15).

<sup>&</sup>lt;sup>7</sup>Note that I am using the term *nominal predicate* in a pre-theoretical way. In Chapter 4, I define this NP syntactically as NP<sub>2</sub> to stay away from a misleading terminology.

<sup>&</sup>lt;sup>8</sup>But see section 3.3.2 and Chapter 6 where I show that even proper names may surface in INSTR. Importantly, the proper names that may surface in INSTR are not interpreted as referential (rigid designators in the sense of Kripke (1972)). It will be discussed in Chapter 6 that proper names in a post-copular position are interpreted as being dependent on the world of evaluation or a situation.

Importantly, (15) is not ungrammatical, it has an odd meaning in which the NP *Veronica* is interpreted as a property of *a singer*.

(15) a. #Veronikou byla zpěvačka. Veronica.INSTR been.F.SG singer.NOM Intended: 'Veronica was a singer.'

However, the example in (16) shows that in some NP-NP copular clauses, the nominal predicate in INSTR may surface as either, the linearly first or the linearly second NP. The interpretation of (16a) and (16b) is similar, it can be paraphrased as: *the entity denoted by Veronica has a property of being the singer*. There are, however, some important information-structure differences between (16a) and (16b) which are going to be discussed in the next section.

- (16) a. Veronika byla Veronica.NOM been.F.SG 'Veronica was the/a singer.'
  - b. Zpěvačkou byla Veronika. singer.INSTR been.F.SG Veronica.NOM 'The singer was Veronica.'

In Czech, only NPs in NOM may trigger verbal agreement, consequently the INSTR NP in copular clauses never triggers agreement on the copula, as is shown in (17).

- (17) a. <u>Veronika</u> byla /\*byl detektivem. <u>Veronica.F.NOM</u> been.F.SG been.M.SG detective.M.INSTR 'Veronica was the/a detective.'
  - b. Detektivem \*byl / byla Veronika . detective.M.INSTR been.M.SG been.F.SG Veronica.F.NOM 'The detective was Veronica.'

As was already mentioned, in most NP-NP copular clauses with two NPs in NOM, the copula agrees with the linearly first NP (recall the examples in (10) and (11)). However, in some cases, the copula may agree with the linearly second NP as well, as can be seen in (18b).

- (18) a. Veronika byla /\*byl detektiv. Veronica.F.NOM been.F.SG been.M.SG detective.M.NOM 'Veronica was the/a detective.'
  - b. Detektiv \*byl / byla Veronika. detective.M.NOM been.M.SG been.F.SG Veronica.F.NOM 'The detective was Veronica.'

However, notice that the example in (18) closely resembles the example in (17). More precisely, the only difference between (18) and (17) is that the NP 'detective' which does not trigger the agreement on the copula is in NOM in (18) and in INSTR in (17). Therefore, the NP that may alternate in case is the NP that does not trigger agreement on the copula.

In contrast, the NP that triggers agreement on the copula may not alternate in case, as is shown in (19). As was shown in the example in (15), the copular clauses in (15) and (19) are not ungrammatical but they cannot have the intended meanings. The NP *Veronica* would be interpreted as a property of a detective in (19).<sup>9</sup>

(19)	a.	# Veronikou	byl	detektiv.
		Veronica.F.INSTR	been.M.SC	detective.M.NOM
		Intended: 'Veronic	a was the/a	detective.'
	b.	#Detektiv b	vl	Veronikou .
	0.	detective.M.NOM b	-	

<sup>&</sup>lt;sup>9</sup>Note that throughout this dissertation, I use '\*' to mark syntactically incorrect structures while I use '#' to mark implausible sentences. Sentences marked with '#' are therefore not straightforwardly ungrammatical, they do not violate any syntactic principles, however, they either lack the intended meaning or they cannot be assigned any meaning at all.

Intended: 'The detective was Veronica.'

To summarize, it was shown that in Czech NP-NP copular clauses, the NP that may alternate in case, i.e. it may surface in NOM or in INSTR, is the NP that does not trigger agreement on the copula.

It was also shown that in most cases, the linearly first NP triggers agreement on the copula and the linearly second NP is the NP that may alternate in case. However, we also saw copular clauses where the opposite was true, i.e. the copula agreed with the linearly second NP and the linearly first NP alternated in case. In the next section I argue that these copular clauses semantically correspond to specificational copular clauses.

## **3.3** Czech specificational copular clauses

The goal of this section is to show that specificational clauses syntactically differ from other types of copular clauses in Czech. However, it is not trivial to show that a sentence unambiguously corresponds to a specificational clause. More precisely, as far as I know there is no test that would allow me to distinguish a specificational clause from other types of copular clauses in a straightforward manner. Instead, I argue that in order to determine whether a clause is specificational, we need to compare it with the other types of copular clauses separately.

As was already mentioned, we can distinguish between two types of NP-NP copular clauses in Czech with respect to which NP determines the copular agreement. The example in (20) shows that the copula may agree with the linearly first NP (henceforth, first-NP agreement), as in (20a), or with the linearly second NP (henceforth, second-NP agreement), as in (20b).

(20) a. Veronika byla /\*byl detektiv. Veronica.F.NOM been.F.SG been.M.SG detective.M.NOM 'Veronica was the/a detective.'

b.	Detektiv	*byl	/ byla	Veronika.
	detective.M.NOM	been.M.SG	been.F.SG	Veronica.F.NOM
	'The detective wa	as Veronica.'		

In the previous section I mentioned that there is a difference in the interpretation of copular clauses like (20a) compared to copular clauses like (20b). Before I turn into the individual comparisons, let me briefly discuss this difference. The difference between (20a) and (20b) can be described in pre-theoretical terms with respect to English definiteness. Czech does not have definite and indefinite articles, however, as is suggested by the glosses, (20b) differs from (20a) in that the NP *detective* must be interpreted as definite in (20b) while the same NP can be interpreted as either definite or indefinite in (20a).

In Chapter 4, I argue that both, (20a) and (20b) are derived from the same basegenerated structure. However, it will be shown in Chapter 7 that the derivation of (20b) is restricted to cases in which the nominal predicate has particular information-structure properties, i.e. it needs to be given. Namely, it will be shown that the nominal predicate, i.e. the NP *detective* in (20), must be given and an aboutness topic in order for (20b) to be derived. Kučerová (2007) pointed out that there is a correlation between givenness in Czech and English definiteness. Namely, given NPs in Czech tend to correspond to definite NPs in English.<sup>10</sup> In this section, I argue that the copular clause in (20a) where the linearly second NP *detective* can be interpreted as definite or indefinite is semantically predicational. In contrast, I argue that the copular clause in (20b) where the linearly first NP have

<sup>&</sup>lt;sup>10</sup>However, Kučerová (2007) does not argue that there is a one-to-one mapping between Czech givenness and English definiteness. See the discussion in Kučerová and Neeleman (2012) where it is shown that the relationship between givenness and definiteness is not entirely straightforward.

a strong tendency to be interpreted as definite is specificational.

### **3.3.1** Specificational versus predicational

Intuitively, in predicational copular clauses the linearly second NP ascribes an unstated property to the linearly first referential NP (Higgins, 1973), the example in (21) shows two predicational sentences. The sentence in (21a) could be paraphrased as: the entity rigidly denoted by the proper name Peter has a property of being a teacher, and (21b) as: the entity rigidly denoted by the proper name Peter has a property of being nice.

(21)	a.	Peter is a teacher.	PREDICATIONAL	
	b.	Peter is nice.	PREDICATIONAL	

Specificational clauses, however, do not semantically express a relation between a referential NP and a property NP ascribed to it. Consider the examples of specificational clauses in (22).

(22)	a.	The director of Psycho is Alfred Hitchcock.	SPECIFICATIONAL	
	b.	The manager of the store is John Smith.	SPECIFICATIONAL	

It is not the case that the linearly second NP ascribes a property to the linearly first NP in these examples. (22a) cannot be paraphrased as: the entity rigidly denoted by the NP The director of Psycho has a property of being Alfred Hitchcock. Similarly, (22b) cannot be paraphrased as: the entity rigidly denoted by the NP The manager of the store has a property of being John Smith.

In order to distinguish predicational from specificational copular clauses semantically

we can use a test in which we substitute the copula with the verb *become*. The replacement of the copula with the verb *become* is only possible in predicational clauses (Higgins, 1973). As you can see in (23), the predicational clauses in (21) are plausible and meaningful when the copula is substituted by the verb *become*. For instance, (23a) may be interpreted as: the entity denoted by the proper name Peter acquired a property of being a teacher, for example, by finishing a degree in teaching or getting a job as a teacher.

(23) a. Peter became a teacher. PREDICATIONALb. Peter became nice. PREDICATIONAL

However, the copula in the specificational clauses in (22) cannot be substituted by the verb *become*, as you can see in (24). Importantly, the sentence is not ungrammatical per se but it is implausible. For instance, (24a) could only be interpreted as: the entity denoted by the definite NP the director of Psycho acquired a property of being Alfred Hitchcock.

(24) a. #The director of Psycho became Alfred Hitchcock. SPECIFICATIONAL
b. #The manager of the store became John Smith. SPECIFICATIONAL

Let me now go back to the Czech copular clauses in (20) repeated bellow as (25) where (25a) exhibits first-NP agreement, while (25b) exhibits second-NP agreement.

- (25) a. Veronika byla detektiv. Veronica.F.NOM been.F.SG detective.M.NOM 'Veronica was the/a detective.'
  - b. Detektiv byla Veronika. detective.M.NOM been.F.SG Veronica.F.NOM 'The detective was Veronica.'

If we substitute the copula in the sentences in (25) with the Czech 'stát se' (become) as in

(26), (26a) results in a plausible sentence while (26b) becomes implausible.

(26) a. Veronika se stala detektivem. Veronica.F.NOM REFL became.F.SG detective.M.INSTR 'Veronica became the/a detective.' PREDICATIONAL
b. #Detektiv se stal Veronikou. detective.M.NOM REFL became.M.SG Veronica.F.INSTR

Intended: 'The detective became Veronica.' NON-PREDICATIONAL

Importantly, (26b) is not ungrammatical, it is semantically infelicitous. Notice that 'stát se' (*become*) in both, (26a) and (26b), agrees with the linearly first NP. The reason for that is that the Czech verb 'stát se' (*become*) obligatorily takes an INSTR NP as its complement (Uličný, 2000). The verb 'stát se' therefore has to agree with the other NP in NOM, see (27), because INSTR NPs never trigger verbal agreement.

- (27) a. Veronika se stala /\*stal detektivem. Veronica.F.NOM REFL became.F.SG /became.M.SG detective.M.INSTR 'Veronica became the/a detective.'
  - b. Petr se stal /\*stala zdravotní sestrou. Peter.M.NOM REFL became.M.SG /became.F.SG health sister.F.INSTR 'Peter became the/a nurse.'

A reader familiar with the Slavic INSTR might argue that the reason why (26b) is infelicitous is not the copular clause itself but the fact that the proper name 'Veronika' surfaces in INSTR. Several authors focusing on copular clauses in other Slavic languages like Russian or Polish analyze INSTR NPs as non-referential predicational NPs (see for instance Geist (1999), Pereltsvaig (2007), and Matushansky (2008)). A proper name is by default referential and not predicational, and thus one might argue that a proper name cannot surface in INSTR at all. The example in (28) shows, however, that there are Czech copular clauses which allow proper names to surface in INSTR. Therefore, I do not assume that the proper name in INSTR is the reason why (26b) is implausible.

(28) Scenario: Pantomime - one person role-played someone else

a. Petra byla Veronikou . Petra.F.NOM been.F.SG Veronica.F. INSTR 'Petra was Veronica.' EQUATIVE

I assume that there is nothing syntactically wrong about (26b). More precisely, I assume that the reason why (26b) is not acceptable is because it is semantically odd in the same way as *The manager of the store became John Smith* is.

However, the '*become* substitution test' does not give us enough evidence to conclude that copular clauses that exhibit second-NP agreement are specificational. The test only helped us to semantically identify clauses with first-NP agreement, such as (29a), as predicational and sentences with second-NP agreement, such as (29b), as non-predicational.

(29)	a.	Veronika	byla	detektiv.	
Veronica.F.NOM been.F.SG detective.M.NOM					
	'Veronica was the/a detective.'			ive.'	PREDICATIONAL
	b.	Detektiv detective.M.NO	5	Veronika. G Veronica.F.NOM	
		'The detective was Veronica.'		ca.'	NON-PREDICATIONAL

The data we have seen so far can be summarized as in (30).

(30) **Czech copular clauses - Generalization (Version 1.):** If the copula agrees with the linearly second NP, the copular clause is **not** predicational.

In order to establish if the second-NP agreement pattern is characteristic for specificational copular clauses only, we need to look at agreement properties in other types of copular clauses. The remaining two types of copular clauses discussed in the literature since Higgins (1973) are equative and identificational copular clauses.

# **3.3.2** Equatives versus specificational

As was already mentioned, equative copular clauses consist of two referential NPs (Higgins, 1973). Our typical referential NPs are proper names, and therefore a copular clause containing two proper names is an equative copular clause. We have seen an example of an identity clause above in the example (28). To see which proper name the copula agrees with in identity copular clauses, we can manipulate the gender of the proper names in the equative copular clause. Imagine a scenario in which Petra is a huge fan of Shakespearean plays, and she often dreams that she is a character from a Shakespearean play. One can say about Petra: *Last night*... with the continuation in (31).

As can be seen in (31), the copula agrees with the linearly first NP, and also, as expected, the linearly second NP 'Hamlet' may surface in INSTR, as is shown in (31b). I therefore argue that the copula always agrees with the linearly first NP in Czech equative copular

clauses.11

# 3.3.3 Identificational versus specificational

The last type of copular clauses discussed in the literature are identificational copular clauses. As was already mentioned, English identificational copular clauses consist of a demonstrative pronoun (either *this* or *that*) and a lexical NP, as is shown in (33).

(33)	a.	That is Susana.	IDENTIFICATIONAL	
	b.	This is a teacher.	IDENTIFICATIONAL	

Czech copular clauses which are the most reminiscent of the English identificational copular clauses consist of a Czech demonstrative pronoun 'to' (roughly, *it*) and a lexical NP. An example of a Czech identificational copular clause is in (34).

(34)	a.	To je Zuzana.it is Susana'That is Susana.'IDENTIFICATION				
	b.	To je učitel. it is teacher 'That is a teacher.'	IDENTIFICATIONAL			

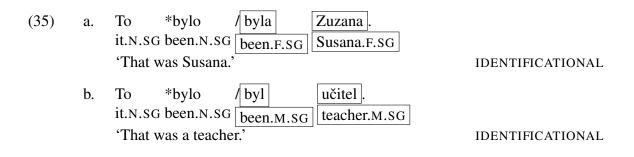
The gender of the pronoun 'to' is morphologically in neuter singular and as we can see in (35), the copula never agrees with 'to', instead, the copula always agrees with the linearly

(32) Hamlet byla Petra. Hamlet.M.NOM been.F.SG Petra.F.NOM 'Petra was Hamlet.'

I assume that (32) is just another instantiation of a specificational copular clause.

<sup>&</sup>lt;sup>11</sup>Interestingly, the equative sentence in (31) has a grammatical equivalent with the reversed order of NPs as is shown in (32).

second NP. In Chapter 5, I argue that the reason why the copula agrees with the linearly second NP is that 'to' is a  $\phi$ -feature deficient pronoun unable to value  $\phi$ -features on the copula.



As was already mentioned, specificational clauses differ from identificational clauses in that specificational clauses consist of two lexical NPs while identificational clauses consist of a pronoun and a lexical NP. In order to exclude identificational clauses from a generalization about specificational clauses, I refer to clauses containing two lexical NPs as NP-NP copular clauses. The final empirical generalization is in (36).

(36) **Generalization - Czech specificational clauses:** If the copula agrees with the linearly second NP in a **NP-NP** copular clause, the copular clause is specificational.

Czech identificational copular clauses, or more precisely, clauses with the Czech pronoun 'to' and another phrase are going to be the focus of Chapter 5. Until then, I am leaving these constructions aside and I only focus on NP-NP copular clauses.

# **3.3.4** Towards the analysis

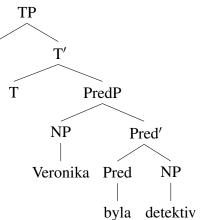
The aim of this subsection is to lay a background for the analysis of specificational copular clauses which I argue for in Chapter 4. The analysis can be briefly described as follows:

both sentences in the example in (37) are derived from the same base-generated structure.

(37)	a.	Veronica.F.NOM	a byla detektiv. a.F.NOM been.F.SG detective.M.NOM a was the/a detective.'		PREDICATIONAL		
	b.	Detektiv detective.M.NO 'The detective v	M been.F.S	G Veronica.F.NOM	SPECIFICATIONAL		

Crucially, in Chapter 4, I argue that the linearly first NP 'detektiv' in (37b) is base-generated lower than the linearly second NP 'Veronika'. The base-generated structure for both, (37a) and (37b) I assume is schematized in (38).

(38) The base-generated structure



The argument for this analysis I present here has to do with information-structure properties of the sentences in (37). I follow Heycock and Kroch (2002), Heller (2005), and Mikkelsen (2006), among others, and I argue that specificational copular clauses have special information-structure properties compared to other types of clauses. More precisely, I argue that (37a) and (37b) are truth-conditionally equivalent but they differ in that the specificational clause in (37b) is more restricted with respect to information-structure properties. Mikkelsen (2006) noticed that while predicational sentences like (39) can serve as an answer to both questions, (41) and (42), the specificational clause in (40) can only be an answer to (41) and not to (42).

(39)	John is the mayor.	PREDICATIONAL
(40)	The mayor is John.	SPECIFICATIONAL
(41)	Who is the mayor?	$\checkmark$ (39) $\checkmark$ (40)
(42)	Who/What is John?	<b>√</b> (39) # (40)
	[Mikkelsen (2006)]	

The situation is slightly different in Czech. As in English, the specificational clause in (37b) may only serve as an answer to (43) and the predicational clause in (37a) may be an answer to (44). However, unlike in English, Czech speakers disprefer (37a) as an answer to (43).

(43)	Kdo byl detektiv? who was detective 'Who was the detective?'	?? (37a) √(37b)
(44)	Kdo /co byla Veronika? who /what was Veronica 'Who/what was Veronica?'	√(37a) # (37b)

In Chapter 7, I argue that the specificational clause in (37b) is derived from the basegenerated structure in (38) iff the NP 'detektiv' is given and an aboutness topic. I follow Kučerová (2007) and the literature cited there in that Czech sentences follow a strict ordering rule with respect to given and new information. Namely, given information must precede new information in Czech in a given domain.<sup>12</sup> According to Kučerová (2007), if a sentence is base-generated such that it violates this information ordering rule, i.e. when new information precedes given information, given constituents obligatorily scramble above new elements. I follow Kučerová (2007) and I argue that if the NP 'detektiv' is given and the NP 'Veronika' is new, the NP 'detektiv' scrambles over the NP 'Veronika'.<sup>13</sup> The unacceptability of (37a) is therefore expected under this analysis because it is the NP 'detektiv' that is given in the (43)-(37b) question-answer pair. In Chapter 4, I argue that the given NP 'detektiv' A-moves to the Spec, TP (cf. Kučerová (2007)). The evidence for that will come from embedding environments and binding properties in specificational clauses.

<sup>&</sup>lt;sup>12</sup>The generalization is restricted to domains defined semantically and syntactically in Kučerová (2007). For the purposes of this thesis I consider the domain to be a proposition.

<sup>&</sup>lt;sup>13</sup>Notice that if this were true, the word order of (37b) would be *detective-Veronica-been*, however, this word order is ungrammatical. I follow Kučerová (2007) in arguing that an NP may scramble only if the verb which is the sister of the NP moved to T.

# Chapter 4

# The inversion analysis of specificational copular clauses

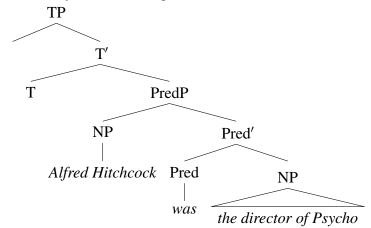
In this chapter I investigate the structure of Czech specificational copular clauses. Based on novel data I provide evidence that they are derived by movement of one NP over another NP. Thus providing further support for inversion analyses, as proposed in Moro (1997), Den Dikken (2006) Mikkelsen (2006) Heycock (2012), among others.<sup>1</sup> The central claim of the inversion analyses is that a specificational copular clause such as (1a), and a copular clause in (1b) have the same base-generated structure. Consequently, both, (1a) and (1b) are derived from the base-generated structure by movement.

(1) a. The director of Psycho was Alfred Hitchcock.

<sup>&</sup>lt;sup>1</sup>Importantly, the proposals differ in that Moro (1997), Den Dikken (2006), and Mikkelsen (2006) argue that specificational clauses are derived from predicational clauses while Heycock (2012) argues that specificational clauses are derived from equatives. The distinction between predicational and equative copular clauses is not relevant for the proposal discussed in this chapter. Based on the data presented in the previous chapter, I argue that specificational clauses may be derived from both, predicational and equative copular clauses. For ease of exposition, I call the copular clause corresponding to the equivalent of a specificational clause with the reversed structure simply *a copular clause*.

b. Alfred Hitchcock was the director of Psycho.

The base-generated structure of both copular clauses I assume for (1a) and (1b) is schematized in (2).

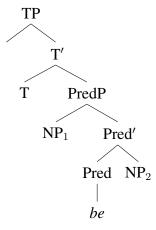


(2) The inversion analysis - the base-generated structure

Following the inversion analysis, I argue that if the structurally higher NP, i.e. *Al-fred Hitchcock*, moves to the Spec, TP, the copular clause in (1b) is derived. While if the structurally lower NP, i.e. *the director of Psycho*, moves to Spec, TP, the specificational copular clause in (1a) is derived. Note that in the latter case, the hierarchical relation in the base-generated structure is distinct from the linear word order. Namely, while the NP *the director of Psycho* is base-generated structurally lower than the NP *Alfred Hitchcock*, it is spelled out as the linearly first NP. To clearly distinguish between the hierarchical relation in the base-generated structure and the linear word order, let me introduce some new labels. So far we have been using the labels *the linearly first NP* and *the linearly second NP* to refer to the linear word order in copular clauses. In order to avoid potential confusion, I use different labels to refer to the NPs in their base-generated hierarchical structure. From

now on, I am going to call the NP that is base-generated in the Spec, PredP as  $NP_1$ , and the NP that is base-generated as the complement of Pred as  $NP_2$ . This is schematized in (3).

(3) The base-generated structure - labels  $NP_1$  and  $NP_2$ 



Let me demonstrate how the labels corresponding to the base-generated hierarchical relation and the linear word order are going to be used throughout this chapter and beyond. In the specificational clause such as the one in (1a) (repeated here as (4)), the NP *the director of Psycho* is going to be referred to as *the linearly first NP* but as  $NP_2$  because it is assumed to be base-generated as a complement of Pred. The NP *Alfred Hitchcock* will be labelled as *the linearly second NP* and  $NP_1$  because I assume it is base-generated in the Spec, PredP.

(4) The director of Psycho was Alfred Hitchcock.

This chapter is organized as follows. In section 4.1, I introduce the baseline data pattern from Czech to be used throughout this Chapter and beyond. In section 4.2, I briefly discuss an alternative proposal which does not utilize the inversion analysis to account for specificational copular clauses. Section 4.3 and section 4.4 deal with the concrete assumptions about the syntax of specificational copular clauses, and I explain how the inversion analysis

accounts for simple Czech copular clauses. In section 4.5, I investigate more complex data from Czech and I argue that only the inversion analysis can account for the data.

# 4.1 The Czech specificational copular clause

In the previous chapter, I showed that Czech NP-NP copular clauses in which the copula agrees with the linearly second NP are specificational copular clauses. This is indicated in the generalization in (5).

(5) **Generalization - Czech specificational clauses:** If the copula agrees with the linearly second NP in a NP-NP copular clause, the copular clause is specificational.

An example of a Czech specificational copular clause is in (6).

(6) Detektiv \*byl / byla Veronika. detective.M.NOM been.M.SG been.F.SG Veronica.F.NOM 'The detective was Veronica.'

We also saw that in specificational copular clauses, the linearly first NP alternates in case. It may surface in NOM as in (6) or in INSTR as in (7).

(7) Detektivem byla Veronika. detective.M. INSTR been.F.SG Veronica.F.NOM 'The detective was Veronica.'

If the linearly first NP surfaces in INSTR, the copula must agree with the linearly second NP in NOM. As the generalization in (5) indicates, agreement with the linearly second NP is the defining characteristic of Czech specificational clauses. Therefore, in order to avoid potential ambiguities, I use the word order NP.INSTR-copula-proper name.NOM as

the baseline specificational order.<sup>2</sup>

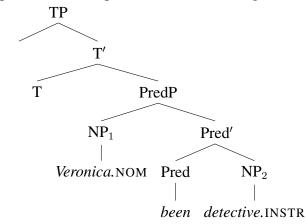
As in the English examples described above, the specificational copular clause with the INSTR-NOM word order has a grammatical NOM-INSTR equivalent, as is shown in (8).<sup>3</sup>

(8) a. Detektivem byla Veronika. detective.M. INSTR been.F.SG Veronica.F. NOM 'The detective was Veronica.'
b. Veronika byla detektivem. Veronica.F. NOM been.F.SG detective.M. INSTR

'Veronica was the/a detective.'

Following the inversion analysis of specificational copular clauses, I assume that the baseline Czech specificational clause has the base-generated structure as in (9). I also assume that both copular clauses, (8a) and (8b), are derived from the base-generated structure in (9).

(9) The Czech specificational copular clause - the base-generated structure



<sup>&</sup>lt;sup>2</sup>As was already discussed in the previous chapter, the linearly second NP in specificational clauses is not a nominal predicate. To ensure its non-predicative status the linearly second NP is always going to be a proper name.

<sup>&</sup>lt;sup>3</sup>As was already mentioned in the footnote 1, I do not commit to any particular semantic categorization of the copular clause with the linear word order NOM-INSTR.

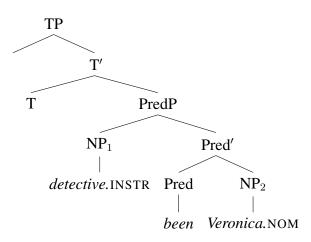
However, not all current formal linguists analyze specificational clauses using the inversion analysis. There is an alternative proposal in the current literature. This alternative proposal does not assume that the base-generated structure of a specificational copular clause is as in (9). The proponents of this proposal argue that the base-generated structural relations between the NPs reflect the linear word order in a specificational copular clause. Namely, according to this proposal, the linearly first NP is base-generated as the structurally higher NP, and the linearly second NP is base-generated as the structurally lower NP. Let me call this proposal 'the 'as is' analysis' after Romero (2005).

# 4.2 The 'as is' analysis

The proponents of the 'as is' analysis, for example Romero (2005) and Heller (2005), assume that the difference between specificational copular clauses and other copular clauses is purely semantic (or pragmatic). Consequently, these authors do not put any burden on syntax when analyzing specificational copular clauses.

The 'as is' analysis assumes that the hierarchical relations between NPs in the basegenerated structure of specificational copular clauses reflect their linear word order. This is schematized in the tree in (10).

(10) The 'as is' analysis - the base-generated structure



The semantic aspects of the 'as is' analysis are beyond the scope of the current chapter. What is important is that the inversion analysis argued for in this chapter builds on the argument that specificational copular clauses syntactically differ from other copular clauses. However, according to the 'as is' analysis, there is no structural difference between specificational copular clauses and other copular clauses.

In the remainder of this chapter I build my predictions on the inversion analysis and I argue that the inversion analysis accounts for a wide range of data from Czech specificational copular clauses. By the end of this chapter I show a data pattern only the inversion analysis can account for. In other words, I argue (contra Romero (2005) and Heller (2005)) that the difference between specificational copular clauses and other types of copular clauses is (at least partially) syntactic and not purely semantic.

Before I discuss the inversion analysis in more formal detail, let me introduce some assumptions I make about the base-generated structural position of NP<sub>1</sub>. Up to now, I assumed that NP<sub>1</sub> in copular clauses is base-generated in Spec, PredP. However, I follow Ramchand (1996, 1997) in that the base-generated position of NP<sub>1</sub> in copular clauses varies depending on whether the copular clause expresses an individual or a stage-level predication. Concretely, in the next section, I follow Geist (1999) in arguing that INSTR NPs may only express a stage-level predication. As any linearly first NP in a specificational copular clause may surface in INSTR, I argue that specificational clauses can only be derived from copular clauses that express a stage-level predication in Czech. Consequently, following Ramchand (1996, 1997) I argue that NP<sub>1</sub> in specificational clauses is base-generated in the highest Spec position internal to VP.<sup>4</sup>

# **4.3 Base-generated position of NP**<sub>1</sub>

Ramchand (1996, 1997) argues that in Scottish Gaelic copular clauses subjects can be base-generated in two distinct syntactic positions. According to Ramchand (1996, 1997) the subject position depends on whether the copular clause expresses an individual or a stage-level predication. According to Ramchand (1996, 1997) subjects of the individuallevel predication are base-generated VP externally (in Spec, TP). In contrast, subjects of the stage-level predication are base-generated in the highest Spec position internal to VP. Following Ramchand (1996, 1997) I argue that NP<sub>1</sub> in Czech copular clauses denoting stage-level predication is base-generated in the highest Spec position within a VP.

Geist (1999) argues that in Russian copular clauses INSTR  $NP_2^5$  expresses a stagelevel predication while NOM NP<sub>2</sub> denotes an individual-level predication. I follow Geist (1999) in arguing that INSTR NPs express a stage-level predication. However, I show that Czech NPs exhibit a slightly different pattern than the one Geist (1999) argues to hold in

<sup>&</sup>lt;sup>4</sup>I therefore argue that if there are any functional verbal projections above PredP, NP<sub>1</sub> is base-generated in the Spec position of the highest verbal projection.

<sup>&</sup>lt;sup>5</sup>Note that according to Geist (1999), all INSTR NPs are labelled as predicates. NOM NPs can be subjects or predicates. I refrain from using the term 'predicate' in the syntactic sense and I refer to what Geist (1999) structurally calls 'predicates' as NP<sub>2</sub>, i.e. the NP base-generated as a complement of Pred. I use the term 'predicate' only with reference to semantics.

Russian. Specifically, according to Geist (1999), NOM NPs may only express individuallevel predication. I argue that this is not the case in Czech. More precisely, I argue that in Czech, INSTR is a marked case compatible only with stage-level predication while NOM is unmarked and may express both, individual and stage-level predication.

Stage-level predicates usually express a temporally and/or spatially bounded property ascribed to an individual. An example of a stage-level predicate is *a student* in (11) which is spatially bounded by the PP *in Prague*. Even though, the NP *student* is preferred in INSTR rather than in NOM case, as can be seen in (11a) and (11b), respectively, NOM is still available, especially if the PP *in Prague* linearly follows it, as in (11c).

- (11) a. Petr byl v Praze studentem. Peter was in Prague student.INSTR 'Peter was a student in Prague.'
  - b. ?Petr byl v Praze student. Peter was in Prague student.NOM 'Peter was a student in Prague.'
  - c. Petr byl student v Praze. Peter was student.NOM in Prague 'Peter was a student in Prague.'

In contrast, individual-level predicates that express permanent life-time properties are incompatible with INSTR. Instead, they must surface in NOM. As is shown in (12), an individual-level predicate like *mammal* can only surface in NOM, as can be seen in (12a), and not in INSTR, as can be seen in (12b) (Uličný, 2000).

(12) a. Pes je savec. dog is mammal.NOM 'A dog is a mammal.'  b. \*Pes je savcem. dog is mammal.INSTR Intended: 'A dog is a mammal.'

I therefore argue that INSTR NPs can only express a stage-level predication. In specificational copular clauses, the linearly first NP (the base-generated NP<sub>2</sub>) always alternates in case, it may surface in NOM or INSTR (as in all the cases discussed in this chapter). Hence, I argue that specificational copular clauses are all derived from base-generated structure corresponding to a stage-level predication. Following Ramchand (1996, 1997) I argue that NP<sub>1</sub> in specificational clauses is base-generated in the highest Spec position internal to VP. It will be shown that in most cases, the highest Spec position internal to VP is the Spec, PredP position because there will be no more verbal projections within a VP. However, later in this chapter, a case in which a VP in a copular clause contains more functional projections will be discussed.

In the next section, I argue that INSTR NP<sub>2</sub> in specificational copular clauses moves to Spec, TP. According to Ramchand (1996, 1997), NP<sub>1</sub> in copular clauses expressing individual-level predication is base-generated in the Spec, TP. Consequently, we would predict copular clauses expressing individual-level predication not to allow for derivation of specificational clauses. In other words, if the Spec, TP is already filled by NP<sub>1</sub>, we would not expect NP<sub>2</sub> to be able to move there. This prediction is borne out in Czech, as is shown in (15).<sup>6</sup>

(13) Savec je například pes.
 mammal is for-example dog
 'A mammal is for example a dog.'

I argue that (13) does not correspond to a specificational copular clause. In the next section, it will be argued that a specificational clause is a TP. In contrast, I argue that (13) corresponds to a CP, and is presumably

<sup>&</sup>lt;sup>6</sup>However, as was pointed out to me by Ivona Kučerová, the example in (15) becomes grammatical when the NP *dog* is preceded by *for example*, as is shown in (13).

(15) \*Savec je pes. mammal is dog'A mammal is a dog.'

# 4.4 The inversion analysis

As was already mentioned, the central claim of the inversion analysis is that the hierarchical relations between NPs in the base-generated structure do not reflect the linear (pronounced) word order of the NPs in specificational copular clauses. The question is: how do we derive the linear word order in (16) from the assumed base-generated hierarchical structure in (17)?

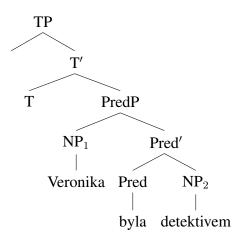
(16) Detektivem byla Veronika. detective.M.INSTR been.F.SG Veronica.F.NOM 'The detective was Veronica.'

(17) The base-generated structure in Czech

derived by predicate fronting in the sense of Heycock and Kroch (1998). The evidence for that comes from embedding contexts under verbs that have been argued in Iatridou and Kroch (1992) not to allow for CP-recursion, for example *doubt*. As is shown in (14), the specificational clause in (14a) can be embedded under *doubt*, while the copular clause in (i) cannot be embedded under *doubt*.

(14)	a.	Petr pochybuje, že ředitelkou toho podniku je Marie.				
		Peter doubts that manager.INSTR of-that company is Mary				
		'Peter doubts that the manager of the company is Mary.'				
	b.	*Petr pochybuje, že savec je například pes.				
		Peter doubts that mammal is for-example dog				
	'Peter doubts that a mammal is for example dog.'					

I therefore argue that (13) is not a specificational clause.



In order to show how (16) is derived from (17), there are three important questions that need to be addressed, namely: (i) where does the INSTR NP<sub>2</sub> move to?, (ii) why does it move?, and (iii) how does it move past the NOM NP<sub>1</sub>? Let me first address the first question.

# **4.4.1** The terminal position of NP<sub>2</sub>

Proponents of the inversion analysis of specificational clauses argue that  $NP_2$  moves to Spec, TP (Moro, 1997; Den Dikken, 2006; Mikkelsen, 2005, 2006; Heycock, 2012). In this section, I argue that the same holds for Czech. In order to show that this is the case, let me consider what would be other potential landing sites for  $NP_2$  and exclude them.

Specificational clauses have been argued to involve a movement of a topic phrase to the left-periphery (Mikkelsen, 2006). In Chapter 7, I argue that  $NP_2$  in specificational clauses is aboutness topic. Constructions involving movement of topics have often been argued to correspond to a CP in size with the topic phrase landing in the Spec, CP (for instance, Sturgeon (2008) argues that this is the case for some Czech topicalized structures). One potential landing site for  $NP_2$  in specificational copular clauses is therefore a Spec, CP. I

provide evidence that specificational clauses do not structurally correspond to a CP.

Let me first consider a non-specificational copular clause. Existing literature on copular clauses agrees that the linearly first NP in non-specificational clauses is either basegenerated in Spec, TP or moves to Spec, TP. I assume that the NOM NP<sub>1</sub> 'Veronika' moves to Spec, TP in the copular clause in (18).<sup>7</sup>

(18) Veronika byla detektivem. Veronica.F. NOM been.F.SG detective.M. INSTR 'Veronica was the/a detective.'

Therefore, the sentence in (18) corresponds to a TP in size. As was already mentioned, specificational clauses have been argued to involve movement for topic reasons (Mikkelsen, 2005). Other constructions involving movement for topic reasons, such as for example, left-dislocation, have been argued to correspond to a CP in size. If specificational clauses involve a movement of a topic NP<sub>2</sub>, it might be the case that a specificational clause corresponds to a CP analogously to other topicalized structures.

I provide evidence that this is not the case. Czech has topic constructions that are derived from canonical sentences via left-dislocation of an NP (Sturgeon, 2008). An example of a left-dislocation construction is in (19). Notice that the difference between (19a) and (19b), is that in (19b) the left-dislocated NP left a resumptive pronoun lower in the structure.

a. Ten snědý fešák Marii nezajímá. that tanned pretty-man Mary.GEN not-interests 'The tanned pretty man does not interest Mary.'
b. Toho snědého fešáka, <u>toho</u> Marie nerada. that tanned pretty-man.ACC <u>that.M.ACC</u> Mary.NOM not-like

<sup>&</sup>lt;sup>7</sup>The reason why NP<sub>1</sub> moves to Spec, TP will be discussed in the following section.

'The tanned pretty man, Mary does not like him.'

There are certain embedded environments, in which the left-dislocation topic constructions are disallowed. Iatridou and Kroch (1992) argue that certain verbs do not allow for CP-recursion, for instance the verb *doubt*. As is shown in (20), the canonical sentence (19a) can be embedded under the verb *doubt*, while the topic construction in (19b) cannot.

- (20) a. Petr pochybuje, že ten snědý fešák Marii nezajímá. Peter doubts that that tanned pretty-man Mary.GEN not-interests 'Peter doubts that the tanned pretty man does not interest Mary.'
  - b. \*Petr pochybuje, že toho snědého fešáka, toho
    Peter doubts that that tanned pretty-man.ACC that.M.ACC
    Marii nerada.
    Mary.NOM not-like
    'Peter doubts that the tanned pretty man, Mary does not like him.'

If specificational clauses behaved like topic constructions, we would have expected specificational clauses to be disallowed under the verb *doubt* analogously to (20b). This is not the case though as the example in (21b) shows. Both, the NOM-INSTR copular clauses and the INSTR-NOM specificational clauses, can be embedded under *doubt*.

- (21) a. Petr pochybuje, že Marie je ředitelkou toho podniku. Peter doubts that Mary is manager.INSTR of-that company 'Peter doubts that Mary is the manager of the company.'
  - b. Petr pochybuje, že ředitelkou toho podniku je Marie. Peter doubts that manager.INSTR of-that company is Mary 'Peter doubts that the manager of the company is Mary.'

Another potential landing site for NP<sub>2</sub> I exclude is a T'-level. I argue that specificational

clauses are derived via scrambling of an NP<sub>2</sub>. Scrambling has been argued to involve Abar movement (Mahajan, 1990; Sternefeld and Müller, 1994). In this section, I follow Kučerová (2007) in arguing that Czech scrambling is not an A-bar movement, instead, it will be shown that specificational clauses invole A-movement of NP<sub>2</sub> to the Spec, TP. The evidence comes from binding principle C which is defined in (22).

### (22) **Binding Principle C:**

An R expression must be free (not be bound).

The following argument and the test are closely modelled after Kučerová (2007). It has been argued that A-bar moved phrases reconstruct at LF while A-moved phrases do not reconstruct (Mahajan, 1990). If an NP reconstructs, i.e. it is interpreted in its base-generated position, no binding differences are expected between a base-generated structure and a structure derived via A-bar movement. In contrast, phrases that A-move do not reconstruct, and consequently, A-movement should lead to changes in binding relations between a base-generated structure and a structure derived via A-movement.

Kučerová (2007) offers the minimal pairs in (23). The example in (23a) with the suggested co-indexation of *he* and *Peter* violates Binding Principle C. Kučerová (2007) argues that in (23b) the NP *Peter's friends* A-moved to Spec, TP, and consequently, (23b) saves the Binding Principle C violation. The sentence in (23b) is grammatical when *Peter* and *he* are co-indexed.

- (23) a. \*Marie a  $on_i$  viděli Petrovy<sub>i</sub> přátele. Marie.NOM and he saw Petr's friends.ACC '\*Marie and he<sub>i</sub> saw Petr's<sub>i</sub> friends.'
  - b. Petrovy<sub>*i*</sub> přátele viděla Marie a  $on_i$ . Petr's friends.ACC saw Marie.NOM and he

'\*Marie and he<sub>i</sub> saw Petr's<sub>i</sub> friends.'

[Kučerová (2007)]

I argue that the same relation holds between a predicational and a specificational copular clause. Namely, if NP<sub>1</sub> in a predicational copular clause contains a pronoun he, this pronoun cannot be co-indexed with the proper name *Peter* in NP<sub>2</sub>. However, if (24) is dervied as a specificational clause, as in (24b), the co-indexation of *Peter* and *he* becomes possible.

- (24) a. \*Marie a on<sub>i</sub> byli Petrovými<sub>i</sub> nejlepšími přáteli. Mary and he were Peter's best friends-INSTR '\*Mary and he<sub>i</sub> were Peter's<sub>i</sub> best friends.'
  - b. Petrovými<sub>i</sub> nejlepšími přáteli byli Marie a on<sub>i</sub>. Peter's best friends.INSTR were Mary and he 'Peter's<sub>i</sub> best friends were Mary and him<sub>i</sub>.'

Following Kučerová (2007), and given the data in (24), I assume that the derivation of a specificational clause involves A-movement to the Spec, TP. Note, however, that (24) could be explained if we assumed that specificational clauses and predicational clauses were base-generated as they are (Romero, 2005; Heller, 2005). In section 4.5, I provide evidence against this view. Namely, it will be shown that in complex copular constructions with multiple verbal heads, only the predicational word order is allowed. I argue that such pattern would be unexpected under the 'as is' account.

# **4.4.2** Topic restriction in Czech specificational clauses

In the previous section we have established that NP<sub>2</sub> in specificational clauses moves to the

Spec, TP. The question is why does the  $NP_2$  move?<sup>8</sup>

<sup>&</sup>lt;sup>8</sup>In this section I answer this question only partly. More precisely, I explain why one of the NPs in a copular clause has to move to the TP domain, however, I do not address the question of why it is  $NP_2$  in specificational copular clauses. This question is going to be addressed in Chapter 7 where I argue that the movement of  $NP_2$  is possible iff  $NP_2$  is given and an aboutness topic.

Before I turn into this question, let me first address a more simple question: Why does the NOM NP<sub>1</sub> 'Veronika' move to Spec, TP in a copular clause like (25)?

(25) Veronika byla detektivem. Veronica.F. NOM been.F.SG detective.M. INSTR 'Veronica was the/a detective.'

One reason that suggests itself is that an NP must move to Spec, TP to satisfy EPP (Chomsky, 2000). In this section, I show that this cannot be the case in Czech. More precisely, I follow Kučerová (2012)'s version of EPP for Czech, called the T-Extension Condition (henceforth, TEC), and I show that TEC in Czech copular clauses is satisfied by something else, namely, by a head-movement of the Pred head. Crucially, it will also be shown that in vast majority of copular clauses, the word order the copula-NP<sub>1</sub>-NP<sub>2</sub> is not allowed. I argue that Czech copular clauses have a specific restriction such that they must have a topic (cf. Basilico (2003)). I argue that the topic phrase is in most cases restricted to surface in the Spec, TP position in Czech. Evidence supporting this view comes from the fact that the restriction on Spec, TP to be occupied by a topical phrase goes away if a weak topical pronoun appears in the middle-field. Moreover, it will be shown that the same restriction holds in analytical passive constructions in Czech.

According to Chomsky (2000)'s version of EPP, certain functional heads must have specifiers. The functional head that is widely believed to pose such requirement is T. Therefore, it follows that in many languages, the Spec, TP must be filled by a phrase. However, Kučerová (2012) argues that EPP in Czech could be satisfied not only by phrases in Spec, TP, but also by heads merged to T. Kučerová (2012) argues for a less restrictive version of EPP, the so-called T-Extension Condition (henceforth, TEC), whose definition is shown in (26).

### (26) **The T-Extension Condition (TEC)**:

If Merge  $(T, \alpha)$  applies, Merge  $(T', \beta)$  must be the next step of the derivation, where (i) T' is a projection of T, and (ii) belongs to the same phase as T. [Kučerová (2012):3]

Notice that Kučerová (2012)' TEC is satisfied by any phrase or a head  $\beta$  that gets merged in the TP domain as long as the phrase or a head  $\beta$  belongs to the same phase as T. I argue that TEC in Czech copular clauses is not satisfied by an NP in the Spec, TP but it is satisfied by the Pred head which moves to T.

I argue that in Czech copular clauses, the past participle 'byla' which is in the Pred head moves to T. I follow Veselovská (1995), Veselovská and Karlík (2004), Veselovská (2004), Kučerová (2012) in that we can identify the syntactic position of a Czech verb with respect to a position of a low VP-adverbial like *often* 'často'. Concretely, in the copular clause environment, I assume that there are two options: (i) if 'často' precedes the past participle, the past participle stayed in its base generated Pred head position, or (ii) if 'často' follows the past participle, the past participle must be in a higher syntactic position than the Pred head. The example in (27) shows that the latter is the case.

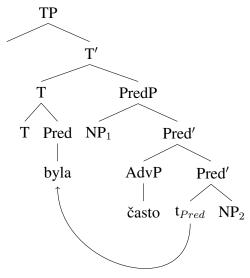
# (27) a. ??Petr <u>často</u> byl třídním učitelem. Peter <u>often</u> been class teacher.INSTR 'Peter was often the class teacher.'<sup>9</sup>

<sup>&</sup>lt;sup>9</sup>The reason why this order is just marginal (at least for some speakers) and not fully ungrammatical may have to do with the fact that the VP-adverbials like *often* can scramble depending on information-structure properties (Biskup, 2009), i.e. wherever the Czech *often* appears it is going to take scope above everything that is below it. It would be desirable to test this prediction, namely, that the word order in (27a) is only possible if *often* takes scope over the rest of the sentence. Unfortunately, it is difficult to construct such context as the meaning of the copula is too vague to display a clear cut between the two possible scopal readings.

b. Petr byl často třídním učitelem. Peter been often class teacher.INSTR 'Peter was often the class teacher.'

The structure with the lower adverbial 'často' I assume is schematized in (29).<sup>10</sup>

(29) The position of the low adverbial 'často'



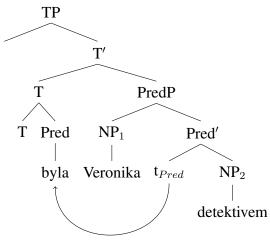
<sup>&</sup>lt;sup>10</sup>Note that the VP-adverbial may surface in two syntactic positions, i.e. lower than NP<sub>1</sub> in Pred' as in the structure presented here, or higher than NP<sub>1</sub> in PredP. Kahnemuyipour (PC) suggested that to find out which of the positions is occupied by 'často' one needs to look at the specificational word order. As you can see in (28) both word orders are available in Czech, i.e. with NP<sub>1</sub> before 'často' as in (28a), and with NP<sub>1</sub> after 'často' as in (28b).

(28)	a.	Třídním	učitelem	byl	Petr	často .
		class	teacher.INSTR	been	Peter	often
		'The clas	ss teacher was	often	Peter.	,
	b.	Třídním	učitelem	byl	často	Petr.
		class	teacher.INSTR	been	often	Peter
		'The clas	ss teacher was	often	Peter.'	,

The sentence in (28a), however, differs from the sentence in (28b) in interpretation. As was already mentioned in the previous footnote, this difference has to do with scope of 'často'. I do not commit to which of the two word orders have the default scopal interpretation. Instead, I assume that the position of 'často' is somewhere in PredP, and where exactly it is irrelevant for the current proposal. Namely, regardless of the exact position of 'často', Pred surfaces before it, and therefore Pred must have moved to T.

I argue that the position of 'často' in Czech copular clauses provides evidence that Pred obligatory moves to T, as is shown in (30). As was already mentioned, Kučerová (2012)'s TEC can be satisfied by a verbal head that moves to T. Therefore, I argue that in Czech copular clauses, TEC is satisfied by Pred-to-T movement.

(30) The copular clause structure after Pred-to-T movement



Interestingly, even though TEC is satisfied by Pred-to-T movement in Czech copular clauses, the word order Pred-NP<sub>1</sub>-NP<sub>2</sub> is not available in the majority of Czech copular clauses, as is shown in (31).<sup>11</sup>

(31) a. \*Byla Veronika detektivem. been.F.SG Veronica.F.NOM detective.M.INSTR 'Veronica was the/a detective.'

I argue that the reason why (31) is ungrammatical is that there is an additional requirement

<sup>&</sup>lt;sup>11</sup>However, note that the sentence in (31a) would be grammatical as a question. I assume that the past participle in question moves from T to C in order to derive a yes/no question. The acceptability of (31a) as a question is therefore expected. More precisely, the NP 'Veronica' is in the Spec, TP, while the past participle is above it, in C.

in copular clauses, namely, copular clauses must have topic.<sup>1213</sup> More precisely, I loosely follow Basilico (2003) in that all copular clauses must have a topic, and that the topic needs to have a syntactic representation.<sup>14</sup> As can be seen in (33), the sentence becomes grammatical if the past participle is preceded by an AdvP or a PP.

- (33) a. \*Byla Veronika detektivem. been.F.SG Veronica.F.NOM detective.M.INSTR 'Veronica was the/a detective.'
  - b. Včera byla Veronika detektivem. yesterday been.F.SG Veronica.F.NOM detective.M.INSTR 'Yesterday, Veronica was the/a detective.'
  - c. V divadelní hře byla Veronika detektivem. in theatre play been.F.SG Veronica.F.NOM detective.M.INSTR 'In the play, Veronica was the/a detective.'

Notice that both, the AdvP, and the PP, refer to a temporally restricted event in (33). I follow Basilico (2003) in that a topic may represent an individual or an event. I argue that even if the phrase that precedes the past participle corresponds to a locative PP, the locative PP is interpreted as referring to an event that takes place in the location restricted by the PP. Consider the example in (34). The PP *at school* does not simply refer to the location,

(32) a. Byl detektivem. been.M.SG detective.M.INSTR 'He was the/a detective.'

<sup>14</sup>According to Basilico (2003), all clauses must have a topic. I refrain from making such a strong claim because I do not have enough evidence for that from constructions other than copular clauses.

<sup>&</sup>lt;sup>12</sup>In contrast, Czech transitive constructions may surface such that the linearly first element is a verb in embedding environments, see Kučerová (2012). Note that the fact that verb-initial constructions are available in embedded environments informed Kučerová (2007)'s TEC. Chomsky (2000)'s version of EPP would rule out structures in which the Spec, TP is not filled by a phrase.

<sup>&</sup>lt;sup>13</sup>There is another piece of evidence suggesting that there must be an additional requirement other than TEC which would explain why Spec, TP needs to be filled in Czech copular clauses. Namely, while according to Kučerová (2012), TEC cannot be satisfied by a phonologically covert material, such as *pro*, the additional requirement may be satisfied by the Czech *pro*, as is shown in (32).

instead, it refers to the events spatially restricted by the PP at school.

(34) Ve škole byla Veronika pilnou studentkou. at school been.F.SG Veronica.F.NOM diligent student.F.INSTR 'At school, Veronica is a diligent student.'

Purely spatial NPs cannot precede the participle in Czech copular clauses, as you can see in (35).<sup>15</sup>

- (35) a. Ten zákusek v lednici je dobrota. that dessert in fridge is tasty 'The dessert in the fridge is tasty.'
  - b. #V lednici je ten zákusek dobrota.
     in fringe is that dessert tasty
     Intended: 'The dessert in the fridge is tasty.'

To summarize, I argue that Spec, TP in Czech copular clauses must be filled by a topic phrase and that the topic phrase has to denote an individual or an event.

Evidence for this comes from copular clauses in which topic is realized elsewhere. More precisely, the prediction is that if a topic may be realized elsewhere in the sentence, the requirement on Spec, TP to be filled by another phrase should go away. I argue that this prediction is borne out in Czech identificational clauses. In other words, I argue that even though the word order the copula-NP<sub>1</sub>-NP<sub>2</sub> is not possible in most copular clauses in Czech, there is an exception, as the example in (36) shows.

(36) Byl to Petr. was TO Peter 'That was Peter.'

<sup>&</sup>lt;sup>15</sup>However, as Kahnemuyipour and Kučerová (PC) pointed out, the adverbial phrase in (35) is extracted from the DP while in (34), the adverbial phrase is an adjunct to the verbal phrase. Due to this fact the sentence in (34) and the sentence in (35b) are not a minimal pair.

The pronoun in Czech identificational clauses is a weak pronoun in the sense of Cardinaletti and Starke (1994). As Cardinaletti and Starke (1994) pointed out, weak pronouns must have antecedents prominent in the discourse. I argue that this characteristic is what makes weak pronouns maximally topical. In other words, I argue that what the weak pronoun in identificational clauses refers to is what the sentence is about, i.e. an aboutness topic in the sense of Reinhart (1981) and Endriss (2009). I follow Cardinaletti and Starke (1994) and Frey (2006) in that weak pronouns may surface in the "middle-field". Moreover, I follow Frey (2004) in that a "middle-field" position is a topic position. Therefore, (36) provides evidence that if a topic may be realized elsewhere in a copular clause, in the "middle-field", the Spec, TP may remain empty. In all the other cases, Spec, TP must be filled by a topic.

I argue that there is another type of Czech constructions that have the same topic requirement as Czech copular clauses do, namely, Czech analytical passives. Czech analytical passives have been argued to involve verb movement to T (Veselovská and Karlík, 2004). However, as you can see in (37), an analytical passive is ungrammatical if the verb is in the initial position, as is shown in (37b). Instead, the Spec, TP must be filled either by the subject NP *Peter* as in (37a), or by an AdvP as in (37c), or by *pro*, as in (37d). Finally, the Czech weak pronoun may also surface in the "middle-field" in Czech analytical passive constructions.

- (37) a. Petr byl pokárán. Peter was reprimanded 'Peter was reprimanded.'
  - b. \*Byl Petr pokárán.
     was Peter reprimanded
     Intended: 'Peter was reprimanded.'
  - c. Včera byl Petr pokárán. yesterday was Peter reprimanded.

'Peter was reprimanded yesterday.'

- d. Byl pokárán.
   was reprimanded
   'He was reprimanded.'
- e. Bylo to uvedeno na straně pět. was it mentioned on page five 'It was mentioned on page five.'

I therefore argue that analytical passives, as well as Czech copular clauses, must have a topic, and the topic must surface in Spec, TP, unless it is realized elsewhere in the sentence.

# **4.4.3** The movement of NP<sub>2</sub> past NP<sub>1</sub>

Now that we determined that  $NP_2$  in specificational copular clauses moves to Spec, TP in Czech copular clauses in order to satisfy the topic requirement we can turn into the question: How can  $NP_2$  move past  $NP_1$ ?

Syntactic movement is constrained by locality (Chomsky, 1995; Richards, 1997; Anagnostopoulou, 2003; Doggett, 2004). According to some conservative definitions of a locality constraint, the movement of NP<sub>2</sub> over NP<sub>1</sub> should not be possible. An example of such a constraint is Shortest Agree in Doggett (2004). Its definition is given in the example in (38).<sup>16</sup>

(38) a. Shortest Agree

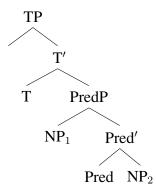
Agree between probe P and goal  $\alpha$  is prohibited if  $\beta$  is a potential goal for P and  $\beta$  is closer to P than  $\alpha$ .

b.  $\beta$  is closer to  $\tau$  than  $\alpha$  if  $\tau$  c-commands  $\beta$  and  $\beta$  c-commands  $\alpha$ .

<sup>&</sup>lt;sup>16</sup>Doggett (2004) follows Chomsky (2000) in that a movement of an NP to the Spec, TP can only take place once the NP agrees with T. According to Doggett (2004), a movement is therefore constrained by the same locality constraint as agreement between a probe and a goal.

According to Doggett (2004)'s locality constraint in (38), NP<sub>2</sub> should not be able to move over NP<sub>1</sub> because NP<sub>1</sub> c-commands NP<sub>2</sub>, as you can see in (39).

(39) NP<sub>2</sub> over NP<sub>1</sub>



Independently of inversion, Chomsky (1995) proposed a more liberal definition of locality constraint, the so-called closeness. Its definition is given in (40).

(40) Closeness: If  $\beta$  c-commands  $\alpha$ , and  $\tau$  is the target of the movement, then  $\beta$  is closer to  $\tau$  than  $\alpha$  unless  $\beta$  is in the same minimal domain as (i)  $\tau$  or (ii)  $\alpha$ .

If the movement of  $NP_2$  over  $NP_1$  is possible according to the definition in (40) depends on the definition of minimal domain. Chomsky (1995) argues that minimal domain is defined as in (41).

(41) The minimal domain of a head H is the set of terms immediately contained in projections of H.

According to (41), the phrase in the Spec, PredP and the complement of Pred belong to the same minimal domain because they are both immediately contained in projections of Pred. Therefore, NP<sub>2</sub> may move over NP<sub>1</sub> because NP<sub>1</sub> and NP<sub>2</sub> belong to the same minimal domain, or in other words, NP<sub>1</sub> and NP<sub>2</sub> are *equidistant*.

In his later work, however, Chomsky (2000), argues for an additional locality constraint, the Phase Impenetrability Condition, the definition of which is in (42).

(42) Phase Impenetrability Condition (PIC): In a phase  $\alpha$  with a head H, the domain of H is not accessible to operations outside  $\alpha$ , only H and its edge (=specifiers/adjuncts) are accessible to such operations.

Notice that PIC poses a problem for the derivation of a specificational clause if we assume following Dikken (2007) that PredP is a phase. Concretely, according to PIC,  $NP_2$  should not be accessible to operations outside of its own phase, instead, only  $NP_1$  should be able to move to Spec, TP because it is on the edge of a phase.

In order to account for the inversion in copular clauses, (Dikken, 2007) and Heycock (2012) argue that a phase may get extended via a head-movement. I follow (Dikken, 2007) and Heycock (2012) in that (43) holds.

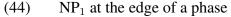
(43) The phase extension (cf. Dikken (2007), Heycock (2012)): if a head of a phase moves to a head of a higher projection, the phase gets extended to include the higher projection and the set of terms immediately contained in that projection.

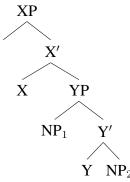
I follow Dikken (2007) and Heycock (2012) in arguing that in order for  $NP_2$  to be accessible to operations outside of PredP, Pred needs to move to a higher projection.

As was already mentioned, I argue that NP<sub>2</sub> movement is a type of scrambling. Independently of specificational clauses, Kučerová (2007) argues that an object NP may scramble to Spec, TP if and only if, the head which is the sister of the NP, moved to T.<sup>17</sup> Notice

<sup>&</sup>lt;sup>17</sup>Note that this generalization is in line with Holmberg's generalization as originally defined in Holmberg (1986). Holmberg's generalization states that Scandinavian Object-Shift may only appear after its verbal complement raises.

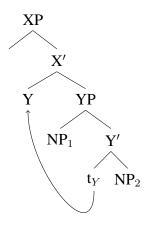
that this is in line with Dikken (2007) and Heycock (2012). I therefore follow Kučerová (2007)'s concrete proposal for scrambling and argue that Pred must move to T in order for  $NP_2$  to be able to move to Spec, TP in specificational clauses. More precisely, I argue that if  $NP_1$  and  $NP_2$  are base-generated in the same minimal domain, i.e. PredP, as in (44), if the domain is a phase, the derivation of a specificational clause is blocked. In such a configuration,  $NP_2$  is not accessible to operations outside of PredP. If a Pred head moves to T, however, the phase containing  $NP_1$  and  $NP_2$  gets extended,  $NP_1$  is no longer on the edge of a phase and  $NP_1$  and  $NP_2$  become equidistant.





Following Dikken (2007), Heycock (2012), and Kučerová (2012) I assume that if Y moves to X as in (45), the phase Y gets extended to include the higher projetion and the set of terms immediately contained in that projection. The phase Y gets extended to X and NP<sub>1</sub> is no longer on the edge of the phase. Consequently, NP<sub>1</sub> and NP<sub>2</sub> become equidistant.

(45) The minimal domain extension

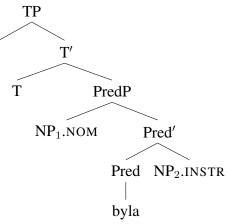


To summarize, the inversion analysis I argue for builds on these assumptions: (i) in the specificational NP<sub>2</sub>-NP<sub>1</sub> word order, NP<sub>2</sub> moves to the same position as NP<sub>1</sub> does in the linear NP<sub>1</sub>-NP<sub>2</sub> word order, i.e. Spec, TP; (ii) NP<sub>1</sub> and NP<sub>2</sub> are equidistant iff Pred, the sister of NP<sub>2</sub> moves to T.

Let me demonstrate how the analysis argued for so far accounts for simple copular clauses.

 $NP_1$  and  $NP_2$  are in the same minimal domain in the simple past tense copular clauses discussed so far as you can see in (46).

(46)  $NP_1$  and  $NP_2$  in the same minimal domain

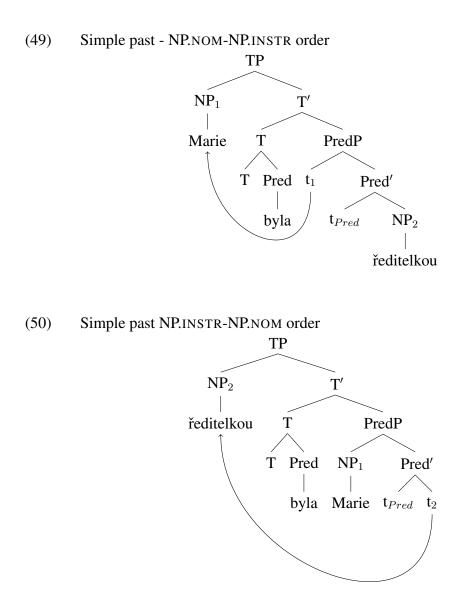


The NOM NP<sub>1</sub>, however, is on the edge of the phase PredP. The example in (47) shows that both word orders, i.e. NP<sub>1</sub>.NOM-NP<sub>2</sub>.INSTR and NP<sub>2</sub>.INSTR-NP<sub>1</sub>.NOM, are possible derivations of the base-generated word order in (46).

- (47) a. Marie Novotná byla ředitelkou.
   Mary Novotná. NOM been headmaster. INSTR 'Mary Novotná was a/the headmaster.'
  - b. Ředitelkou byla Marie Novotná. headmaster. INSTR been Mary Novotná. NOM 'The headmaster was Mary Novotná.'

As was already mentioned in the previous section, Pred obligatorily moves to T. This is schematized in (48).

Once Pred moves to T, we can derive both of the two linear word orders,  $NP_1.NOM$ -past participle- $NP_2.INSTR$  and  $NP_2.INSTR$ -past participle- $NP_1.NOM$ , as you can see in (49) and (50), respectively.



Notice also that the two movements, i.e. the Pred-to-T movement and the NP-to-Spec, TP movement, have to proceed in the order suggested above. Otherwise, only  $NP_1$  would be accessible to operations above PredP because it is on the edge of the phase. In order to show whether the inversion analysis is indeed suitable for Czech copular clauses, we need

to make predictions based on the general assumptions introduced in the previous section. One prediction the analysis makes is that we should not be able to move  $NP_2$  over  $NP_1$  if the sister of  $NP_2$ , i.e. Pred cannot move to T. In the next section I will show that this prediction is borne out in Czech. More precisely, I introduce more complex structures, namely, Czech conditionals, and I build up to a case in which Pred cannot move to T. Consequently,  $NP_2$  cannot move past  $NP_1$  and the  $NP_2$ - $NP_1$  linear word order is not possible in these constructions.

### 4.5 Inversion in Czech conditionals

In the previous section we have seen that if Pred, the sister of  $NP_2$  moves to T,  $NP_1$  or  $NP_2$  may move to Spec, TP. The central question of this section is: What happens if the head movement is blocked?

Following Kučerová (2007), Dikken (2007), and Heycock (2012) I argue that if the head movement is blocked, NP<sub>2</sub> movement should not be allowed. More precisely, following Kučerová (2007), I argue that if Pred does not move to T, NP<sub>2</sub> cannot move to Spec, TP.

In this section, I discuss a configuration in which Pred cannot move to T. It will be shown that in this particular configuration,  $NP_2$  cannot move to Spec, TP and the specificational INSTR-NOM word order is disallowed. The data pattern I discuss in this section comes from Czech bi-clausal conditionals.

In order to analyze bi-clausal conditional constructions, we need to understand the structure of simple conditionals. Let me first introduce some basic data and structural assumptions I make in order to account for Czech conditionals.

Simple conditionals consist of an antecedent and a consequent. The Czech antecedent begins with the complementizer 'kdyby', and the Czech consequent starts with a subject,

the order of the antecedent and the consequent may be switched, as you can see in (51).

- (51) a. Kdyby Petr neřval, Marie by spala. when+will+PAST Peter not-yelled Mary will+PAST slept 'If Peter didn't yell Mary would have slept.'
  - b. Marie by spala, kdyby Petr neřval. Mary will+PAST slept when+will+PAST Peter not-yelled 'Mary would have slept if Peter didn't yell.'

Notice that both, the antecedent and the consequent contain the conditional auxiliary 'by'. 'by' can be translated into English as *would*, or more precisely, as *will*+PAST. One instantiation of 'by' in (52) is after the subject and the other one is part of the complex complementizer 'kdyby' (Tomaszewicz, 2009). 'kdyby' is a compound of a complementizer 'kdy' (literally *when*) and the conditional auxiliary 'by'.

(52) Marie by spala, kdy by Petr neřval. Mary will+PAST slept when+will+PAST Peter not-yelled 'Mary would have slept if Peter didn't yell.'

Following Veselovská and Karlík (2004), Veselovská (2004), and Kučerová (2012) I argue that 'by' is base generated above the verbal projection. The example in (53) shows that 'by' cannot appear below negation, instead, it has to surface above it.

- (53) a. Marie by ne spala, kdyby Petr neřval. Mary will+PAST not slept when+will+PAST Peter not-yelled 'Mary wouldn't have slept if Peter didn't yell.
  - b. \*Marie ne by spala, kdyby Petr neřval. Mary not will+PAST slept when+will+PAST Peter not-yelled Intended: 'Mary wouldn't have slept if Peter didn't yell.

As was already mentioned in Chapter 3, NegP is structurally between T and VP (Veselovská,

2004), therefore, 'by' cannot be in the VP. I follow Kučerová (2007) in arguing that 'by' is base-generated in T. Antecedents or consequents of conditionals may contain copular clauses as you can see in (54).

- (54) a. Marie Novotná by byla ředitelkou, kdyby Mary Novotná.NOM will+PAST been headmaster.INSTR when+will+PAST nepodváděla u všech zkoušek. not-cheat by all exams 'Mary Novotná would have been the headmaster if she hadn't cheated on all the exams.'
  - b. Kdyby Marie Novotná byla ředitelkou, náš malý when+will+PAST Mary Novotná.NOM been headmaster.INSTR our little Pepíček by nemusel tolik trpět.
    Pepíček will+PAST not-have-to as-much suffer 'If Mary Novotná was the headmaster our little Pepíček wouldn't have to suffer as much.'

Importantly, the specificational NP<sub>2</sub>.INSTR-NP<sub>1</sub>.NOM word order is also possible in simple conditionals, as you can see in (55).

 (55) a. Ředitelkou by byla Marie Novotná, headmaster. INSTR will+PAST been Mary Novotná. NOM kdyby nepodváděla u všech zkoušek. when+will+PAST not-cheat by all exams
 'The headmaster would have been Mary Novotná if she hadn't cheated on all

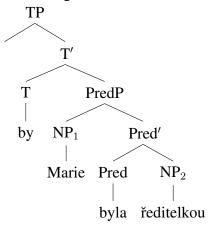
the exams.'

b. Kdyby ředitelkou byla Marie Novotná, náš malý when+will+PAST headmaster. INSTR been Mary Novotná. NOM our little Pepíček by nemusel tolik trpět. Pepíček will+PAST not-have-to as-much suffer 'If the headmaster was Mary Novotná our little Pepíček wouldn't have to

suffer as much.'

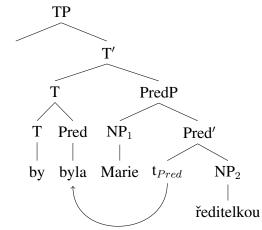
The fact that the NP<sub>2</sub>.INSTR-NP<sub>1</sub>.NOM word order is available in simple conditionals is in line with our analysis so far. In sentences like (55), NP<sub>1</sub> and NP<sub>2</sub> are base-generated in the PredP analogously to simple past tense copular clauses, as you can see in (56).

(56) Simple conditional - the base-generated order of NPs



Crucially, I argue that, as in other Czech copular clauses, Pred moves to T in simple conditionals.<sup>18</sup> This is schematized in (57).

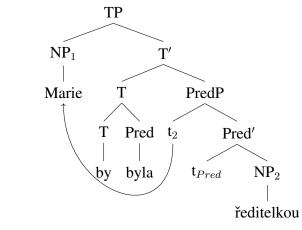
(57) Simple conditional - Pred to T movement



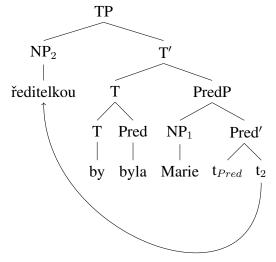
<sup>&</sup>lt;sup>18</sup>Unfortunately, it is difficult to find independent evidence to support this. The test I used in the previous section to show if Pred moves to T was the syntactic position of the low VP-adverbial 'často'. 'Často', however, sounds semantically odd in Czech conditionals. Consequently, it is not trivial to perform the test in conditionals.

 $NP_1$  and  $NP_2$  are now equidistant, and therefore,  $NP_1$  or  $NP_2$  may move to Spec, TP as you can see in (58) and (59).

(58) Simple conditional - NP.NOM-NP.INSTR order



(59) Simple conditional - NP.INSTR-NP.NOM order



#### **Bi-clausal conditionals**

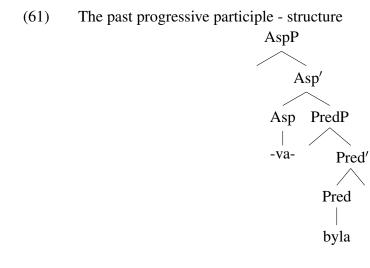
Czech also has a conditional construction in which either an antecedent or a consequent have a bi-clausal structure, as is shown in (60).

- (60) a. Kdyby Petr býval neřval, Marie by spala. when+will+PAST Peter will+PAST not-yelled Mary will+PAST slept 'If Peter didn't yell Mary would have slept.'
  - b. Marie by bývala spala, kdy by Petr neřval. Mary will+PAST will+PAST slept when+will+PAST Peter not-yelled 'Mary would have slept if Peter didn't yell.'

The antecedent in (60a) and the consequent in (60b) contain two verb forms, the past participle of *sleep* as in the mono-clausal conditional and the complex past progressive participle 'bývala'.

Before I discuss the relevant data concerning copular clauses, let me introduce some morpho-syntactic assumptions I make about participles. So far, I treated the past participle as a single lexical unit, however, as will be shown in this section, Czech participles are complex. The structures presented in this section are loosely modelled after Veselovská and Karlík (2004). The purpose of the presentation of the structures of participles is to demonstrate head-movement properties in copular clauses because they are relevant for my proposal. How exactly participles are morpho-syntactically formed is outside of the scope of this thesis.

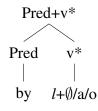
I follow Veselovská and Karlík (2004) in that the past progressive participle consists of a progressive suffix 'va' and a past participle. I also follow Veselovská and Karlík (2004) in assuming that the Czech progressive suffix '-va-' is a head of an aspectual projection separate from the past participle and that '-va-' expresses an Iteration feature (henceforth, ITER). I assume that '-va-' and the past participle 'byla' are base-generated as in (61).



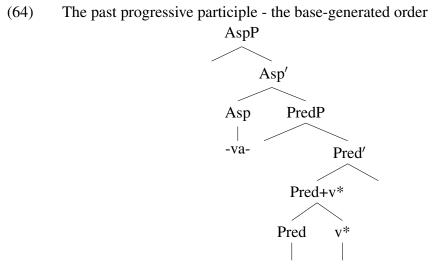
Until now, I treated the past participle 'byla' as a single lexical unit, however, 'byla' is morpho-syntactically complex. The past participle 'byla' belongs to a class of so called *l-participles* which were historically derived from *l-adjectives* (Migdalski, 2006). The example in (62) represents the morphological composition of the *l-participle* 'byla' I assume (modelled after Migdalski (2006):30).

Following Veselovská (2003) and Veselovská and Karlík (2004) I assume that 'byla' consists of two verbal heads, a participial verbal stem 'by' and another verbal head 'l'. I also assume that the endings ' $\emptyset/a/o$ ' following 'l' in *l-participles* express inflectional features (Veselovská and Karlík, 2004). I therefore assume that the past participle 'byla' is a verb with the structure in (63) (modelled loosely after Veselovská (2004)). Pred is the verbal lexical stem of the past participle and v\* is the other verbal head '1' with inflectional features.

(63) The past participle - structure

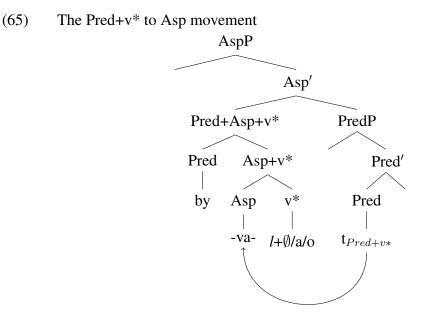


I therefore assume that the verbal projection in past progressive copular clauses is basegenerated as in (64).



by  $l+\emptyset/a/o$ 

I assume that the formation of the past participle is derived via a movement from Pred to Asp, where the whole  $Pred+v^*$  complex moves to Asp and gets linearized as  $Pred+Asp+v^*$ , as is schematized in (65). The progressive past participle is consequently also a verb derived from the past participle ( $Pred+v^*$ ) that carries an aspectual feature ITER.



Now that I made assumptions about the structures of participles and their head movement properties, let me turn into the bi-clausal conditionals. The antecedent and the consequent of bi-clausal conditional constructions may also contain a copular clause as you can see in (66).

- (66) a. Marie Novotná by bývala byla ředitelkou, Mary Novotná. NOM will+PAST been+ASP been headmaster. INSTR kdyby nepodváděla u všech zkoušek. when+will+PAST not-cheated by all exams 'Mary Novotná would have been the headmaster if she hadn't cheated on all the exams.'
  - b. Kdyby Marie Novotná bývala byla when+will+PAST Mary Novotná. NOM been+ASP been ředitelkou, náš malý Pepíček by nemusel tolik trpět. headmaster. INSTR our little Pepíček will+PAST not-have-to as-much suffer 'If Mary Novotná was the headmaster our little Pepíček wouldn't have to

suffer as much.'

Crucially, in the bi-clausal conditional sentences, the NP<sub>2</sub>.INSTR-NP<sub>1</sub>.NOM word order is disallowed, as you can see in (67).<sup>19,20</sup>

(67) a. ??Kdyby ředitelkou bývala byla Marie Novotná.NOM, when+will+PAST headmaster. INSTR been+ASP been Mary Novotná NOM náš malý Pepíček by nemusel tolik trpět. our little Pepíček will+PAST not-have-to as-much suffer Intended: 'If the headmaster was Mary Novotná our little Pepíček wouldn't

have to suffer as much.'

b. ??Ředitelkou by bývala byla Marie Novotná, headmaster. INSTR will+PAST been+ASP been Mary Novotná. NOM kdyby nepodváděla u všech zkoušek. when+will+PAST not-cheat by all exams Intended: 'The headmaster would have been Mary Novotná if she hadn't cheated on all the exams.'

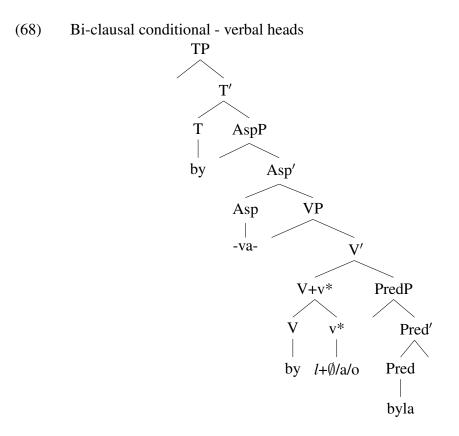
So far we have seen cases in which both word orders,  $NP_1.NOM-NP_2.INSTR$  and  $NP_2.INSTR-NP_1.NOM$  were available. Why is the  $NP_2.INSTR-NP_1.NOM$  word order disallowed in (67)? I argue that the inversion analysis accounts for the ungrammaticality of (67).

As was already mentioned, the past progressive participle consists of one head and one complex head, i.e. the aspectual head containing the suffix '-va-' and the complex verbal head 'byla'. The copular clauses in (66) contain an additional past participle 'byla'. I argue that the verbal projection in bi-clausal conditionals consists of one head and two complex heads, an Asp head '-va-', a complex V head 'byla', and a complex Pred head 'byla' as in

<sup>&</sup>lt;sup>19</sup>I am very grateful to my supervisor Ivona Kučerová who suggested to look at these constructions.

<sup>&</sup>lt;sup>20</sup>One might wonder why the examples in (67) are not marked as purely ungrammatical but as marginal (??). The reason for that is that the speakers I have consulted did not rate these examples as ungrammatical, however, in comparison with the examples in (66), they always rated them as worse. Importantly, I take the fact that there is a striking preference for (66) compared to (67), and that no such preference is observable in any of the previously discussed cases as evidence for a structural asymmetry between the word order in (66) compared to the word order in (67).

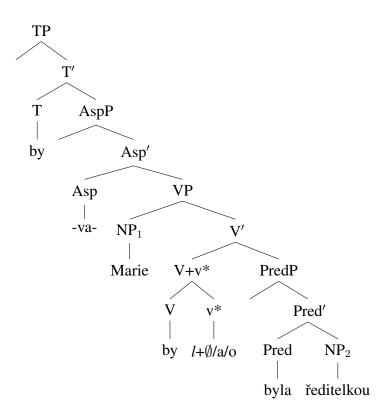
(68).21



I argue that even though  $NP_2$  is base-generated in the same position as in all the previous cases,  $NP_1$  is base-generated in Spec, VP. Following the assumptions made in section 4.4 of this chapter, I argue that  $NP_1$  is base-generated in the Spec of the highest projection internal to VP, i.e. in this case Spec, VP. This is schematized in (69).

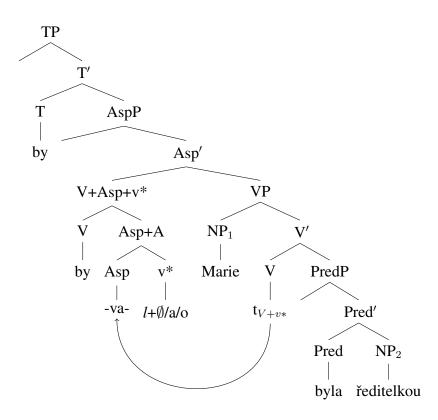
(69) Bi-clausal conditional - the base generated order of NPs

<sup>&</sup>lt;sup>21</sup>Note that unless it is important for the derivation of the word order, I simplify the complex Pred+v\* head 'byla' as *Pred*.



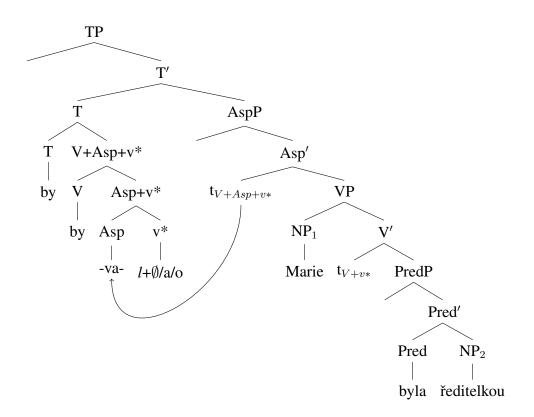
Crucially, I argue that the reason why (67) cannot be derived is that the sister of  $NP_2$ , i.e. the lower Pred head, is too far from T, and Pred cannot move to T. Consequently, Pred and  $NP_2$  are both locked in their syntactic positions, and  $NP_2$  cannot move to Spec, TP. Instead of the lower Pred head, it is the higher participle in V that moves to Asp, and then to T, as is shown in (70).

(70) V-to-Asp movement



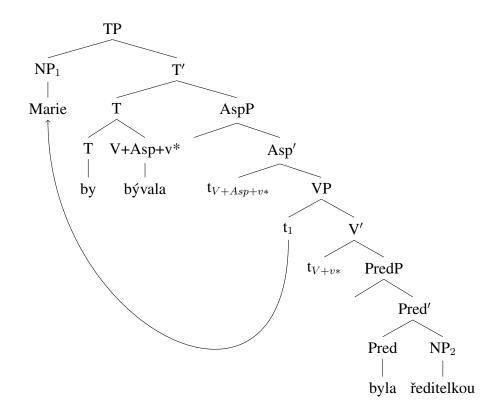
Analogously to other Czech copular clauses we have seen so far, I also assume that the complex V+Asp+v\* moves to T as in (71).

(71) V+Asp+A to T movement



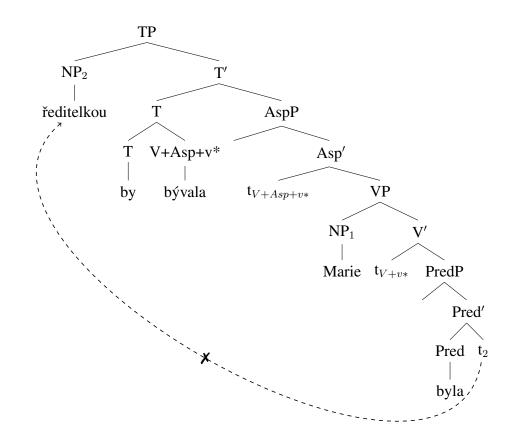
The only possible NP order that can be derived from (71) is the NP<sub>1</sub>.NOM-NP<sub>2</sub>.INSTR word order. Its derivation is schematized in (72).

(72) Bi-clausal conditional - NP.NOM-NP.INSTR order



The  $NP_2$ .INSTR- $NP_1$ .NOM word order is impossible as is indicated in the tree in (73).

(73) Bi-clausal conditional - \*NP.INSTR-NP.NOM order



In the footnote 10 of Chapter 3, I mentioned that specificational clauses may also be derived from equative clauses. If that is the case, one would expect that a specificational clause should not be derived from equatives either. As the examples in (74a) and (74b) show, this prediction is borne out. Namely, in bi-clausal conditionals, only the equative word order is allowed, as is shown in (74a), the specificational word order is not available, as the example in (74b) shows.

- (74)a. Petr by býval byl Hamletem, kdyby Petr.NOM will+PAST been+ASP been Hamlet.INSTR when+will+PAST tolik nepil. as-much not-drank 'Peter would have been Hamlet if he hadn't drank as much.' b. ??Hamletem býval byl Petr, kdyby by
  - Hamlet.INSTR will+PAST been+ASP been Petr.NOM when+will+PAST tolik nepil. as-much not-drank 'Hamlet would have been Petr if he hadn't drank as much.'

As was already mentioned, Czech copular clauses resemble Czech analytical passives in that they require Spec, TP to be filled by a topic phrase (unless the topic is realized elsewhere in the sentence). I argue that there are some other striking similarities between Czech copular clauses and Czech analytical passives. More precisely, the bi-clausal constructions as well as analytical passives discussed in this section contain two participles, as is shown in (75).

(75) a. Petr byl pokárán . Peter been reprimanded 'Peter was reprimanded.'

Czech analytical passives may have their agent argument realized as an INSTR NP following the lower participle *reprimanded*, as can be seen in (76).

(76) a. Petr byl pokárán učitelem. Peter been reprimanded by-teacher 'Peter was reprimanded by a teacher.'

According to Veselovská and Karlík (2004), the first argument, i.e. the NP 'Petr' is basegenerated in the Spec, vP. As was already mentioned, Czech is a scrambling language, in which object NPs are able to raise to the Spec TP (Kučerová, 2007). Crucially, as is shown in (77), the agent argument, i.e. the NP 'učitelem' in analytical passives cannot raise to Spec, TP.

I argue that the reason why (77) is not possible is the same as the reason why the specificational word order is not possible in bi-clausal conditionals. Namely, the lower participle is too far to be able to move to T, and consequently, the agent argument is unable to move to Spec, TP.

Let me elaborate on what I mean by 'Pred is too far' in formal terms. Namely, I argue that the reason why 'Pred is too far' has to do with phasehood. Dikken (2007) argues that an inherent phase is a predication, a subject-predicate structure. In simple copular clause where NP<sub>1</sub> and NP<sub>2</sub> are both base-generated in PredP, PredP is a phase. However, in bi-clausal conditional structures and Czech analytical passives, there are two participles, and consequently, (at least) two verbal projections. As was already mentioned, NP<sub>1</sub> in bi-clausal conditionals, as well as the first argument in analytical passives, are both basegenerated in the Spec of the highest verbal projection. I therefore argue, following Dikken (2007), that it is the whole VP in bi-clausal conditionals and the whole VP in passives that constitutes a phase. More precisely, PredP cannot be a phase in bi-clausal conditionals because it does not include a subject. Consequently, according to PIC (Chomsky, 2000), NP<sub>1</sub> and the participle in V are at the edge of the phase VP, and therefore the only items accessible to operations outside of VP.

To summarize, in this section I provided evidence that if the sister of NP<sub>2</sub>, i.e. Pred,

cannot move to T,  $NP_2$  cannot move to Spec, TP either. The relevant examples are repeated here as (78).

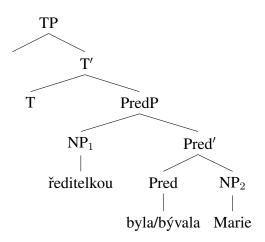
(78) a. ??Kdyby ředitelkou bývala byla Marie Novotná.NOM, when+will+PAST headmaster. INSTR been+ASP been Mary Novotná NOM náš malý Pepíček by nemusel tolik trpět. our little Pepíček will+PAST not-have-to as-much suffer Intended: 'If the headmaster was Mary Novotná our little Pepíček wouldn't have to suffer as much '

have to suffer as much.'

b. ??Ředitelkou by bývala byla Marie Novotná, headmaster. INSTR will+PAST been+ASP been Mary Novotná. NOM kdyby nepodváděla u všech zkoušek. when+will+PAST not-cheat by all exams Intended: 'The headmaster would have been Mary Novotná if she hadn't cheated on all the exams.'

Crucially, the data in (78) provide direct evidence against the 'as is' analysis. Note that the data discussed in the previous section and at the beginning of this section, i.e. the Czech simple past tense copular clauses and the simple mono-clausal conditionals, could have been accounted for by the 'as is' analysis as well. According to the 'as is' analysis, the linear word order corresponds to the hierarchical word order, i.e. in our case the INSTR NP would be NP<sub>1</sub> and the NOM NP would be NP<sub>2</sub>, as you can see in (79).

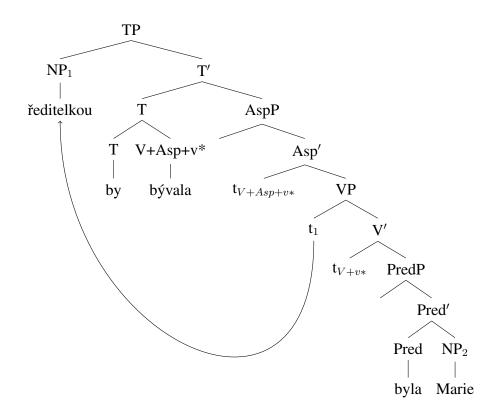
(79) The 'as is' analysis - the base-generated order



In the simple past and simple conditional sentences, the INSTR-NOM word order was possible. According to the 'as is' analysis, this word order would correspond to a separate sentence where the INSTR NP would be an NP<sub>1</sub>, and therefore, in all cases also the closest NP to move to Spec, TP.

However, the 'as is' analysis cannot account for the case in which the NOM-INSTR word order is allowed while the INSTR-NOM word order is not. More precisely, according to the 'as is' analysis the INSTR NP 'ředitelkou' would be an NP<sub>1</sub> in copular clauses like (78). However, if the INSTR NP was indeed an NP<sub>1</sub> we would not expect any locality constraint to prevent it from moving to the Spec, TP. Consequently, the 'as is' analysis would not be able to prevent the derivation of the impossible word order in (78), as you can see in (80).

(80) 'As is' analysis - Bi-clausal conditional - NP.INSTR-NP.NOM order



In this chapter, I argued for the inversion analysis of specificational clauses. There is another type of semantic clauses from Higgins (1973)'s taxonomy that has been argued to involve inversion by some scholars, namely, identificational clauses (Mikkelsen, 2004). In the following chapter, I argue that despite an initial resemblance of identificational clauses to specificational clauses, identificational clauses should not be analyzed via the inversion analysis. More precisely, even though the copula always agrees with the linearly second NP in both, specificational, and identificational clauses, I argue that in identificational clauses, this is not due to inversion but instead, it is due to  $\phi$ -feature deficiency of NP<sub>1</sub>.

## Chapter 5

# Copular agreement and a $\phi$ -feature deficient pronoun

In Chapter 3 I showed that in Czech identificational clauses the copula agrees with the linearly second NP. The relevant examples are repeated here as (1).

(1)	a.	To *bylo /byla Zuzana. it.N.SG been.N.SG been.F.SG Susana.F.SG	
		'That was Susana.'	IDENTIFICATIONAL
	b.	To *bylo /byl učitel. it.N.SG been.N.SG been.M.SG teacher.M.SG	
		'That was a teacher.'	IDENTIFICATIONAL

Copular agreement with the linearly second NP is characteristic of Czech specificational clauses. In Chapter 3, it was established that the copula agrees with the linearly first NP in predicational and equative copular clauses. I argued that specificational clauses are derived from the same base-generated structure predicational and equative clauses are derived

from.<sup>1</sup> Crucially, in Chapter 4 I argued for the inversion analysis of specificational clauses. It follows from the inversion analysis, that the copula agrees with  $NP_1$  in Czech specificational clauses. I therefore argue that all the copular agreement patterns discussed so far, i.e. predicational, equative, and specificational clauses, are described in the following generalization.

(2) Generalization - predicational, equative, and specificational clauses: The copula always agrees with NP<sub>1</sub> in Czech predicational, equative, and specificational clauses.

The question is: Why does the copula agree with the linearly second NP in identificational clauses? One possible explanation that offers itself is that identificational clauses should be treated as specificational clauses. More precisely, if the pronoun in Czech copular clauses cannot trigger agreement on the copula, it might seem straightforward to assume that the pronoun is NP<sub>2</sub>. This type of analysis has explicitly been argued for by Mikkelsen (2004) and suggested in Moltmann (2013). In this chapter I argue against this view. More precisely, I argue that despite its inability to trigger agreement, the pronoun in identificational copular clauses is NP<sub>1</sub>. I follow Bartošová and Kučerová (2014) in arguing that the reason why the Czech pronoun 'to' (henceforth, TO) cannot trigger agreement is that TO is a  $\phi$ -feature deficient pronoun. Furthermore, I argue that the copular agreement pattern one

<sup>&</sup>lt;sup>1</sup>In Chapter 3 I showed that specificational clauses may be derived from equatives as well. Moreover, in Chapter 4 I showed that the derivation of specificational clauses from predicational clauses and equatives is blocked, if the sister of  $NP_2$  is unable to move to T. Chapter 6 deals with predicational and equative copular clauses. It will be shown that they do differ but only with respect to the semantic type of  $NP_2$ . The data is therefore compatible with proposals arguing that the structure of predicational clauses and equatives do not substantially differ from each other. For the purposes of this discussion it is important that there is no difference between predicational clauses compared to equative clauses in the relative syntactic position of  $NP_1$  with respect to the relative syntactic position of  $NP_2$ . Namely, I assume that in both, predicational, and equative clauses,  $NP_1$  is base-generated structurally higher than  $NP_2$ .

might observe in Czech identificational copular clauses correlates with referential properties of TO. In order to account for this pattern, I present a concrete proposal argued for in Bartošová and Kučerová (2015) that accounts for copular agreement in Czech copular clauses with emphasis on identificational copular clauses.

### **5.1 TO is an NP**<sub>1</sub>

In this section, I argue contra Mikkelsen (2004) that the pronoun in identificational copular clauses is an NP<sub>1</sub>. I argue that in order to determine the syntactic position of the Czech TO, one needs to compare identificational clauses with specificational clauses. If identificational clauses syntactically correspond to specificational clauses, TO is an NP<sub>2</sub>. I argue that if identificational clauses and specificational clauses differ from each other, there is no reason to assume that TO is an NP<sub>2</sub>. In this section, I show five pieces of evidence that demonstrate that identificational copular clauses do not syntactically correspond to specificational clauses do not syntactically correspond to specificational clauses of the referential properties of TO as they will be the focus of the following section.

Firstly, in Chapter 3 it was shown that the linearly first NP in specificational clauses, i.e. the base-generated NP<sub>2</sub> may surface in INSTR, as can be seen in (3).

(3) Detektiv /detektivem byl Petr. detective.3SG.M.NOM /detective.3SG.M.INSTR was.3SG.M Peter.3SG.M.NOM 'The detective was Peter.' SPECIFICATIONAL

If TO was an  $NP_2$  in identificational clauses, we would expect that TO may also surface in INSTR. However, as the example in (4) shows, this is not the case.

(4) To /\*tím byl detektiv.
 TO.NOM /TO.INSTR was.3SG.M detective.3SG.M.NOM
 'He was a detective.' IDENTIFICATIONAL

Secondly, as was also already shown, the linearly second NP in specificational clauses, i.e. the base-generated NP<sub>1</sub> cannot surface in INSTR, as can be seen in (5).

(5) \*Detektiv byl Petrem. detective.3SG.M.NOM was.3SG.M Peter.3SG.M.INSTR

Intended: 'The detective was Peter.'

In contrast, the linearly second NP in identificational copular clauses may surface in INSTR, as is shown in (6).

(6) To bylo příčinou rozvodu.
 TO was.3SG.N cause.3SG.F.INSTR of-divorce
 'It was the reason for divorce.' IDENTIFICATIONAL

Thirdly, specificational clauses have been shown to always have a grammatical equivalent with the reversed order of NPs. As was already mentioned, that the grammatical may correspond to either a predicational or an equative copular clause. The example in (7) demonstrates a specificational clause and its predicational equivalent with the reversed order of NPs.

(7) a. Detektivem byl Petr. detective.3SG.M.INSTR was.3SG.M Peter.3SG.M.NOM 'The detective was Peter.' SPECIFICATIONAL
b. Petr byl detektivem. Peter.3SG.M.NOM was.3SG.M detective.3SG.M.INSTR

'Peter was a/the detective.'

PREDICATIONAL

In constrast, identificational do not have a grammatical equivalent with the reversed order of NPs, as is shown in (8).

(8)	a.	То	byl	detektiv.		
		TO.NOM was.3SG.M detective.3SG.M.NOM 'He was a detective.'				IDENTIFICATIONAL
	b. *Detektiv byl to. detective.3SG.M.NOM was.3SG.M TO.NOM Intended: 'He was a detective.'		<b>⊁</b> reversed IDENTIFICATIONAL			

Fourthly, in specificational clauses, the post-copular phrase can only be a noun phrase, adjective phrases and prepositional phrases are not allowed in this position, as is shown in (9).<sup>23</sup>

(9)	a.		
		singer.INSTR been.F.SG beautiful	
		Intended: 'The singer was beautiful.'	<b>✗</b> SPECIFICATIONAL
	b.	# Zpěvačkoubylanapódiu.singer.INSTRbeen.F.SG on-stage	
		Intended: 'The singer was on the stage.'	<b>✗</b> SPECIFICATIONAL

In constrast, in identificational clauses, the post-copular phrase may also be an adjective phrase or a prepositional phrase, as is shown in (10).

(10) a. To bylo krásné. TO been.N.SG beautiful

<sup>&</sup>lt;sup>2</sup>With the exception of specificational pseudoclefts, i.e. clauses containing a cleft instead of the linearly first NP in simple NP-NP specificational clauses which are not the focus of this thesis.

<sup>&</sup>lt;sup>3</sup>Note that I marked the example in (9b) as implausible. The reason for that is that the construction is not syntactically impossible, however, it has a meaning different from the intended one. Namely, the meaning of (9b) could be paraphrased as: *On stage, she was a singer*. in which the subject *she* is realized as pro in Czech and the NP *singer* is the predicate. The PP *on the stage* modifies the whole sentence *She was a singer*. and not just the NP *singer*.

'It was beautiful.'

IDENTIFICATIONAL

b. To bylo na pódiu. TO been.N.SG on-stage 'It was on the stage.'

IDENTIFICATIONAL

The last piece of evidence supporting the analysis of identificational clauses as a subtype of predicational rather than specificational comes from Czech wh-questions. While forming a wh-question in Czech that asks about NP<sub>2</sub>, the wh-word we use is in INSTR, and not in NOM, as is shown in the example (11). Importantly, this is regardless of the case of NP<sub>2</sub>, NP<sub>2</sub> may be in NOM, however, the wh-word is always preferred in INSTR.<sup>4</sup>

- (11) Petr je detektiv. Peter is detective 'Peter is a detective.'
  - a. Čím je Petr? what.INSTR is Peter 'What is Peter?'
  - b. ??Co je Petr? what.NOM is Peter Intended: 'What is Peter?'

PREDICATIONAL

Question about NP<sub>2</sub>

In contrast, if the wh-question asks about the structural subject, the wh-word must be in NOM, as is shown in (12).

(12) Petr je detektiv. Peter is detective 'Peter is a detective.'

PREDICATIONAL

<sup>&</sup>lt;sup>4</sup>Notice that referential NPs require a wh-word *who*, i.e. the proper name *Peter*, while non-referential NPs such as *detective* require the wh-word *what*. The distinction between wh-questions asking about referential NPs compared to non-referential NPs will be discussed in more detail in Chapter 6. For the purposes of the current discussion, it is only important that the wh-word which corresponds to NP<sub>2</sub> in Czech copular clauses is highly preferred in INSTR.

a. #Kým je detektiv? who.INSTR is detective Intended: 'Who is a detective?'

b. Kdo je detektiv? who.NOM is detective 'Who is a detective?'

Question about NP<sub>1</sub>

As the example in (13) shows, if the wh-question asks about the post-copular phrase in identificational clauses, the wh-word is in INSTR. Note that this is parallel to a wh-question asking about NP<sub>2</sub> in predicational clauses as in (11).

- (13) To je detektiv. TO is detective 'It is a detective.' IDENTIFICATIONAL
  a. Čím je ten muž? what.INSTR is that man 'What is that man?'
  b. ??Co je ten muž?
  - what.NOM is that man Intended: 'What is that man?'

Question about NP<sub>2</sub>

However, if the wh-question asks about TO in identificational clauses, the wh-word must be in NOM, as is shown in (14).

- (14) To je detektiv. TO is detective 'It is a detective.'
  - a. #Kým je detektiv?
     who.INSTR is detective
     Intended: 'Who is a detective?'
  - b. Kdo je detektiv? who.NOM is detective

IDENTIFICATIONAL

'Who is a detective?'

Question about TO

The distribution of wh-words in wh-questions therefore strongly suggests that TO is the structural subject in identificational clauses. More precisely, while wh-words in INSTR are asking about structural predicates, wh-words in NOM ask about structural subjects.

In this section I presented five pieces of evidence that shown that identificational clauses do not syntactically correspond to specificational clauses. Considering the fact that TO always linearly precedes  $NP_2$ , I argue that there is no reason to assume that TO is basegenerated as  $NP_2$ . Consequently, I argue that TO is an  $NP_1$  in identificational clauses.

# 5.2 Copular agreement in identificational clauses and the interpretation of TO

The organization of this section will proceed as follows. Firstly, I argue that TO is a weak,  $\phi$ -feature deficient pronoun. Secondly, I argue that there are essentially two ways a  $\phi$ -feature-agreement in identificational clauses might be accomplished. Namely, the copula either agrees with NP<sub>2</sub> if NP<sub>2</sub> is in NOM, or the copula receives default  $\phi$ -features. Thirdly, I show that the interpretation of TO is sensitive to whether the copula agrees with NP<sub>2</sub> or whether it receives default  $\phi$ -features.

### **5.2.1** TO is a $\phi$ -feature deficient pronoun

As was already mentioned, TO is a 3rd person neuter singular pronoun. TO may appear in two syntactic positions, either at the left periphery, as is shown in (15a), or in the middle-field, as is shown in (15b).

- (15) a. To byla Zuzana. TO been.F.SG Susana.F.SG 'That was Susana.'
  - b. Byla to Zuzana. been.F.SG TO Susana.F.SG 'That was Susana.'

I argue that regardless of its syntactic position, TO is a weak pronoun in the sense of Cardinaletti and Starke (1994). The evidence for that comes from two syntactic tests presented by Cardinaletti and Starke (1994), i.e. c-modification, and c-coordination. Firstly, while strong pronouns may undergo c-modification, i.e. they may be modified by an adverbial *only*, weak pronouns cannot be modified by *only*. Czech personal pronouns such as 'on' are strong pronouns, as is shown in (16), 'on' may be modified by *only*.

(16) Jenom on byl detektiv.Only he been detective 'Only he was a detective.'

In constrast, regardless of its syntactic position, TO cannot be modified by *only*, as is shown in (17).

- (17) a. \*Jenom to byl detektiv. only TO been detective Intended: 'Only it was a detective.'
  - \*Byl jenom to detektiv.
     been only TO detective
     Intended: 'Only it was a detective.'

Secondly, while strong pronouns may be coordinated with another NP, weak pronouns may not. The Czech personal pronoun 'on' may be coordinated with another pronoun or a proper name, as is shown in (18). (18) On a ona /Marie byli detektivové.he and she /Mary been detectives'He and she/Mary were detectives.'

In constrast, regardless of the syntactic position of TO, TO cannot be coordinated with another pronoun or a proper name, as can be seen in (19).

- (19) a. \*To a ona/Marie byli detektivové. TO and she /Mary been detectives Intended: 'It and she/Mary were detectives.'
  - \*Byli to a ona /Marie detektivové.
     been TO and she /Mary detectives
     Intended: 'It and she/Mary were detectives.'

Based on the data presented above, I argue that TO is a weak pronoun.<sup>5</sup> Moreover, I follow Bartošová and Kučerová (2014) and I argue that TO is also  $\phi$ -feature deficient. By  $\phi$ -feature deficient, I mean that TO carries no valued  $\phi$ -features. As a result of its  $\phi$ -feature deficiency, TO is unable to trigger agreement on the copula. Instead, as was already shown, the copula agrees with NP<sub>2</sub> if NP<sub>2</sub> is in NOM. The relevant examples are repeated here as (20).

- (20) a. Byla to Zuzana. been.F.SG TO Susana.F.SG 'That was Susana.'
  - b. Byl to učitel. been.M.SG TO teacher.M.SG

<sup>&</sup>lt;sup>5</sup>In Bartošová (2014), it was argued that the copular clauses where TO appears at the left periphery differs from the interpretation where TO appears in the middle-field. I follow Bartošová (2014) and I assume that the copular clauses with TO in the middle-field correspond to the default interpretation compared to the clauses where TO appears at the left periphery. However, I depart from Bartošová and Kučerová (2014) in that I no longer follow the analysis argued for there. Concretely, the copular clauses with TO at the left periphery have a more restricted interpretation than the copular clauses with TO in the middle-field. The exact interpretation difference between the two constructions is outside of the scope of the current discussion. However, henceforward, I use examples where TO appears in the middle-field because in most cases, the Czech identificational clauses with TO in the middle-field sound more natural.

'That was a teacher.'

However, as was already mentioned, if the post-copular phrase in the Czech identificational copular clause is an NP<sub>2</sub> in INSTR, an adjective phrase, or a prepositional phrase, the copula surfaces in neuter singular. The relevant examples are repeated here as (21).

- (21) a. Bylo to příčinou rozvodu. was.3SG.N TO cause.3SG.F.INSTR of-divorce 'It was the reason for divorce.'
  - b. Bylo to krásné. been.N.SG TO beautiful 'It was beautiful.'
  - c. To bylo na pódiu. been.N.SG TO on-stage 'It was on the stage.'

Do the examples in (21) reflect that TO may sometimes trigger agreement in identificational clauses? I argue that they do not for two reasons. Firstly, if TO was analyzed as sometimes being able to trigger argument, it would be impossible to explain why TO is unable to trigger agreement in copular clauses with NP<sub>2</sub> in NOM, as is shown in (22). More precisely, it will be argued in section 5.4, that TO, being an NP<sub>1</sub>, is the structurally closest NP for T. This configuration makes it the first goal for Agree. Consequently, if TO was able to trigger agreement on the copula, we would expect the copula to always agree with TO. The example in (22) shows that this is not the case.

- (22) a. \* Bylo to Zuzana. been.N.SG TO Susana.F.SG 'That was Susana.'
  - b. \* Bylo to učitel. been.N.SG TO teacher.M.SG

'That was a teacher.'

Secondly, it is known that neuter singular is a morphological default in Czech. (Panevová et al., 2015) For instance, in a copular clause where the linearly first phrase is an infinite VP, the copula receives default neuter singular  $\phi$ -features, as is shown in (23).

(23) Tančit na pohřbu bylo nepřístojné.
 dance on funeral was.3SG.N improper
 'It was improper to dance at a funeral.' [Panevová et al. (2015)]

I therefore follow Bartošová and Kučerová (2015) in arguing that, analogously to (23), if there is no phrase in the identificational copular clause, the copula may agree with, the copula receives default neuter singular  $\phi$ -features in Czech.

Crucially, it will be shown that the interpretation of TO in Czech identificational copular clauses correlates with the two different types of agreement (or non-agreement in the case where the copula receives default  $\phi$ -features). Namely, if the copula agrees with NP<sub>2</sub> in NOM, TO may refer to individuals or propositions. In contrast, if the copula receives default  $\phi$ -features, TO may only refer to propositions.

## **5.2.2** TO referring to individuals and propositions

In identificational copular clauses with NP<sub>2</sub> in NOM, TO may refer to individuals of any gender and number, or to propositions, as is shown in (24). More precisely, as is shown in (24), TO can either refer to the individual 'the young man' in (24a), the individual 'the elderly lady' in (24b), the individuals 'the young man and the elderly lady' in (24c), and the proposition 'that the young man and the elderly lady addressed me on the street yesterday' in (24d). TO can thus be translated into English as *he*, *she*, *they*, or *it*, respectively.

- (24) Včera mě na ulici oslovil mladý muž a postarší žena.
   yesterday me on street addressed young man.3SG.M and elderly lady.3SG.F
   'A young man and an elderly lady addressed me on the street yesterday.'
  - a. Byl to detektiv. was.3SG.M TO detective.3SG.M.NOM 'He (= the young man) was a detective.'
  - b. Byla to čarodějnice.
    was.3SG.F TO witch.3SG.F.NOM
    'She (= the elderly lady) was a witch.'
  - c. Byli to pojišť ováci.
     were.3PL.M TO insurance agents.3PL.M.NOM
     'They (= the young man and the elderly lady) were insurance agents.'
  - d. Byla to příčina mého pozdního příchodu do práce.
    was.3SG.F TO cause.3SG.F.NOM of-my late arrival to work
    'It (= that the young man and the elderly lady addressed me on the street

yesterday) was the reason for my late arrival at work.'

In the examples in (24a-c), TO refers to animate antecedents. As the example in (25) shows,

TO may also refer to inanimate antecedents. Namely, in (25a) and (25b), TO refers to the inanimate antecedent *present*.

- (25) Na stole ležel dárek.on table lied present'There was a present lying on the table.'
  - a. Byl to nový telefon. was.3SG.M TO new phone.3SG.M.NOM 'It (= the present) was a new phone.'
  - b. Byla to kniha. was.3SG.F TO book.3SG.F.NOM 'It (= the present) was a book.'

Strikingly,  $NP_2$  in the identificational clauses where TO refers to an individual cannot surface in INSTR. As is shown in (26) and (27), this restriction holds regardless of if the individual is animate or inanimate.

- (26) Včera mě na ulici oslovil mladý muž a postarší žena.
   yesterday me on street addressed young man.3SG.M and elderly lady.3SG.F
   'A young man and an elderly lady addressed me on the street yesterday.'
  - a. #Bylo to detektivem. was.3SG.N TO detective.3SG.M.INSTR Intended: 'He (= the young man) was a detective.'
  - b. #Bylo to čarodějnicí.
     was.3SG.N TO witch.3SG.F.INSTR
     Intended: 'She (= the elderly lady) was a witch.'
  - c. #Bylo to pojišť ováky.
     were.3SG.N TO insurance agents.3PL.M.INSTR
     Intended: 'They (= the young man and the elderly lady) were insurance agents.'
- (27) Na stole ležel dárek.on table lied present'There was a present lying on the table.'
  - a. #Bylo to novým telefonem. was.3SG.N TO new phone.3SG.M.INSTR 'It (= the present) was a new phone.'
  - b. #Bylo to knihou. was.3SG.N TO book.3SG.F.INSTR 'It (= the present) was a book.'

As is shown in (28), if TO refers to a proposition, NP<sub>2</sub> may surface in INSTR and the copula may receive default  $\phi$ -features.

(28) Bylo to příčinou mého pozdního příchodu do práce.
was.3SG.N TO cause.3SG.F.INSTR of-my late arrival to work
'It (= that the young man and the elderly lady addressed me on the street yesterday)
was the reason for my late arrival at work.'

Why is TO unable to refer to individuals in (26) and (27)? As was already mentioned, what

makes the identificational clauses in (24) and (25) different from the clauses in (26) and

(27) is not only the case of NP<sub>2</sub>. It is also the fact the copula agrees with NP<sub>2</sub> in NOM in

(24) and (25) while in (26) and (27) the copula has default  $\phi$ -features.<sup>6</sup>

In the remainder of this section, I argue that the generalization in (30) holds.

(30) Generalization - identificational clauses: If the copula in Czech identificational clauses agrees with NP<sub>2</sub>, TO may refer to an individual or a proposition, otherwise TO may only refer to a proposition.

The first piece of evidence supporting the generalization in (30) is that, as we have already

- (29) Na ulici plakalo dítě.on street cried child.N.SG'A child cried on the street.'
  - a. To bylo smutné.
    it was.N.SG sad
    'It (= the child) was sad.'
    b. #Bylo to smutné.
  - was it sad Intended: 'It (= the child) was sad.'

Bartošová and Kučerová (2014) argue that the Czech demonstrative TO referential to neuter singular individuals morpho-syntactically differs from the  $\phi$ -feature deficient TO which appears in identificational clauses. For the purposes of this chapter, I only discuss the  $\phi$ -feature deficient TO because I assume that the TO referential to neuter singular individuals behaves analogously to subject NPs with a full set of  $\phi$ -features. For more discussion and the morpho-syntactic analysis of the latter pronoun, the reader is referred to Bartošová and Kučerová (2014).

<sup>&</sup>lt;sup>6</sup>However, note that Czech also has a demonstrative pronoun TO which is referential to a neuter singular individual and has full set of  $\phi$ -features (Bartošová and Kučerová, 2014). This TO may not surface as a weak pronoun and triggers agreement on the copula, as is shown in (29).

seen, NPs in INSTR can predicate over individuals in NP-NP copular clauses. If it was the INSTR case in and of itself causing the implausibility of (26) and (27), we would not expect INSTR NPs to be able to predicate over individuals. However, the examples in (31) show that if the intended antecedents of TO in the examples in (26) surface in copular clauses as a full lexical NP<sub>1</sub> in NOM, NP<sub>2</sub> may be in INSTR and the sentences are plausible.

- (31) a. Ten mladý muž byl detektivem. that young man.3SG.M.NOM was.3SG.M detective.3SG.M.INSTR 'The young man was a detective.'
  - b. Ta postarší žena byla čarodějnicí. that elderly lady.3SG.F.NOM was.3SG.F witch.3SG.F.INSTR 'The elderly lady was a witch.'
  - c. Ten mladý muž a ta postarší žena byli that young man.3SG.M.NOM and that elderly lady.3SG.F.NOM were.3PL.M pojišť ováky. insurance agents.3PL.M.INSTR 'The young man and the elderly lady were insurance agents.'

Secondly, if the post-copular phrase is not an NP in Czech identificational copular clauses, the same restriction arises, namely, TO cannot refer to an individual. As is shown in (32), TO cannot refer to the individual *the manager of the store*, instead, TO must refer to the proposition *that I met the manager of our company for the first time yesterday* in (32a) and (32b).

- (32) Včera jsem poprvé potkala ředitele naší firmy. yesterday AUX first-time met manager.3SG.M of-our company 'I met the manager of our company for the first time yesterday.'
  - a. Bylo to milé.
    been.3SG.N TO nice.3SG.N
    'It (= that I met the manager of our company for the first time yesterday) was

nice.'

#'He (= the manager of our company) was nice.'

b. Bylo to v parku.
been.3SG.N TO in park
'It (= that I met the manager of our company for the first time yesterday) was in the park.'

#'He (= the manager of our company) was in the park.'

However, as can be seen in (33), both, the AP *nice*, and the PP *in the park* can predicate over the full lexical NP *the manager of our company* which is the intended antecedent of TO in (32).

(33)	a.	Ředitel	naší	firmy	byl	milý.
		manager.3SG.M 'The manager o				I nice.3SG.M

b. Ředitel naší firmy byl v parku. manager.3SG.M of-our company was.3SG.M in park 'The manager of our company was in the park.'

Based on the data discussed above, I argue that the post-copular phrases cannot be solely responsible for the fact that TO cannot refer to individuals unless the post-copular phrase is an NP in NOM. All the post-copular phrases discussed so far are able to predicate over individuals in NP-NP copular clauses. I argue that the locus of the restriction is the copular agreement. Namely, I argue that the Generalization in (30), repeated here as (36) holds.<sup>7</sup>

(34) \*Byl toto/ tamto detektiv.was this/ that detectiveIntended: 'This /that was a detective.'

However, the copula still agrees with the NP2 in identificational clauses with 'toto', and 'tamto', and their

<sup>&</sup>lt;sup>7</sup>Note that Czech also has 'compound' pronouns that may appear in identificational clauses, namely, 'toto' (*this*), and 'tamto' (*that*). The two pronouns cannot surface in the middle-field, as is shown in (34).

(36) Generalization - identificational clauses: If the copula in Czech identificational clauses agrees with NP<sub>2</sub>, TO may refer to an individual or a proposition, otherwise TO may only refer to a proposition.

Let me summarize what has been discussed so far. In copular clauses with TO, TO is structurally an NP<sub>1</sub>. However, TO does not trigger agreement on the copula because it is a  $\phi$ -feature deficient pronoun. Consequently, the copula agrees with NP<sub>2</sub> if NP<sub>2</sub> is in NOM. If NP<sub>2</sub> is not in NOM, the copula receives default  $\phi$ -features, which in Czech are neuter singular. In TO-NP<sub>2</sub>.NOM copular clauses, TO may refer to individual(s) or propositions, while in copular clauses consisting of TO and non-NOM post-copular phrases, TO may only refer to propositions. Therefore, we can conclude that if the copula agrees with NP<sub>2</sub> in copular clauses with TO, TO may refer to individuals, however, if the copula receives default  $\phi$ -features, TO cannot refer to individuals.

referential properties are parallel to the  $\phi$ -feature deficient TO discussed so far, as is shown in (35).

(35) a. Toto byla moje třídní učitelka. this was.F.SG my class teacher 'This was my class teacher.'
b. Tamto byl náš školník. that was our school-caretaker 'That was our school caretaker.'

I therefore assume that the two pronouns should be treated analogously to the  $\phi$ -feature deficient TO. However, more needs to be said about why 'toto' and 'tamto' cannot surface in the middle-field. I leave this question open for future research.

## **5.3** Towards the Analysis

## **5.3.1** The role of TO in the copular agreement

The question that needs to be addressed is: How do we model this depedency of the interpretation of TO on the copular agreement? The analysis I argue for in this chapter to account for (36) is entirely based on the analysis proposed in Bartošová and Kučerová (2015) with further supporting evidence discussed here. I argue that in order to account for the dependency, TO needs to participate in the copular agreement. How does TO participate in copular agreement? In this section, I argue that TO comes into the derivation with a PERSON feature. Furthermore, I argue that the value of the PERSON feature on TO determines the interpretation of TO. More precisely, it will be shown that there are three possible values corresponding to three possible interpretation. The first one is [+PERSON], and it will be argued that if TO is valued as [+PERSON], TO refers to an animate antecedent. The second one is [-PERSON] and if TO is valued as [-PERSON], TO may refer to an inanimate antecedent or a proposition. The last one is a default value corresponding to NO PERSON and it is a consequence of a Failed Agree in the sense of Preminger (2011). It will be argued that the default NO PERSON value translates into a default interpretation of TO. The default interpretation will be argued to be a proposition. It will also be argued that the PERSON feature, TO comes with into the derivation, is unvalued.

According to Béjar (2003), Richards (2008), among others, NPs have to carry a PERSON feature in order to appear in an argumental position and to receive Case. As was already shown, TO must be in NOM while the post-copular phrase might be an NP<sub>2</sub> in INSTR, an AP, or a PP. Therefore, following Bartošová and Kučerová (2015) I argue that even though  $\phi$ -feature deficient, TO has to carry a PERSON feature in order to appear in a Case marked  $NP_1$  position and to receive NOM. I also follow Longobardi (2008) in that argumental pronouns must have D and that D minimally consists of a PERSON feature. More precisely, following Bartošová and Kučerová (2015), I argue that TO consists solely of D with an unvalued PERSON feature.

### **5.3.2** How PERSON affects the interpretation of TO

The question is: What are the possible values of PERSON TO may have? In order to lay the assumptions on how PERSON relates to the interpretation of TO we need to look at a wider range of data. Concretely, I show that in Czech, it is necessary to distinguish between animate and inanimate NPs in the grammar. Following Bartošová and Kučerová (2015), I argue that the distinction should be modelled in the following way: (i) animate NPs carry a [+PERSON] feature, (ii) inanimate NPs carry a [-PERSON] feature.

In Bartošová and Kučerová (2015), an additional restriction was shown to hold in Czech identificational copular clauses. Namely, in past tense identificational clauses, where the copula agrees with NOM NP<sub>2</sub>, the GENDER of the antecedent of TO must match the GENDER of the NP<sub>2</sub>.

Let me discuss the relevant data in detail. Firstly, as was already mentioned, in NP-NP copular clauses, NP<sub>1</sub> and NP<sub>2</sub> do not have to match in GENDER. As is shown in (37a), NP<sub>1</sub> is feminine, while NP<sub>2</sub> is masculine. In (37b), NP<sub>1</sub> is masculine and NP<sub>2</sub> is feminine. Both sentences in (37) are grammatical.

- (37) a. Ta sympatická dívka byla vítěz závodu. that likeable girl.F.SG was.F.SG winner.M.SG of-race 'That likeable girl was the winner of the race.'
  - b. Ten sympatický mladík byl zdravotní sestra. that likeable man.M.SG was.M.SG health sister.F.SG

'That likeable man was a nurse.'

[the examples are from Bartošová and Kučerová (2015)]

Interestingly, as is shown in (38b), if NP<sub>1</sub> is TO and NP<sub>2</sub> is masculine, TO cannot refer to the feminine antecedent *likeable girl* salient in the previous context.<sup>8</sup> Instead, only (38a) where NP<sub>2</sub> is feminine, is a plausible continuation of (38).

(38)	Do cíle	e se	přiřítila	sympatická	dívka.
	to fin	ish-line REFL	rushed-in	likeable	girl.F.SG
	'A like	able girl rush	ed across	the finish lii	ne.'
		yla to zo as.F.SG TO h			
		She (= the like			,
		yl to v as.M.SG TO v		závodu. SG of-race	
					vas the winner of the race.'
	W	ould have be	en OK as:	'He was the	e winner of the race.'
	[t	he examples	are from E	Bartošová an	d Kučerová (2015)]

Similarly, as is shown in (39), if the salient antecedent of TO is a masculine individual, only (39a) with the masculine NP<sub>2</sub> is a plausible continuation of (39). In contrast, (39b) which was plausible as a continuation of (38) is implausible as a continuation of (39), because TO cannot refer to a masculine antecedent when NP<sub>2</sub> is feminine.

(39) Do cíle se přiřítil sympatický mladík.
 to finish-line REFL rushed-in likeable man.M.SG
 'A likeable man rushed across the finish line.'

<sup>&</sup>lt;sup>8</sup>In order to get the desirable interpretation in which TO would refer to *the likeable girl* one would have to use the less frequent feminine version of the Czech noun *winner* as NP<sub>2</sub>, namely, 'vítězka'. In that case, the copula would agree with the feminine *winner*, and consequently, TO would be able to refer to the feminine *the likeable girl*.

- a. Byl to vítěz závodu. was.M.SG TO winner.M.SG of-race 'He (= the likeable man) was the winner of the race.'
- b. #Byla to zdravotní sestra.
   was.F.SG TO health sister.F.SG
   intended: 'He (= the likeable man) was a nurse.'

would have been OK as: 'She was a nurse.'

[the examples are from Bartošová and Kučerová (2015)]

However, the GENDER-matching restriction is not attested in sentences where the antecedent of TO and NP<sub>2</sub> are inanimate, as can be seen in (40). TO may refer to an inanimate NP of any GENDER regardless of the GENDER of NP<sub>2</sub>. For instance, even if NP<sub>2</sub> is the masculine NP *flop* as in (40a), TO may refer to the masculine *novel*, the feminine *book*, and the neuter *pop-up book*.

(40)Anna napsala román /knížku /lepolero. Anna wrote novel.M /book.F /pop-up book.N 'Anna has written a novel/a book/a pop-up book.' a. Byl to propadák. was.M.SG TO flop.M 'It [=the novel/the book/the pop-up book] was a total flop.' Byla to slátanina. b. was.F.SG TO patchwork.F 'It [=the novel/the book/the pop-up book] was a patchwork.' to sci-fi. Bylo с. was.N.SG TO sci-fi.N 'It [=the novel/the book/the pop-up book] was a sci-fi.' [the examples are from Bartošová and Kučerová (2015)]

Based on the data in (38) and (39) compared to (40), Bartošová and Kučerová (2015) argue

that animacy of NPs must be represented in the grammar. More precisely, following Nevins (2007), among others, Bartošová and Kučerová (2015) argue that 3rd person animate NPs carry a [+PERSON] feature, while 3rd person inanimate NPs carry a [-PERSON] feature.<sup>9</sup> The question is: What PERSON value corresponds to a proposition? More precisely, what is the value of TO such that TO may only refer to a proposition?

As was already mentioned, TO cannot refer to an inanimate NP when the copula has default  $\phi$ -features. The relevant examples are repeated here as (41).

- (41) Na stole ležel dárek.on table lied present'There was a present lying on the table.'
  - a. #Bylo to novým telefonem. was.3SG.N TO new phone.3SG.M.INSTR 'It (= the present) was a new phone.'
  - b. #Bylo to knihou.
    was.3SG.N TO book.3SG.F.INSTR
    'It (= the present) was a book.'

According to Bartošová and Kučerová (2015), inanimate NPs are [-PERSON]. If a default PERSON value corresponded to [-PERSON], the pattern in (34) would remain unexplained. More precisely, if the default PERSON value was [-PERSON] we would not be able to prevent TO from referring to inanimate NPs in identificational clauses where the copula has default  $\phi$ -features. Instead, I argue that upon a failure to Agree, PERSON does not receive any value. More precisely, I follow Preminger (2011) in that Failed Agree does not result in ungrammaticality in some cases. According to Preminger (2011), one such case is when

<sup>&</sup>lt;sup>9</sup>Bartošová and Kučerová (2015) argue that the GENDER-matching restriction is modelled via GENDER presuppositions associated with [+PERSON] pronouns (cf. Sudo et al. (2012). The actual GENDER-matching restriction and its analysis are out of the scope of this chapter. An interested reader is refered to Bartošová and Kučerová (2015) and Kučerová and Bartošová (2015) where the analysis is discussed in detail.

agreement fails due to an absence of a goal which would carry the feature probed for. I argue that this is exactly what we see in identificational clauses in which the post-copular phrase is not a NOM NP<sub>2</sub>. It is implicit in Preminger (2011) that Failed Agree means no agree. I follow this implicit intuition and I argue that the PERSON feature which corresponds to the default PERSON is NO PERSON. I argue that the unambiguous proposition interpretation corresponds to this Failed Agree NO PERSON value. Consequently, I argue that the interpretation to a proposition is a default interpretation of a default NO PERSON valuation.

### 5.3.3 Unvalued PERSON

This brings us to the question: Is PERSON on TO valued or unvalued when it enters the derivation in identificational clauses? I argue that it follows from the analysis so far, that the PERSON on TO must be unvalued. If PERSON on TO was valued from the lexicon, we would not be able to account for the distributional facts discussed so far. Namely, if TO could enter the derivation with any value of PERSON, we would expect TO to be able to refer to an animate or inanimate individual, or to a proposition, regardless of its syntactic environment. However, this is not what we have seen so far.

Before I turn into the discussion of assumptions I make about the structure of TO, let me briefly discuss one issue the presented analysis entails. Namely, as was already mentioned, TO may refer to a proposition even in copular clauses where the copula agrees with NP<sub>2</sub> in NOM. The relevant example is repeated here as (42).

(42) Byla to příčina mého pozdního příchodu do práce.
 was.3SG.F TO cause.3SG.F.NOM of-my late arrival to work
 'It (= that the young man and the elderly lady addressed me on the street yesterday)

was the reason for my late arrival at work.'

In the next section, I argue that an activity condition for Agree is PERSON. More precisely, the copula may only Agree with an NP if the NP carries a PERSON feature. As is shown in (35), the NP<sub>2</sub> in NOM, i.e. the feminine NP *cause*, triggers agreement on the copula. It is therefore unexpected that TO might refer to a proposition even in copular clauses where the copula agrees with  $NP_2$  in NOM. The proposal discussed so far predicts that TO may refer to a proposition if it receives the default NO PERSON value as a consequence of Failed Agree. If only default NO PERSON value was responsible for a proposition interpretation of TO, we would not expect TO to refer to propositions when the copula agrees with  $NP_2$ . In order to account for cases like (42), I argue that TO may refer to a proposition if TO gets valued as [-PERSON]. More precisely, I assume that if a proposition is more salient antecedent in the discourse, TO valued as [-PERSON] refers to a proposition. Suggestive evidence for this view comes from sentences where even the NP such as *cause* may refer to an inanimate antecedent if the discourse is restricted in such a way. Consider the example in (43), I argue that the context does not make the proposition that there was a candle on the table a salient antecedent of TO in (43a). If TO referred to the proposition that there was a candle on the table in (43), (43a) would have an unlikely meaning corresponding to: The cause of the fire was that there was a candle on the table. In other words, a candle being on the table is in and of itself not a likely cause of a fire. Instead, in (43a), the inanimate NP the candle itself is an antecedent of TO.

(43) Na stole byla svíčka.on table been candle'There was a candle on the table.'

a. Byla to příčina požáru. was.3SG.F TO cause.3SG.F.NOM of-fire 'It (= the candle) was the cause of fire.'

However, as expected, TO may not refer to the inanimate NP *the candle* when the NP *the cause* surfaces in INSTR. As is shown in (44), the identificational clause with NP<sub>2</sub> in INSTR is implausible in the context of (43).<sup>10</sup>

- (44) Na stole byla svíčka.on table been candle'There was a candle on the table.'
  - a. #Bylo to příčinou požáru. was.3SG.N TO cause.3SG.F.INSTR of-fire Intended: 'It (= the candle) was the cause of fire.'

I therefore assume that if TO gets valued as [-PERSON], TO may refer to a proposition if the proposition is more salient than an inanimate NP. How exactly discourse saliency affects what TO refers to is outside of the scope of the current thesis. I leave this question open for future research.

## 5.3.4 The Structure of TO

One prominent proposal regarding the structure of pronouns is that of Elbourne (2005). Elbourne (2005) argues for a unified analysis of pronouns, where a pronoun is realized as a DP with an elided NP corresponding to the pronoun's linguistic antecedent. Elbourne (2005) argues that syntactically, the NP is realized as a sister of D in the structure of a

<sup>&</sup>lt;sup>10</sup>However, there seems to be disagreement in the judgment of the example (43a). While Ivona Kučerová (PC) disagrees with the judgment I present here, Ludmila Veselovská agrees with the judgment. I used this example to illustrate that while in (43), the interpretation where TO refers to an inanimate NP is not fully impossible while the same interpretation is unavailable in the example in (44). There might be interesting individual differences that should be addressed in future research.

pronoun, and gets deleted in PF. Elbourne (2005) assumes that the D-layer in the pronoun corresponds to a definite article and unvalued  $\phi$ -features. The unvalued  $\phi$ -features on D get valued from the elided NP. Consider the example in (45).

(45) A man called Mary. He was sad.

The pronoun *he* in Elbourne (2005)'s system corresponds to a DP, where D is the definite article that carries unvalued  $\phi$ -features, presumably PERSON, GENDER, and NUMBER. The unvalued  $\phi$ -features get valued from the NP which corresponds to the linguistic antecedent of the pronoun, i.e. *a man*. In the system proposed here, the PERSON gets valued as [+PERSON], GENDER gets valued as masculine, NUMBER gets valued as singular in (38). Consequently, the pronoun is realized as *he*.

I argue that the analysis of pronouns proposed in Elbourne (2005) is insufficient for the Czech TO. Concretely because of the PERSON feature on TO was valued from a linguistic antecedent of TO, no restriction on the syntactic environment of TO would be expected in copular clauses. For instance, nothing would prevent TO with a linguistic antecedent that refers to an animate individual, i.e. valued as [+PERSON] by its linguistic antecedent, to appear in any type of identificational clause. However, as the data discussed in this chapter show, TO valued as [+PERSON] cannot appear in copular clauses in which the post-copular phrase is not an NP<sub>1</sub> in NOM. The relevant examples are repeated here as (46).

- (46) Včera mě na ulici oslovil mladý muž a postarší žena.
   yesterday me on street addressed young man.3SG.M and elderly lady.3SG.F
   'A young man and an elderly lady addressed me on the street yesterday.'
  - a. #Bylo to detektivem. was.3SG.N TO detective.3SG.M.INSTR Intended: 'He (= the young man) was a detective.'

- b. #Bylo to čarodějnicí.
   was.3SG.N TO witch.3SG.F.INSTR Intended: 'She (= the elderly lady) was a witch.'
- c. #Bylo to pojišť ováky.
   were.3SG.N TO insurance agents.3PL.M.INSTR
   Intended: 'They (= the young man and the elderly lady) were insurance agents.'

More precisely, it was shown that the generalization in (30), repeated here as (47), holds.

(47) Generalization - identificational clauses: If the copula in Czech identificational clauses agrees with NP<sub>2</sub>, TO may refer to an individual or a proposition, otherwise TO may only refer to a proposition.

In order to account for the fact that the interpretation of TO is dependent on the copular agreement, I follow Kučerová and Bartošová (2015) in arguing that TO consists solely of a D layer. More precisely, Kučerová and Bartošová (2015) argue that there is no elided sister NP in the representation of TO.

Independently of identificational copular clauses, Kratzer (2009) argues that some pronouns get their  $\phi$ -features valued in the syntactic structure in which they appear. More precisely, Kratzer (2009) argues that some pronouns (fake indexicals, reflexives, etc.) function as *minimal pronouns* in that they enter the derivation carrying only an index. The pronouns receive features via feature transmission from a verbal head that carries  $\lambda$  which binds them. Kratzer (2009) argues that the generalization in (48) holds.

(48) **Feature Transmission under Binding**: The  $\phi$ -feature set of a bound DP unifies with the  $\phi$ -feature set of the verbal functional head that hosts its binder. [Kratzer (2009)]

I follow Kratzer (2009) and I argue that TO is a *minimal pronoun* which comes into the derivation with a bare index. In the analysis presented here, the bare index corresponds to the unvalued PERSON feature. I also follow Elbourne (2005) in that the unvalued PERSON feature is on D. Concretely, I follow Kučerová and Bartošová (2015) in arguing that TO is structurally only the D-layer carrying an unvalued PERSON feature.

The proposal is also compatible with Longobardi (2008) who argues that reference to individuals in pronouns is achieved via the PERSON feature on D. Namely, I argue that if the PERSON feature on D fails to be valued, the pronoun cannot refer to individuals. If TO gets valued in an identificational clause with NP<sub>2</sub> in NOM, TO may refer to individuals. If TO gets valued as [+PERSON], TO may refer to animate individuals. If TO gets valued as [-PERSON], to may refer to inanimate individuals or propositions (depending on which interpretation is more salient). If TO is not valued at all and receives a default NO PERSON valuation as a result of Failed Agree, TO may only refer to propositions.

# 5.4 Single Agree, Multiple-Agree, and Single "Agree"

In this section, I present the analysis from Bartošová and Kučerová (2015) and I argue that the analysis accounts for the data discussed in this chapter. In order to account for the copular agreement patterns discussed above, the analysis builds on the following syntactic assumptions: (i) an Agree analysis of  $\phi$ -feature agreement from Chomsky (2000), (ii) the activation feature for Agree is PERSON, (iii) matching and valuation are separate processes Béjar (2003), and (iv) Failed Agree may result in a default  $\phi$ -feature valuation Preminger (2011).

Following Kučerová and Bartošová (2015) I argue that the locus of  $\phi$ -feature agreement in Czech copular clauses is T. As was already mentioned, the Czech copula agrees with a NOM NP in PERSON, NUMBER, and the past participle also agrees in GENDER. Following Bartošová and Kučerová (2015) I argue that whatever features the copula morphosyntactically agrees with are the features T probes for, i.e. PERSON, NUMBER, and GENDER in Czech copular clauses. More precisely, I follow Adger (2003) and Kučerová and Bartošová (2015), in that T agrees with the functional verbal heads it c-selects for, i.e. Pred in all simple copular clauses.

Let us start with the assumption that every NP in NOM may in principle value unvalued  $\phi$ -features on T. We will see that this will not make the correct predictions. As was already mentioned, in Czech copular clauses consisting of two lexical NPs in NOM, the copula strictly agrees with NP<sub>1</sub>, i.e. the NP which cannot surface in Instrumental. The copula can never agree with NP<sub>2</sub> even if NP<sub>2</sub> surfaces in NOM. The relevant example is repeated here as (49).

The example in (49) suggests that it is always NP<sub>1</sub> which is going to be probed for by T to get its  $\phi$ -features valued. Note that there is a discrepancy in the analysis argued for so far. Namely, in Chapter 4 I argued that in most cases NP<sub>1</sub> and NP<sub>2</sub> become equidistant in Czech copular clauses, therefore, T should be able to Agree with NP<sub>1</sub>, as well NP<sub>2</sub>. If NP<sub>1</sub> and NP<sub>2</sub> are equidistant, NP<sub>1</sub> cannot be structurally closer. In order to resolve this issue, I stipulate that the following order of operations takes place: (i) T first Agrees with the verbal functional heads, i.e. Pred, and inherits their unvalued  $\phi$ -features (ii) T probes NP<sub>1</sub> and gets its  $\phi$ -features valued, (iii) Pred moves to T and extends the minimal domain. One piece of suggestive evidence that might support this dissociation between Agree and Move

comes from the bi-clausal conditional structures discussed in Chapter 4. Consider again the example in (50). As is shown in (50), the low past participle cannot agree with NP<sub>2</sub>, instead, it always Agrees in  $\phi$ -features with T, while T agrees with NP<sub>1</sub>. However, as was established in Chapter 4, the low past participle cannot move to T.

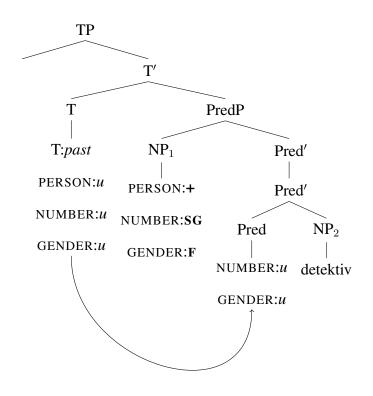
(50) Marie Novotná by bývala byla / \*byl Mary Novotná.NOM will+PAST.F been+ASP.F been.F / been.M detektiv, kdyby nepodváděla u všech zkoušek. detective.M.NOM when+will+PAST not-cheated by all exams 'Mary Novotná would have been the headmaster if she hadn't cheated on all the exams.'

I suspect that the contrast we see in (50) follows from the same underlying issue my proposal faces here, i.e. even though  $NP_1$  and  $NP_2$  should be equidistant, T always probes  $NP_1$ . For the time being I argue that timing matters and Agree happens before Move. Is this the correct generalization though? At this point, I am not aware of other empirical evidence that would support it. I therefore leave this an open question for future research.<sup>11</sup>

I argue that in NP-NP copular clauses Agree proceeds in a following way. I show the assumed Agree procedure on copular clauses with past participle where, additionally to PERSON and NUMBER, the copula also agrees with GENDER. Let us assume that NP<sub>1</sub> is a 3rd person feminine animate NP, for instance *Veronica*. I assume that T first Agrees with Pred and inherits its unvalued  $\phi$ -features, as in (51) (*u* stands for *unvalued*).

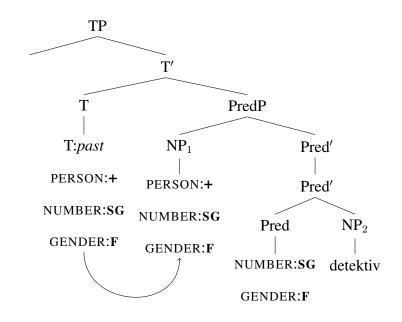
### (51) T inherits unvalued $\phi$ -features from Pred

<sup>&</sup>lt;sup>11</sup>Another way to account for this problem would be to stipulate that only  $NP_1$  carries the activation PER-SON feature. However, it will be shown below that the ordering of operations suggested here is necessary for the analysis of identificational copular clauses as well.  $NP_1$  and  $NP_2$  both carry a PERSON feature in identificational copular clauses, however, it will be shown that TO must be the first NP, T probes for.



The scheme in (52) shows that after T inherited unvalued  $\phi$ -features from Pred, T Probes the 3rd person feminine animate NP<sub>1</sub> and gets all  $\phi$ -features valued. The values of NUMBER and GENDER also appear on Pred because Pred Agrees with T.

(52) T Agrees with NP<sub>1</sub> in  $\phi$ -features



The question that needs to be answered now is: What happens in cases in which NP<sub>1</sub> is TO? TO carries an unvalued PERSON which makes it the first possible goal for T to agree with. However, TO is otherwise  $\phi$ -feature deficient, as TO only carries the unvalued PERSON feature. Consequently, TO cannot value any of the  $\phi$ -features T probes for. Following Bartošová and Kučerová (2015) I argue that if there is another NP that carries PERSON in the copular clause that can value  $\phi$ -features on T, T probes for it. Importantly though, as TO is NP<sub>1</sub> and it bears an unvalued PERSON feature, T first establishes a matching link with TO. If NP<sub>2</sub> is in NOM T gets all  $\phi$ -features valued from NP<sub>2</sub> establishing a valuation link with NP<sub>2</sub>. The first matching link with TO and the second valuation link with NP<sub>2</sub> create a Multiple-Agree chain in the sense of Hiraiwa (2005). Consequently, TO inherits the valued PERSON feature from NP<sub>2</sub> via the Multiple-Agree chain.

Take, for example, the identificational copular clause in (53).

(53) Byl to detektiv. was.3SG.M TO detective.3SG.M.NOM 'He (= the young man) was a detective.' (54)

The following trees represent how the analysis predicts Agree to proceed.<sup>12</sup> T first probes TO because TO is the structurally closest NP.<sup>13</sup> T establishes a matching link with TO, as is schematized in (54). Note that it is important for the current proposal that TO is the first goal for  $\phi$ -feature Agree with T because if T probed NP<sub>2</sub> first, T would get all its  $\phi$ -features valued from NP<sub>2</sub>, and consequently, it would have no reason to probe TO.

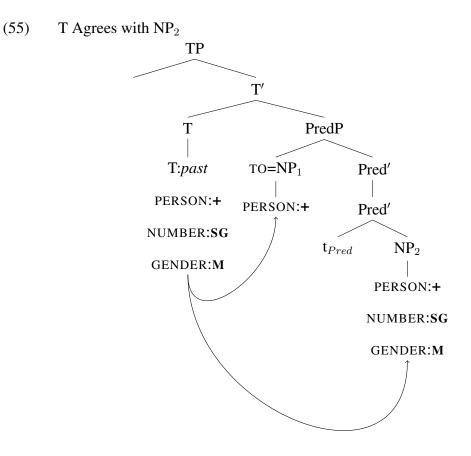
T Agrees with TO TP T'Т PredP D T:past Pred' PERSON:u PERSON:*u* Pred' NUMBER:*u* Pred  $NP_2$ GENDER:u NUMBER:*u* PERSON:+ GENDER:*u* NUMBER:SG GENDER:M

As was already mentioned, I assume that after T probes NP<sub>1</sub>, Pred moves to T. As a

<sup>&</sup>lt;sup>12</sup>I skipped the step where T inherits unvalued  $\phi$ -features from Pred because I assume it proceeds in the exact same way as in (51).

<sup>&</sup>lt;sup>13</sup>I am grateful to Susana Bejar who pointed out that there is nothing in the data discussed in this chapter that would prevent me from treating TO as probe. I agree, however, for the time being I remain the analysis of TO being a goal. The reason for that is that TO in its syntactic position could only probe NP<sub>2</sub> directly, otherwise, I would have to assume that TO probes T upwards. In the current system, I assume that probing proceeds downwards. There is a reason why I assume that TO establishes a matching link with T but it has not been discussed in this chapter. Recall the examples in (38) and (39) that show that there is a GENDERmatching restriction in past tense identificational copular clauses. Bartošová and Kučerová (2015) show that the GENDER-matching restriction is not attested in identificational clauses in which the copula does not agree with NP<sub>2</sub> in GENDER. Consequently, Bartošová and Kučerová (2015) argue that the only features that affect the interpretation of TO are the features the copula agrees with. I therefore remain analyzing TO as an Agree goal in identificational copular clauses.

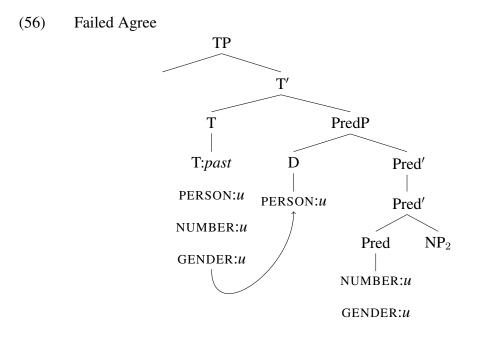
result, NP<sub>1</sub> and NP<sub>2</sub> are equidistant and NP<sub>2</sub> is an accessible goal for T. Consequently, T may probe NP<sub>2</sub> and get its  $\phi$ -features valued. TO gets its  $\phi$ -features valued from NP<sub>2</sub> via the Multiple-Agree chain between T, TO, and NP<sub>2</sub>. This is schematized in the tree in (55).



In (55), TO gets valued as [+PERSON], and therefore, TO refers to an animate individual, i.e. *the young man* in (53).<sup>14</sup>

<sup>&</sup>lt;sup>14</sup>Moltmann (2013) argues against the predicational analysis of identificational clauses and presents the following argument. According to Moltmann (2013), the English pronouns *this*, and *that* are unable to appear in the subject position of sentences other than copular clauses, and may never refer to a person outside of copular clauses. Note that this is entirely expected under the current analysis. Namely, TO is only able to refer to a person if it gets its PERSON feature valued. We would therefore expect TO to refer to a person

In an identificational copular clause with a non-NOM NP<sub>2</sub>, i.e. an NP<sub>2</sub> in INSTR, an AP, or a PP, the non-Nominative predicate cannot value the features on T. T only probes TO and establishes a matching link with it. T has nothing else to probe afterwards, and it fails to get its  $\phi$ -features valued from another NOM NP in the structure. This Single "Agree" link is schematically represented in the tree in (56), where the line corresponds to the single matching link between T an TO, and there is no other link as no valuation takes place within the structure.



As a result, T receives default NO PERSON neuter singular valuation attested with failed Agree in the sense of Preminger (2011). Importantly, the default value of the NO PERSON valuation is such that it does not correspond to a lexical NP, and consequently TO cannot

exclusively in Multiple-Agree configurations, i.e. in configurations where both,  $NP_1$ , and  $NP_2$  may trigger agreement on the verb. Copular clauses are the only constructions in Czech where both,  $NP_1$ , and  $NP_2$  may surface in NOM (Rezac, 2005), and therefore may, in principle, trigger agreement on the copula. Non-Nominative NPs are unable to trigger agreement in Czech. Consequently, the unvalued PERSON on TO cannot get valued in constructions outside of Czech copular clauses.

be interpreted as referring to an individual. TO may only refer to a proposition. Consider for instance the copular clause in (57). After the Single "Agree", TO receives the default NO PERSON valuation. Consequently, TO is only able to refer to the proposition and not to an individual.

(57) Bylo to příčinou mého pozdního příchodu do práce.
was.3SG.N TO cause.3SG.F.INSTR of-my late arrival to work
'It (= that the young man and the elderly lady addressed me on the street yesterday)
was the reason for my late arrival at work.'

I argue that the based on Kučerová and Bartošová (2015) and Bartošová and Kučerová (2015) presented in this chapter accounts for the empirical generalization from (30), repeated here as (58).

(58) Generalization - identificational clauses: If the copula in Czech identificational clauses agrees with NP<sub>2</sub>, TO may refer to an individual or a proposition, otherwise TO may only refer to a proposition.

If the PERSON on TO gets valued via a Multiple-Agree chain by a Nominative  $NP_2$ , TO may refer to an individual. However, if TO does not get valued in the structure, and consequently receives default NO PERSON valuation, TO may only refer to a proposition.

In this chapter, I argued that identificational clauses have syntactic structure analogous to predicational clauses. It was argued in chapter 3 that both, predicational, and equative clauses allow for derivation of specificational clauses. In chapter 4, it was shown that the derivation of specificational clauses is restricted by movement of Pred to T. If the movement of Pred to T is blocked, neither predicational nor equative clauses allow for derivation of specificational nor equative clauses allow for derivation of specificational nor equative clauses allow for derivation of specificational clauses. One important question with respect to Higgins (1973)'s taxonomy

that remains unanswered is: do predicational and equative clauses differ from each other? In the following chapter, I argue that they do, however, probably rather minimally. More precisely, I argue that they differ with respect to the semantic type of  $NP_2$ .

# **Chapter 6**

# **Predicational clauses versus equatives**

As was already mentioned in Chapter 3, Czech specificational clauses may be derived from both, predicational copular clauses, as is shown in (1), and equatives, as is shown in (2).

(1)	a.	Veronika byla detektiv. Veronica.F.NOM been.F.SG detective.M.NOM 'Veronica was the/a detective.'	PREDICATIONAL
	b.	Detektiv byla Veronika. detective.M.NOM been.F.SG Veronica.F.NOM 'The detective was Veronica.'	SPECIFICATIONAL
(2)	a.	Petra byla Hamletem. Petra.F.NOM been.F.SG Hamlet.M.INSTR 'Petra was Hamlet.'	EQUATIVE
	b.	Hamletem byla Petra. Hamlet.M.INSTR been.F.SG Petra.F.NOM 'Petra was Hamlet.'	SPECIFICATIONAL

Current literature on copular clauses disagrees on whether, and how predicational clauses

differ from equatives. Namely, there are two competing sets of proposals in the current literature. The first set of proposals argues that predicational clauses are syntactically and/or semantically the same as equatives (Moro, 1997; Adger and Ramchand, 2003; Percus and Sharvit, 2014). The second set of proposals argue that predicational clauses syntactically and/or semantically differ from equatives (Rapoport, 1987; Heycock and Kroch, 1998; Mikkelsen, 2005; Pereltsvaig, 2007). In this chapter, I partly support the second set of proposals. Namely, I argue that predicational and equative clauses differ in that their NP<sub>2</sub>s have distinct semantic types.

# 6.1 The referential status of NP<sub>2</sub>

Predicational and equative copular clauses have been argued to differ from each other with respect to the referential status of NP<sub>2</sub> (Higgins, 1973). While NP<sub>2</sub> in predicational clauses was argued to be non-referential, NP<sub>2</sub> in equatives was argued to be referential (Higgins, 1973; Mikkelsen, 2005, among others). Note that in Chapter 3 I defined referentiality in terms of rigid designation following Kripke (1972). Rigid designators are entities that in every possible world denote the same entity. Consider the equative clause in (3). If (3) was uttered in a scenario in which 'Petra' performed *Hamlet* in a drama theatre, *Hamlet* would not be referential according to the definition of Kripke (1972). *Hamlet* in (3) does not denote an entity rigidly designated by the proper name *Hamlet*. Instead, in (3) *Hamlet* refers to one particular instantiation of *Hamlet* in one particular drama performance.

(3) Petra byla Hamletem. Petra.F.NOM been.F.SG Hamlet.M.INSTR 'Petra was Hamlet.'

EQUATIVE

Adger and Ramchand (2003) and Percus and Sharvit (2014) argue that NP<sub>2</sub> in equatives has a predicative character which makes it similar to NP<sub>2</sub> in predicational clauses. Percus and Sharvit (2014) argue that if we take the referentiality of NP<sub>2</sub> seriously, and therefore argue that NP<sub>1</sub> and NP<sub>2</sub> are both referential in equatives, we should also expect NP<sub>1</sub> and NP<sub>2</sub> to be semantically symmetrical. In other words, we would expect that the order of NPs in a copular clause does not make any difference for their interpretation. For instance, we would expect that the relation in (4) holds.

However, Percus and Sharvit (2014) argue that equatives are not semantically symmetrical, and consequently, the relation in (4) does not hold. I follow Percus and Sharvit (2014) and argue that the relation in (4) does not hold in Czech equatives either. For instance, in a mistaken identity scenario such as the one in (5), (5a) can only be paraphrased as (6a) while (5b) can only be paraphrased as (6b).

- (5) a. Tomáš si myslí, že Marie je Veronika. Thomas REFL think that Mary is Veronica 'Thomas thinks that Mary is Veronica.'
  - b. Tomáš si myslí, že Veronika je Marie. Thomas REFL think that Veronica is Mary 'Thomas thinks that Veronica is Mary.'
- (6) a. Tomáš si myslí o Marii, že je Veronika. Thomas REFL think about Mary that is Veronica 'Thomas thinks about Mary that she is Veronica.' ✓(5a) # (5b)
  b. Tomáš si myslí o Veronice, že je Marie. Thomas REFL think about Veronica that is Mary
  - 'Thomas thinks about Veronica that she is Mary.'  $\# (5a) \checkmark (5b)$

If the embedded copular clause *Mary is Veronica* in (5a) was semantically symmetrical, i.e. both, NP<sub>1</sub> and NP<sub>2</sub>, were referential, we would expect both, (6a) and (6b) to be possible paraphrases of (5a) and (5b). It is therefore far from obvious that the referential status of NP<sub>1</sub> compared to NP<sub>2</sub> is the same. In order to account for the semantic asymmetry of NP<sub>1</sub> and NP<sub>2</sub> in equatives, Percus and Sharvit (2014) argue that NP<sub>2</sub> in equatives is an individual concept of type <s,e>, where *s* refers to a situation. More precisely, according to Percus and Sharvit (2014) NP<sub>2</sub> is interpreted as an individual in a situation (a possible world). Following this analysis, the proper name 'Hamlet' in (7) would be interpreted as denoting an individual 'Hamlet' in a particular situation of a drama performance. Percus and Sharvit (2014) argue that this interpretation of an equative NP<sub>2</sub> is accomplished when an individual denoting NP surfaces as a complement of Pred.

(7) Petra byla Hamletem. Petra.F.NOM been.F.SG Hamlet.M.INSTR 'Petra was Hamlet.' EQUATIVE

Adger and Ramchand (2003) went even further in that they argue that even though NP<sub>2</sub> in equatives is by default referential, when it surfaces as a complement of Pred, its interpretation is shifted into a property of a semantic type  $\langle e,t \rangle$ . Adger and Ramchand (2003) therefore argue that equatives should be syntactically and semantically analyzed analogously to predicational clauses.

However, there are many proposals in the current literature that argue that equatives syntactically differ from predicational clauses (Rapoport, 1987; Heycock and Kroch, 1998; Mikkelsen, 2005; Pereltsvaig, 2007; Geist, 2008; Bondaruk, 2012). The last three proposals are supported by data from other Slavic languages, i.e. Russian and Polish. For instance, Geist (2008) argues that Russian equatives differ from Russian predicational clauses in

that equatives require a pronominal copula while predicational clauses are ungrammatical with the pronominal copula.<sup>1</sup> Czech, however, does not have a pronominal copula or any other different form of copula that would distinguish predicational from equative copular clauses. Nevertheless, I argue that equatives differ from predicational clauses with respect to semantic properties of NP<sub>2</sub>. Namely, I argue that even though both NP<sub>2</sub> in equatives and NP<sub>2</sub> in predicational clauses, are temporally dependent on a the tense of the copula, NP<sub>2</sub> in equatives has a different semantic type than NP<sub>2</sub> in predicational clauses.

# 6.2 Tense Harmony in predicational clauses and equatives

In this section, I argue that both, equative and predicational clauses, exhibit Tense Harmony. In order to build up to the argument, I first discuss a generalization made in Sharvit (2003) and Romero (2004) who argue that Tense Harmony is characteristic of specificational pseudoclefts. In Sharvit (2003)'s and Romero (2004)'s models, specificational pseudoclefts are analyzed 'as is' and they semantically correspond to equatives. In the current discussion I follow their generalization but I apply it to different data, namely, to Czech NP-NP equatives and predicational clauses.

Sharvit (2003), and Romero (2004) argue that the tense of a finite cleft in the specificational subject is dependent on the tense of the matrix copula. Specifically, when the copula is in past tense, the pseudocleft must be in past tense as well, an example of such construction is in (8).<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>However, Citko (2008) argues that this is not entirely true based on data from Polish. Namely, she argues that the pronominal copula may appear in individual-level predicational clauses.

 $<sup>^{2}</sup>$ As was pointed out by Sharvit (2003), and Romero (2004) no such restriction holds in any other combination of tense on the matrix copula and tense of the cleft. Namely, if the matrix copula is in present tense, the tense of the cleft may be past or present. I therefore discuss only the cases that exhibit the restriction, i.e. past tense on the copula, present tense on the cleft.

### (8) SPECIFICATIONAL

- a. \*What John likes was War and Peace.
- b. What John likes is War and Peace. [Romero (2004)]

However, Sharvit (2003), and Romero (2004) argue that no such restriction is attested in predicational clauses with a cleft subject, and they provide the example in (9) as evidence.

### (9) **PREDICATIONAL**

- a. What John reads when he comes home was (once) interesting.
- b. What John reads when he comes home is interesting. [Sharvit (2003)]

Sharvit (2003), and Romero (2004) argue that the reason why the tense of the cleft is dependent on the tense of the matrix copula is that there is a situational binding into the specificational cleft. More precisely, Sharvit (2003), and Romero (2004) argue that the cleft is an intensional subject of type  $\langle s, e \rangle$  and that *s* is bound by the tense of the matrix copula. Note that if specificational pseudoclefts were to be analyzed as specificational clauses in the model proposed here, the cleft subject would structurally correspond to the post-copular phrase. If that was the case, we would expect NP<sub>2</sub> and not NP<sub>1</sub> to be temporally dependent on the matrix copula. An analysis of specificational pseudoclefts is outside of the scope of this thesis. However, it will be shown that it is NP<sub>2</sub> that is always temporally dependent on the tense of the matrix copula in both, equative and predicational clauses. I argue that in order to see if there is a Tense Harmony in NP-NP predicational or equative clauses, we need to construct sentences with full NPs modified by a finite relative clause.

As is shown in (10), the temporal restriction analogous to the one attested in specificational pseudoclefts holds in equatives as well. More precisely, the tense of the finite relative clause modifying  $NP_2$  is temporally dependent on the past tense matrix copula.

#### (10) EQUATIVE

a.	*Petr Černý byl Hamlet, který přehrává. Peter Černý was Hamlet who overacts
	Intended: 'Peter Černý was Hamlet, who overacts.'
b.	Petr Černý byl Hamlet, který přehrávál.

Peter Černý was Hamlet who overacted.

The example in (11) shows that the same holds for  $NP_2$  in predicational clauses.

(11) **PREDICATIONAL** 

- a. \*Petr Černý byl doktor, který prosazuje alternativní medicínu.
   Peter Černý was doctor who promotes alternative medicine
   Intended: 'Peter Černý was a doctor who promotes alternative medicine.'
- b. Petr Černý byl doktor, který prosazoval alternativní medicínu.
  Peter Černý was doctor who promoted alternative medicine
  'Peter Černý was a doctor who promoted alternative medicine.'

No such restriction holds between a finite relative clause modifying NP<sub>1</sub> and the tense of the matrix copula. As is shown in (12), the finite relative clause on NP<sub>1</sub> in equatives might be in present tense even if the tense of the matrix copula is past.

(12) Petr Černý, který stojí támhle v rohu, byl Hamlet.
 Peter Černý who stands over-there in corner was Hamlet
 'Peter Černý who is standing over there in the corner was Hamlet.' EQUATIVE

The example in (13) shows that the same holds for  $NP_1$  in predicational clauses.

(13) Petr Černý, který stojí támhle v rohu, byl doktor
Peter Černý who stands over-there in corner was doctor
'Peter Černý who is standing over there in the corner was a doctor.' PREDICA-TIONAL

Based on the data in (10) and (11) and following the analyses in Sharvit (2003), and Romero (2004), I argue that NP<sub>2</sub> in both, predicational and equative copular clauses carry a variable *s* in their semantic type. The question is: Does NP<sub>2</sub> in predicational clauses have the same semantic type as NP<sub>2</sub> in equatives? If NP<sub>2</sub> is analyzed analogously to the cleft in a specificational subject, both NP<sub>2</sub> could be of a semantic type <s,e>. Are they though? In the next section I argue that they are not. More precisely, I argue that only NP<sub>2</sub> in equatives has the semantic type <s,e>. NP<sub>2</sub> in predicational clauses will be argued to denote a situationally bound property of type <s,<e,t>>.

# 6.3 Predicational copular clauses versus equatives in Czech

In this section, I argue that we can investigate semantic properties of copular clauses, and NPs they contain, indirectly by looking at properties of their corresponding wh-questions. More precisely, I argue that we can determine the semantic type of an NP by their corresponding wh-phrase in a wh-question in Czech.

As was already mentioned,  $NP_2$  in both, predicational and equative clauses may surface in INSTR. The relevant examples are repeated here as (14).

(14) a. Veronika byla detektivem. Veronica.F.NOM been.F.SG detective.M.INSTR 'Veronica was the/a detective.'

PREDICATIONAL

b.	Petra	byla	Hamletem	•		
	Petra.F.NOM	been.F.SG	Hamlet.M.I	NSTR		
	'Petra was H	lamlet.'		,		EQUATIVE

Czech has two wh-phrases in INSTR, *who*.INSTR and *what*.INSTR. I argue that the distribution of the wh-phrases is dependent on the semantic type of the NP the wh-phrase corresponds to.<sup>3</sup> As is shown in (15), the wh-phrase that corresponds to the non-referential NP *detective* in a predicational clause is *what*.INSTR.

- (15) Veronika byla detektivem.
   Veronica.F.NOM been.F.SG detective.M.INSTR
   'Veronica was the/a detective.'
  - a. \* Kým byla Veronika? who.INSTR was Veronica Intended: 'Who was Veronica?'
  - b. Čím byla Veronika? what.INSTR was Veronica 'Who/what was Veronica?'

In contrast, the wh-phrase that corresponds to the referential NP *Hamlet* in an equative clause is *who*.INSTR, as the example in (16) shows.

(16) Petra byla Hamletem. Petra.F.NOM been.F.SG Hamlet.M.INSTR 'Petra was Hamlet.'

> a. Kým byla Petra? who.INSTR was Petra 'Who was Petra?'

 $<sup>{}^{3}</sup>$ I am very grateful to my supervisor Ivona Kučerová who noticed this distinction and pointed it out to me.

b. \* Čím byla Petra? what.INSTR was Petra Intended: 'Who/what was Petra?'

The distribution of the Czech *what*.INSTR and *who*.INSTR is not the same as the distribution of English *what* and *who*. Consider the sentence in (17).

(17) Sylvia is the manager of our company.

In Chapter 3 I presented a test that may be used to determine whether a sentence is predicational or not. The test involves replacing the copula with the verb *become*. If the substitution of the copula by the verb *become* leads to a plausible sentence, the copular clause is predicational (Higgins, 1973). The copular clause in (17) is plausible with *become*, as is shown in (18), and therefore the copular clause in (17) is predicational.

(18) Sylvia became the manager of our company.

Interestingly, a wh-phrase that corresponds to the NP *the manager of our company* in an English wh-question is *who*, and not *what*, as is shown in (19).

- (19) Sylvia is the manager of our company.
  - a. Who is Sylvia?
  - b. #What is Sylvia?

This suggests that the distinction between English *who*-questions and *what*-questions is not sensitive to the semantic type of an NP in the same way the Czech *what*.INSTR and *who*.INSTR is. I therefore argue that the English *who* and *what* cannot help us distinguish between predicational and equative copular clauses.

However, I argue that the distribution of the Czech *what*.INSTR and *who*.INSTR in whquestions depends on whether the wh-phrase corresponds to NP<sub>2</sub> in a predicational clause or NP<sub>2</sub> in an equative clause. As the example in (20) shows, only the *what*.INSTR whphrase may correspond to the NP *the manager of our company* in a predicational copular clause. Consequently, I argue that if the wh-question has the form *what*.INSTR-*be*-proper name, its answer may only be a predicational copular clause. While if the wh-question has the form *who*.INSTR-*be*-proper name, the answer to it must correspond to an equative copular clause.

- (20) Sylva je manažerkou naší firmy.
   Sylvia is manager of-our company
   'Sylvia is the manager of our company.'
  - a. # Kým je Sylva? who.INSTR is Sylvia Intended: 'Who is Sylvia?'
  - b. Čím je Sylva?
     what.INSTR is Sylvia
     'Who is Sylvia?'

I argue that in order to account for the distribution of the Czech INSTR wh-phrases predicational and equative clauses must differ from each other at least with respect to the semantic type of NP<sub>2</sub>. I propose to model this difference between predicational clauses compared to equative clauses via distinct semantic types of their NP<sub>2</sub>s. More precisely, I assume that NP<sub>2</sub> in equatives and its corresponding *who*.INSTR phrase are both intensional objects of type <s,e> (cf. Percus and Sharvit (2014), Sharvit (2003), and Romero (2004)). In contrast, NP<sub>2</sub> in predicational clauses and its corresponding *what*.INSTR phrase are both situationally bound properties of type <s,<e,t>> (cf. what Heller and Wolter (2008) argue to be the semantic type of a property denoting NP<sub>2</sub> in identificational clauses).<sup>4</sup>

To summarize, in this chapter, I argued contra Adger and Ramchand (2003) that predicational clauses differ from equatives in at least the semantic type of NP<sub>2</sub>. Czech, however, does not provide evidence for significantly different structures of equatives compared to predicational clauses. The skeleton of equative and predicational copular clauses may or may not be the same.

<sup>&</sup>lt;sup>4</sup>Note that in order to account for this difference within the copular clause, one must allow for two lexical entries of the copula.

### Chapter 7

# **Givenness in specificational clauses**

In Chapter 4 I argued that all copular clauses must have a topic phrase in Spec, TP (cf. Basilico (2003)). It therefore follows, that the linearly first NP in specificational clauses (henceforth, *specificational subjects*) must be topics. In this chapter, I discuss yet another property NP<sub>2</sub> must have in order to be a suitable specificational subject, namely, I argue that NP<sub>2</sub> needs to be given.

I follow Reinhart (1981) and Endriss (2009) in that sentence topics are defined with respect to aboutness. Even though most topics are also given, Reinhart (1981) and Endriss (2009) argue that givenness is neither a sufficient, nor a necessary property of topics. Endriss (2009) argues that some quantifier phrases can serve as topics and these by default do not represent a discourse given entity. Consider the example in (1) from Endriss (2009).

(1) a. Anna has eaten all the bananas.

b. Some horse has eaten all the bananas. [Endriss (2009)]

Intuitively, Anna is what the sentence in (1a) is about, therefore, an aboutness topic. (1b)

by comparison with (1a) is intuitively about *some (particular) horse*, and thus the quantifier phrase is the aboutness topic of (1b), in the same way *Anna* is the topic of (1a). I follow Reinhart (1981) and Endriss (2009) in arguing that phrases that do not denote given information can nevertheless be sentence topics. Consider the example in (2).

Policejní strážník mi včera pomohl posbírat rozsypaný nákup.
 police constable REFL yesterday helped gather-up spilled groceries
 'A Police Constable helped me to gather up my spilled groceries yesterday.'

The sentence in (2) may be easily uttered out of the blue with no reference to a particular *Police Constable*. However, *Police Constable* is what the sentence in (2) is about, the aboutness topic of the sentence in (2).

If aboutness topicality was the only necessary property of  $NP_2$  to be able to surface as a specificational subject, we would expect NPs that are not given to surface as specificational subjects, analogously to (2). This is not the case though, as the example in (3) shows.

(3) #Policejní strážník je Petr Novák.
 police constable is Peter Novák
 Intended: 'A Police Constable is Peter Novák.'

Examples similar to the one in (3) have been reported to be problematic for a different reason in the literature on English copular clauses. Namely, Heycock and Kroch (1999) pointed out, that simple English indefinite NPs cannot be specificational subjects, as is shown in (4b). Consequently, specificational clauses may not be derived from predicational clauses in which NP<sub>2</sub> is an indefinite NP.

- (4) a. Mark Robinson is a doctor.
  - b. #A doctor is Mark Robinson.

In Chapter 3, I briefly touched upon the interpretation of Czech specificational clauses with respect to English definitness. Concretely, I mentioned that even though Czech does not have definite and indefinite articles, Czech specificational subjects tend to be translated into English as definite NPs. Kučerová (2007) pointed out that English definiteness often correlates with Czech givenness. More precisely, Czech NPs that are given tend to correspond to English definite NPs, while Czech NPs that are not given tend to correspond to English indefinite NPs. In this chapter, I deal with Czech specificational clauses and I discuss how the restriction we see in (3) can be explained by general restrictions on scrambling in Czech. I briefly discuss that the proposal I assume here might be suitable for English as well.

Concretely, I argue that the reason why the Czech specificational clause in (3) is implausible is that the specificational subject denotes new information. Clark and Haviland (1977) pointed out that languages prefer to order information such that given information precedes new information within a sentence. Kučerová (2007), and the literature cited there, argues that the same restriction holds for Czech and she offers a syntactic proposal to account for this information ordering.<sup>1</sup> Specifically, Kučerová (2007) argues that in order to derive the correct interpretation of a sentence, given items scramble above new items in the structure. I follow Kučerová (2007) in arguing that this is precisely what we see in Czech specificational clauses. Namely, if NP<sub>2</sub> in a copular clause is given, it moves to Spec, TP to derive the specificational word order. In contrast, if NP<sub>2</sub> is new it has no reason to move to the Spec, TP. Consequently, the fact that NPs denoting new information may not be specificational subjects follows from the fact that new items have no reason to scramble.

<sup>&</sup>lt;sup>1</sup>There are many internationally well-known publications of scholars dealing with information-ordering, and how linear word order is dependent on the context in Czech from a functional perspective, among the most notable ones are Firbas (1964), Sgall et al. (1986), Hajicová et al. (2013). These authors usually refer to information-ordering within sentences using terms such as *topic focus articulation* or they refer to terms *theme* and *rheme*. They present formal dynamic/functional proposals to account for word order variations in Czech dependent on context. For the purposes of this chapter, I follow Kučerová (2007)'s terminology, and her proposal.

### 7.1 Givenness in Czech

As was already mentioned, I argue that specificational subjects cannot be new information in Czech. I therefore argue that the generalization in (5) holds. In this section, I first provide more evidence to support this generalization. Secondly, I show, based on the data from Kučerová (2007), that information within Czech sentences is strictly ordered with respect to givenness. Concretely, given information precedes new information. Thirdly, I briefly discuss the proposal Kučerová (2007) argues for to account for the strict information-ordering in Czech. Finally, I argue that Kučerová (2007)'s proposal on scrambling in Czech also accounts for the derivation of specificational clauses.

(5) Generalization - Czech specificational subjects: Czech specificational subjects must be given.

I follow Kučerová (2007), who models the definition of givenness after Schwarzschild (1999) and defines it as in (6).<sup>2</sup>

- (6) Definition of GIVEN for Czech [as defined in Kučerová (2007)]An utterance U counts as GIVEN iff
  - a. it is presupposed that U exists, and
  - b. it has a salient antecedent A
    - (i) if U is type e, then A and U corefer;
    - (ii) otherwise: modulo ∃-type shifting, A entails the Existential F-closure of
    - U.

<sup>&</sup>lt;sup>2</sup>The core definition is from Schwarzschild (1999), Kučerová (2007) adjusted it for Czech and added (6a). However, Kučerová (2012) follows Sauerland (2005) and argues that givenness gives rise to an existential presupposition instead of existential presuposition being a condition for utterances to be given.

Importantly for the current discussion, the definition in (6) implies that: (i) given elements must be existentially presupposed, and (ii) given elements must have a salient antecedent in the discourse, (iii) constituents of any semantic type might be given.<sup>3</sup> As was already mentioned specificational clauses may be derived from both, predicational and equative clauses. In Chapter 6, I argued that NP<sub>2</sub> in Czech predicational and equative clauses have distinct semantic types. It is therefore important that givenness is not dependent on a particular semantic type.

At the beginning of this chapter I provided the example (3) (repeated here as (7), and I argued that if the specificational subject was interpreted as new information, the specificational clause in (7) would be implausible.

(7) #Policejní strážník je Petr Novák.
 police constable is Peter Novák
 Intended: 'A Police Constable is Peter Novák.'

However, I did not provide any context to support such a claim. Let me show some contexts which make specificational clauses plausible and some that do not.

Consider the example in (8). The NP *a private detective* has a salient antecedent in the context of (8) and it is presupposed that *a private detective* exists. Consequently, the specificational clause is (8a) is plausible in the context of (8). Note that (8b), the predicational counterpart of (8a) is not plausible in the context of (8). I argue that (8b) is not plausible because 'Jana Novotná' is new information in the context of (8), it is the NP *private detective* that is given in (8). Out of (8a) and (8b), the specificational clause in (8a) is therefore the only plausible continuation of (8).

<sup>&</sup>lt;sup>3</sup>According to Schwarzschild (1999), any semantic type is raised to t which is accomplished via existential binding of unfilled arguments. More precisely, if a part of an is utterance is given, it is type-shifted into t and the remaining focus (F-marked) part is existentially closed.

- (8) Na případu se podílejí tři vyšetřovatelé různých odborností: privátní REFL participate three investigators of-various specializations private on case detektiv, kriminalista a forenzní lingvista. detective criminologist and forensic linguist 'Three investigators with various specializations are involved in the case: a private detective, a criminologist, and a forensic linguist.' a. Privátní detektiv je Jana Novotná. private detective is Jana Novotná 'The private detective is Jana Novotná.'
  - b. #Jana Novotná je privátní detektiv.
     Jana Novotná is private detective
     Intended: 'Jana Novotná is the private detective.'

However, the specificational clause in (9a) is not a plausible continuation of (9) because in the context of (9), the NP *private detective* neither has a salient antecedent, nor is it presupposed that there exists *a private detective*. The predicational equivalent of (9a) is the only plausible continuation of (9), as is shown in (9b).

- (9) Na případu se podílejí tři lidé: Jana Novotná, Michal Tučný, a Marie on case REFL participate three people Jana Novotná Michal Tučný and Marie Šebestová.
   Šebestová 'Three people are involved in the case: Jana Novotná, Michal Tučný, and Marie Šebestová.'
  - a. #Privátní detektiv je Jana Novotná.
     private detective is Jana Novotná
     Intended: 'A private detective is Jana Novotná.'
  - b. Jana Novotná je privátní detektiv.
     Jana Novotná is private detective
     'Jana Novotná is a private detective.'

I argue that, at least in Czech, the distribution of specificational and predicational clauses

follows from a general restriction on information-ordering within sentences in Czech. More precisely, in Chapter 4, it was shown that specificational word order is derived via scrambling of NP<sub>2</sub> past NP<sub>1</sub> in Czech. In this section I show that scrambling in Czech is restricted by ordering of new and given information (Kučerová (2007) and the literature cited there).

Consider the example in (10). The basic Czech SVO word order may be interpreted in three ways, i.e. both NPs, *boy* and *lollipop* may be interpreted as new, or they can be both interpreted as given, or the subject may be interpreted as given and the object as new.

(10) Chlapec našel lízátko.
boy found lollipop
'A boy found a lollipop.'
'The boy found the lollipop.'

'The boy found a lollipop.'

[Kučerová (2007)]

Crucially, an interpretation in which the subject would be interpreted as new and the object as given is not available in the basic Czech SVO order, as is shown in (11).

(11) Scenario I: A little girl on her way to school lost a lollipop. And then. . .

a. #Chlapec našel lízátko.
boy found lollipop
Intended: 'A boy found the lollipop.' [Kučerová (2012)]

Kučerová (2007) argues that the only way to derive the interpretation which would be a plausible continuation of the scenario in (11) is to reorder the sentence in (11a). Namely, the interpretation we are looking for is available when the given object is the linearly first NP, as in (12).

(12) Lízátko našel chlapec.lollipop found boy'A boy found the lollipop.'

#### [Kučerová (2007)]

Kučerová (2007) argues that this syntactic reordering is derived via a syntactic movement (scrambling) of a given NP. This reordering takes place in order to preserve the correct information ordering. Crucially, the only NPs that may be reordered according to Kučerová (2007) are the given NPs, new NPs have no reason to move.

Let me briefly lay out the proposal Kučerová (2007) argues for in order to account for the reordering of sentences like (12) in the context like (11). Kučerová (2007) argues for the existence of a syncategorematic *G-operator* which may freely attach to constituents in the syntactic structure. Importantly, this G-operator marks its sister, and all constituents above the G-operator within a sentence as given. Consequently, all phrases above the G-operator must be interpreted as given.

The question is: what happens in cases like (11a) where NPs are not base-generated with the correct information ordering? More precisely, in the example in (11), it is only the object that is given. If the G-operator attached to the object NP *the lollipop*, the G-operator would mark all phrases above it as given. Consequently, all phrases in (11) would be interpreted as given, i.e. as *The boy found the lollipop*. However, this is not the interpretation we are looking for in the context of (11). Kučerová (2007) argues that in order to derive the desirable information-ordering, the structure must be reordered. The reordering is accomplished via scrambling of the given phrase into the Spec, TP position. Moreover, as was already mentioned in Chapter 4, Kučerová (2007) argues that a given phrase may only move if the sister of the phrase, i.e. a verbal head, moved to T.

I argue that the derivation of (11) laid out as above is precisely how a specificational clause is derived. Namely, if NP<sub>2</sub> is given and NP<sub>1</sub> is new, NP<sub>2</sub> obligatory scrambles to the

Spec, TP. The G-operator is attached below  $NP_2$  and it marks  $NP_2$  as given. What is below the G-operator is interpreted as new.

I follow Kučerová (2007) and I argue that in Czech copular clauses as well as other Czech sentences, only given NPs may scramble, new NPs stay in situ. Consequently, following the logic of Kučerová (2007)'s proposal, we would never predict NP<sub>2</sub> that denotes new information to move past NP<sub>1</sub> to derive the specificational word order. Therefore, we would never predict the specificational clause in (13a) to be a plausible continuation of (13).

- (13) Na případu se podílejí tři lidé: Jana Novotná, Michal Tučný, a on case REFL participate three people Jana Novotná Michal Tučný and Marie Šebestová.
  Marie Šebestová
  'Three people are involved in the case: Jana Novotná, Michal Tučný, and Marie Šebestová.'
  - a. #Privátní detektiv je Jana Novotná.
     private detective is Jana Novotná
     Intended: 'A private detective is Jana Novotná.'

Note that there are apparent counter-examples to the generalization in (5) repeated here as (14).

(14) Generalization - Czech specificational subjects: Czech specificational subjects must be given.

Namely, it appears that some NPs may surface as specificational subjects even though they do not have a salient antecedent in the discourse and are not existentially presupposed.

Consider the example in (15).<sup>4</sup>

(15) Scenario: A: *Tell me something about your new class!*; B: *Well...* 

a. Nejvyšší holkou ve třídě je Veronika. tallest girl.INSTR in class is Veronica 'The tallest girl in the class is Veronica.'

Note that the linearly first NP, i.e. *the tallest girl in the class* is in INSTR, and therefore the base-generated NP<sub>2</sub>. However, even though *the tallest girl in the class* does not have a salient antecedent and its existence is not presupposed, the specificational word order is allowed in (15).

I argue that even though *the tallest girl in the class* does not have a salient antecedent and its existence is not presupposed in (15), it can be accommodated as given. The suggestive evidence for this comes from the fact that in the same scenario, the NP *the tallest girl in the class* may scramble even in a sentence different from a copular clause.

(16) Scenario: A: *Tell me something about your new class.*; B: *Well...* 

Nejvyšší holku ve třídě dneska pokousal školníkův pes.
 tallest girl.ACC in class today bit caretaker's dog
 'The tallest girl in the class was bitten by the caretaker's dog.'

Notice that in (16), *the tallest girl in the class* is the sentential object, i.e. it is marked with Accusative case in Czech. Nevertheless, (16a) in which *the tallest girl in the class* scrambled from its base-generated position to Spec, TP is a plausible continuation of (16).

I argue that if a phrase may be accommodated as given via presupposition accommodation, the phrase may scramble in Czech as well. More precisely, I argue that if an utterance

<sup>&</sup>lt;sup>4</sup>I am grateful to Ivona Kučerová who pointed this example out to me.

may be accommodated, the utterance can count as given. I follow von Fintel (2008) in that even if an utterance is not in the common ground, it may be accommodated in von Fintel (2008)'s terms "quietly and without a fuss" if it is uncontroversial in the current context. I therefore argue that the phrase *the tallest girl in the class* can be accommodated because it is uncontroversial that *the tallest girl in the class* exists. Formally, the accommodation process may be defined following Soames (1982), as in (17).

- (17) Utterance Presupposition [from Soames (1982)]
   An utterance U presupposes P (at t) iff one can reasonably infer from U that the speaker S accepts U and regards it as uncontroversial, either because
  - a. S thinks that it is already part of the conversational context at t, or because
  - b. *S* thinks that the audience is prepared to add it, without objection, to the context against which *U* is evaluated.

Another apparent counter-example comes from Heycock (2012) who pointed out that not all given NPs may be specificational subjects and she offers the example in (18) to demonstrate this.

- (18) Who around here is a doctor?
  - a. Bill is a doctor. John is a doctor, too.
  - b. Bill is a doctor. #A doctor is John, too.

As is shown in (19), the same restriction holds in Czech as well.

(19) Kdo je tady doktor?who is here doctor'Who around here is a doctor?'

- a. Petr je doktor. Martin je taky doktor.
  Peter is doctor. Martin is too doctor
  'Peter is a doctor. Martin is a doctor, too.'
- b. Petr je doktor. #Doktor je taky Martin.
  Peter is doctor doctor is too Martin Intended: 'Peter is a doctor. #A doctor is Martin, too.'

I argue that even though the NP *a doctor* is mentioned in the discourse of (18) and (19), the NP does not count as given in the discourse. Consider the example in (20) from Kučerová (2007).

(20) Když muž vlastní osla, jeho žena vlastní osla. when man owns donkey his wife owns donkey 'If a man owns a donkey, his wife owns a donkey.'

The NP *donkey* is mentioned in the antecedent of the conditional in (20). But is the NP *donkey* given? Kučerová (2007) argues that it is not because according to her, a phrase must be existentially presupposed in order to count as given. Kučerová (2007) argues that if *donkey* was indeed given in the consequent of (20), we would expect the NP *donkey* to scramble in order to preserve the correct information ordering. Namely, the subject of the consequent, i.e. the NP *his wife*, is not given in (20) and if the object *donkey* was given, we would expect it to scramble over the non-given subject. However, the example in (21) shows that this reordering is not possible.

(21) #Když muž vlastní osla, osla vlastní jeho žena. when man owns donkey donkey owns his wife Intended: 'If a man owns a donkey, his wife owns a donkey.'

I argue that the NP *a doctor* in (18) and (19) is not given because the context does not presuppose an existence of *a doctor*. Levinson (1983) and the literature cited there, show

that presuppositions survive under negation. For instance, (22a) presupposes that there exists x such that x is a man who has two heads. Even though the sentence in (22b) is negated, it still presupposes the same thing, i.e. that there exists x such that x is a man who has two heads.

- (22) a. John saw the man with two heads.
  - b. John didn't see the man with two heads. [Levinson (1983)]

We can therefore use negation as a test to see if the context in (18) and (19) presupposes existence of an x such that x is a doctor. More precisely, if the copular clause *Bill is a doctor* presupposed that it is true that *there exists x such that x is a doctor*, we would expect the negation of the sentence to presuppose that *there exists x such that x is a doctor*. However, this is not the case, (23b) does not presuppose existence of a doctor.

- (23) a. Bill is a doctor.
  - b. Bill is not a doctor.

I therefore argue that the NP *a doctor* in Heycock (2012)'s example is not given, and consequently, it cannot become a specificational subject.

### 7.2 English versus Czech

Czech seems to offer a straightforward explanation of the distribution of specificational copular clauses. Namely, a specificational clause is derived when  $NP_2$ , is given, and  $NP_1$  is new. English seems to follow the same pattern with respect to specificational copular clauses, however, there are two issues.

Firstly, English sentences usually do not strictly order information as given preceding new. The example in (24) shows that new subjects can easily precede given objects in English.

- (24) Who found the lollipop?
  - a. A boy found the lollipop.

Secondly, Czech speakers seem to strongly prefer a specificational clause over a predicational clause in contexts where  $NP_2$  is given. Consider the Czech question-answer pairs in the following examples. As is shown in (25), if the question asks about  $NP_1$ , the only possible answer is the predicational clause.

(25) Čím je Petr? what.INSTR is Peter 'Who is Peter?'

a.	Petr je ředitelem té firmy.	
	Peter is manager of-that company	
	'Peter is the manager of the company.'	PREDICATIONAL
b.	#Ředitelem té firmy je Petr. manager of-that company is Peter	
	'The manager of the company is Peter.'	SPECIFICATIONAL

However, as the example in (26) shows, if the question asks about NP<sub>2</sub>, the strongly pre-

ferred answer is the specificational clause.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup>Note that there is an asymmetry in judgments for (25) compared to (26) reported by my consultants. Specifically, while some of my consultants found the predicational clause odd as an answer to (26), they found the specificational clause in (25b) worse as an answer to (25). At this point I do not have a straightforward explanation of why this is the case. I can only stipulate that the predicational clause is the default derivation, and therefore, more easily accommodated as an answer to (26). However, the derivation of a specificational clause as an answer to the question to (25) is a stronger violation because new information moved over given information which should never be possible.

(26)	Kdo je ředitelem té firmy? who is manager of-that company 'Who is the manager of the company?'					
	<ul> <li>a. ??Petr je ředitelem té firmy.</li> <li>Peter is manager of-that company</li> <li>'Peter is the manager of the company.'</li> </ul>	PREDICATIONAL				
	<ul> <li>b. Ředitelem té firmy je Petr.</li> <li>manager of-that company is Peter</li> <li>'The manager of the company is Peter.'</li> </ul>	SPECIFICATIONAL				

English, however, has been reported to accept both, the predicational and the specificational clause as answers to questions asking about NP<sub>2</sub> (Mikkelsen, 2006). As is shown in (27), both, the specificational clause and the predicational clause are acceptable answers to the question *Who is the mayor*? which makes NP<sub>2</sub> *the mayor* given.

#### (27) Who is the mayor?

a.	John is the mayor.	PREDICATIONAL
b.	The mayor is John.	SPECIFICATIONAL
	[Mikkelsen (2006)]	

Why would English have the restriction on the order of information only in copular clauses? Moreover, why does the restriction seem to be optional even in copular clauses?

Following Birner (1994) I assume that English inversion in general happens only if the phrase which moved to the initial position of the sentence is not new information. In that sense, English behaves like Czech in that it follows the same restriction, i.e. do not scramble new information. However, as English does not disallow information ordering in which new information precedes given, inversion remains optional. In contrast, Czech obligatorily reorders in order to derive the correct information ordering (Kučerová, 2007). Therefore, specificational clauses as well as other reordered sentences are obligatory in Czech contexts where otherwise, new information would precede given information.

# **Chapter 8**

# Conclusion

It has been widely argued in the literature that inversion derives one of the copular clause type as defined in Higgins (1973) from another. In this dissertation, I argued for the inversion analysis of specificational copular clauses; however, I also argued that the inversion analysis does not apply to a particular type of a copular clause. Instead, it was shown that the inversion analysis derives specificational clauses from either predicational or equative copular clauses. In that sense, my proposal is compatible with the intuition behind Moro (1997), and Den Dikken (2006) in that there are two types of copular clause derivations, one that is canonical, and another that is derived from the former via inversion. The latter derivation was argued to be analogous to other Czech scrambled structures. Consider the two sentences in (1). In the example in (1a), the linearly first NP *the manager* is the structural object as witnessed by the Accusative case marking, while the linearly second NP *Peter* is the structural subject because it surfaces in Nominative. In this dissertation I argued that analogous to (1a), in the specificational clause like (1b), the hierarchical relation between the two NPs does not reflect the linear word order. Namely, the linearly first NP in Instrumental, i.e. *the manager of the company*, is structurally NP<sub>2</sub>, while the linearly

second NP in Nominative, i.e. *Peter*, is structurally NP<sub>1</sub>.

- (1) a. Ředitelku políbil Petr. manager.ACC kissed Peter.NOM 'Peter kissed the manager.'
  - b. Ředitelem té firmy je Petr. manager.INSTR of-that company is Peter.NOM 'The manager of the company is Peter.'

It was shown that Czech scrambling is driven by givenness, namely, phrases in Czech scramble to derive the information ordering in which given information precedes new information (Kučerová, 2007). I therefore argued that only given NP<sub>2</sub> may scramble in order to derive the specificational word order such as the one in (1b). To my knowledge, this restriction eliminates the problematic cases where the derivation of specificational clauses was shown to be impossible in the literature. Namely, it eliminates cases such as the one in (2b) from Moro (1997) where the NP<sub>2</sub> *a fool* denotes new information, and is therefore not eligible for scrambling over NP<sub>1</sub>.

(2) a. John is a fool.b. \*A fool is John. [Moro (1997)]

Recall that in order to eliminate cases like (2b), Moro (1997) stipulated that phrases with indefinite articles are not allowed to move from the symmetrical small clause he assumes. However, it was also shown that such a syntactic restriction is too strong because some indefinite NPs may surface as specificational subjects.

The proposal presented here is also similar in spirit to the one in Heycock (2012) who argues that inversion is scrambling in German. My proposal also provides further evidence

for Bailyn (2004) in that it shows that specificational clauses are just another case of inversion in a broader sense. The question that remains open for future research is: Why does English only allow inversion/scrambling in a limited number of syntactic environments?

Compared to specificational clauses, identificational clauses have been largely understudied (with some notable exceptions of Mikkelsen (2004), Heller (2005), Heller and Wolter (2008), and Moltmann (2013)). In this dissertation I argued that despite their initial resemblance to specificational clauses, they should not be treated as inverted structures (contra Mikkelsen (2004)). The proposal therefore supports the proposals of Heller (2005), and Heller and Wolter (2008) who argue that identificational clauses have a predicational structure. Moreover, it was shown that even though the copula agrees with NP<sub>2</sub> in some identificational clauses, the copular agreement determines what the demonstrative pronoun in identificational clauses refers to.

However, the discussion of identificational clauses was based on data from Czech where: (i) the  $\phi$ -feature agreement on the copula is rich, and (ii) it was argued that a Multiple-Agree chain between T, the demonstrative pronoun TO, and NP<sub>2</sub> is established. The question is: What about languages like English where the copula always agrees with the linearly first NP? At this point I can only stipulate that even though we do not see any morphological evidence for a Multiple-Agree chain in English identificational clauses, the referential properties of the demonstrative pronoun are still determined by the PERSON feature on NP<sub>2</sub>. Consider the examples in (3). In (3a), NP<sub>2</sub> is the proper name *Susan*, and the demonstrative pronoun *it* may refer to an individual. However, in (3b), the post-copular phrase is the adjective *nice*, and the demonstrative pronoun cannot refer to an individual, instead, it must refer to a proposition.

(3) Yesterday I met one of my old classmates from high school.

- a. It was Susan.
- b. It was nice.

it = my old classmate it  $\neq$  my old classmate

Whether the referential restriction we see in (3) for English should be treated analogously to Czech, i.e. via a Multiple-Agree chain, remains a question for future research.

In this dissertation, I also argued that despite no detectable differences in the skeleton structure of predicational compared to equative clauses, predicational and equative clauses differ from each other with respect to the semantic type of NP<sub>2</sub>. Namely, it was shown that while NP<sub>2</sub> in predicational clauses can only be substituted by a *what*.INSTR wh-phrase in a Czech wh-question, NP<sub>2</sub> in equatives can only be substituted by a *who*.INSTR wh-phrase. This finding provides evidence contra Adger and Ramchand (2003) who argue that predicational and equative clauses are the same and that even the NP<sub>2</sub> in equative clauses has a semantic type <e,t>. The question that remains open for future research is: How exactly is the mapping between an NP and its corresponding wh-question modelled?

Overall, this dissertation offers a new way of looking at Higgins (1973)'s taxonomy of copular clauses. Specificational clauses are argued to be derived via scrambling from predicational and equative sentences. They do not constitute their own semantic category; instead, I argue that they should be treated analogously to other scrambled sentences. Predicational and equative copular clauses are argued to differ from each other, though, fairly minimally. Identificational clauses differ from predicational and equative clauses in that they employ a different strategy of agreement. However, the skeleton of the identificational copular clause is argued to be analogous to the skeleton of predicational/equative clauses. Investigation of copular clauses is challenging as witnessed by the general lack of consensus in the current literature. While many questions remain open for future research, the present dissertation addressed some disagreements in the literature, presented novel empirical generalizations, and an analysis to account for them.

### **Bibliography**

- Adger, D. (2003). Core syntax: A minimalist approach. Oxford University Press.
- Adger, D. and Ramchand, G. (2003). Predication and equation. *Linguistic inquiry*, 34(3):325–359.
- Anagnostopoulou, E. (2003). *The syntax of ditransitives: Evidence from clitics*. Walter de Gruyter.
- Bailyn, J. F. (2004). Generalized inversion. *Natural Language & Linguistic Theory*, 22(1):1–50.
- Bartošová, J. (2014). Semantic analysis of Czech Demonstrative Pronoun TO. In *FASL*, volume 37, pages 19–38.
- Bartošová, J. and Kučerová, I. (2014). Against a Unified NP-Deletion Analysis of Pronouns: Evidence from Demonstratives in Czech. In *Complex Visibles Out There. Proceedings of the Olomouc Linguistics Colloquium 2014: Language Use and Linguistic Structure.*
- Bartošová, J. and Kučerová, I. (2015). On PERSON, animacy, and copular agreement in Czech. In Workshop on Copulas Across Languages, University of Greenwich, June.

Basilico, D. (2003). The topic of small clauses. *Linguistic Inquiry*, 34(1):1–35.

- Béjar, S. (2003). Phi-syntax: A theory of agreement. PhD thesis, University of Toronto.
- Béjar, S. and Kahnemuyipour, A. (2017). Non-canonical agreement in copular clauses. *Journal of Linguistics*, pages 1–37.
- Béjar, S. and Rezac, M. (2003). Person licensing and the derivation of PCC effects. *Amsterdam Studies in the Theory and History of Linguistic Science Series 4*, pages 49–62.
- Birner, B. J. (1994). Information status and word order: An analysis of English inversion. Language, pages 233–259.
- Biskup, P. (2009). The phase model and adverbials. PhD thesis, Universität Leipzig.
- Bondaruk, A. (2012). Person Case Constraint effects in Polish copular constructions. *Acta Linguistica Hungarica*, 59(1-2):49–84.
- Bondaruk, A. (2013). *Copular clauses in English and Polish: Structure, derivation and interpretation*. Wydawnictwo KUL.
- Bonet, E. (1991). *Morphology after syntax: Pronominal clitics in Romance*. PhD thesis, Massachusetts Institute of Technology.
- Cardinaletti, A. and Starke, M. (1994). The typology of structural deficiency on the three grammatical classes. *Working papers in linguistics*, 4(2):41–109.
- Chomsky, N. (1995). The Minimalist Program. MIT Press.
- Chomsky, N. (2000). Minimalist inquiries: The framework. In Martin, R., Michaels, D., and Urigereka, J., editors, *Step by Step*, pages 89–155. MIT Press, Cambridge, MA.

- Citko, B. (2008). Small clauses reconsidered: Not so small and not all alike. *Lingua*, 118(3):261–295.
- Clark, H. H. and Haviland, S. E. (1977). Comprehension and the given-new contract. *Discourse production and comprehension. Discourse processes: Advances in research and theory*, 1:1–40.
- Collins, C. (1997). Local economy.
- De Hoop, H. (1992). *Case configuration and NP interpretation*. PhD thesis, University of Groningen.
- Den Dikken, M. (2006). *Relators and linkers: The syntax of predication, predicate inversion, and copulas*, volume 47. MIT Press.
- Diesing, M. (1992). Indefinites. Cambridge, MA.
- Dikken, M. d. (2007). Phase extension contours of a theory of the role of head movement in phrasal extraction. *Theoretical linguistics*, 33(1):1–41.
- Doggett, T. B. (2004). *All things being unequal: Locality in movement*. PhD thesis, Massachusetts Institute of Technology.
- Doron, E. (1983). Verbless predicates in Hebrew. PhD thesis, University of Texas at Austin.
- Elbourne, P. D. (2005). Situations and individuals. MIT Press.
- Endriss, C. (2009). *Quantificational topics: A scopal treatment of exceptional wide scope phenomena*. Springer.
- Firbas, J. (1964). On defining the theme in functional sentence analysis. *Travaux linguistiques de Prague*, 1:267–280.

- Frey, W. (2004). A Medial Topic Position for German. *Linguistische Berichte*, pages 153–190.
- Frey, W. (2006). How to Get an Object-es into the German. In Form, Structure, and Grammar: A Festschrift Presented to Günther Grewendorf on Occasion of His 60th Birthday, page 159. Walter de Gruyter GmbH & Co KG.
- Geist, L. (1999). Russisch byt (sein) als funktionale und/oder lexikalische Kategorie. ZAS Papers in Linguistics, 14:1–39.
- Geist, L. (2008). Predication and equation in copular sentences: Russian vs. English. In *Existence: Semantics and syntax*, pages 79–105. Springer.
- Hajicová, E., Partee, B. B., and Sgall, P. (2013). *Topic-focus articulation, tripartite structures, and semantic content*. Springer Science & Business Media.
- Heggie, L. (1988). *The syntax of copular constructions*. PhD thesis, University of Southern California.
- Heller, D. (2002). On the relation of connectivity and specificational pseudoclefts. *Natural Language Semantics*, 10(4):243–284.
- Heller, D. (2005). *Identity and information: Semantic and pragmatic aspects of specificational sentences*. PhD thesis, Rutgers, The State University of New Jersey.
- Heller, D. and Wolter, L. (2008). That is Rosa: Identificational sentences as intensional predication. In *Proceedings of Sinn und Bedeutung*, volume 12, pages 226–240. Citeseer.
- Heycock, C. (2012). Specification, equation, and agreement in copular sentences. *The Canadian Journal of Linguistics/La revue canadienne de linguistique*, 57(2):209–240.

- Heycock, C. and Kroch, A. (1998). Inversion and equation in copular sentences. ZAS *Papers in linguistics*, 10:71–87.
- Heycock, C. and Kroch, A. (1999). Pseudocleft connectedness: Implications for the LF interface level. *Linguistic inquiry*, 30(3):365–397.
- Heycock, C. and Kroch, A. (2002). Topic, focus, and syntactic representations. In *Proceedings of WCCFL*, volume 21, pages 101–125.
- Higgins, F. R. (1973). *The pseudo-cleft construction in English*. PhD thesis, Massachusetts Institute of Technology.
- Hiraiwa, K. (2005). *Dimensions of symmetry in syntax: Agreement and clausal architecture*. PhD thesis, Massachusetts Institute of Technology.
- Holmberg, A. (1986). Word order and syntactic features in the Scandinavian languages and English. PhD thesis, University of Stockholm.
- Iatridou, S. and Kroch, A. (1992). The licensing of CP-recursion and its relevance to the Germanic verb-second phenomenon. In Working Papers in Scandinavian Syntax. Citeseer.
- Jacobson, P. (1994). Binding connectivity in copular sentences. In Semantics and Linguistic Theory, volume 4, pages 161–178.
- Kratzer, A. (2009). Making a pronoun: Fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry*, 40(2):187–237.
- Krifka, M. (2003). Bare NPs: Kind-referring, indefinites, both, or neither? In Semantics and Linguistic Theory, volume 13, pages 180–203.

- Kripke, S. A. (1972). Naming and necessity. In *Semantics of natural language*, pages 253–355. Springer.
- Kučerová, I. (2007). *The syntax of givenness*. PhD thesis, Massachusetts Institute of Technology.
- Kučerová, I. (2012). Grammatical marking of givenness. *Natural language semantics*, 20(1):1–30.
- Kučerová, I. and Neeleman, A. (2012). *Contrasts and positions in information structure*. Cambridge University Press.
- Kučerová, I. (2012). The T-Extension Condition. *Canadian Journal of Linguistics/Revue canadienne de linguistique*, 57(03):387–426.
- Kučerová, I. and Bartošová, J. (2015). Multiple-agree conspiracy: On PERSON, animacy and copular agreement. *Proceedings of the Forty-Sixth Annual Meeting of the North East Linguistic Society (NELS)*, 46.
- Levinson, S. C. (1983). Pragmatics.
- Longobardi, G. (2008). Reference to individuals, person, and the variety of mapping parameters. *Essays on nominal determination: From morphology to discourse management*, pages 189–211.
- Mahajan, A. K. (1990). The A/A-bar distinction and movement theory.
- Matushansky, O. (2008). A case study of predication. *Studies in Formal Slavic linguistics*. *Contributions from formal description of Slavic languages*, 6:213–239.

- Migdalski, K. M. (2006). *The syntax of compound tenses in Slavic*. PhD thesis, Universiteit van Tilburg.
- Mikkelsen, L. (2004). Reexamining Higgins taxonomy: A split in the Identificational class. In 79th Annual Meeting of the LSA in Boston.
- Mikkelsen, L. (2005). Copular clauses: Specification, predication and equation, volume 85. John Benjamins Publishing.
- Mikkelsen, L. (2006). Specificational copular clauses. *Kobe Area Circle of Linguistics, Kobe Shoin Women's University.*
- Mikkelsen, L. (2011). Copular clauses. *Semantics: An international handbook of natural language meaning*, 2:1805–1829.
- Milsark, G. L. (1974). *Existential sentences in English*. PhD thesis, Massachusetts Institute of Technology.
- Milway, D. (2016). Specifying why a doctor isn't mary. Manuscript, University of Toronto.
- Moltmann, F. (2013). Identificational sentences. Natural language semantics, pages 43-77.
- Moro, A. (1997). Dynamic Antisymmetry: Movement as a Symmetry-breaking Phenomenon. *Studia Linguistica*, 51(1):50–76.
- Moro, A. (2006). Copular sentences. The Blackwell companion to syntax, 2:1-23.
- Nevins, A. (2007). The representation of third person and its consequences for person-case effects. *Natural Language & Linguistic Theory*, 25(2):273–313.
- Panevová, J., Petkevič, V., Karlík, P., and Kučerová, I. (2015). Shoda. In *Nový encyklopedický slovník češtiny*.

- Partee, B. (1998). Copula inversion puzzles in English and Russian. In Formal Approaches to Slavic Linguistics: The Seattle Meeting, pages 361–395.
- Percus, O. and Sharvit, Y. (2014). Copular asymmetries in belief reports. *Poster presented at Semantics and Linguistics Theory (SALT)*, 24.
- Pereltsvaig, A. (2007). Copular sentences in Russian: A theory of intra-clausal relations. Springer.
- Preminger, O. (2011). *Agreement as a fallible operation*. PhD thesis, Massachusetts Institute of Technology.
- Ramchand, G. (1997). *Aspect and predication: The semantics of argument structure*. Oxford University Press.
- Ramchand, G. C. (1996). Two subject positions in Scottish Gaelic: The syntax-semantics interface. *Natural Language Semantics*, 4(2):165–191.
- Rapoport, T. R. (1987). Copular, nominal, and small clauses: A study of Israeli Hebrew.PhD thesis, Massachusetts Institute of Technology.
- Reinhart, T. (1981). Pragmatics and Linguistics: An Analysis of Sentence Topics in Pragmatics and Philosophy i. *Philosophica anc Studia Philosophica Gandensia Gent*, 27(1):53–94.
- Rezac, M. (2005). The syntax of clitic climbing in Czech. *Clitic and affix combinations*, pages 103–140.
- Richards, M. (2008). Quirky expletives. Agreement restrictions, pages 181–213.

- Richards, N. (1997). *What moves where when in which language?* PhD thesis, Massachusetts Institute of Technology.
- Romero, M. (2004). Tense and intensionality in specificational copular sentences. In *Semantics and Linguistic Theory*, volume 14, pages 271–288.
- Romero, M. (2005). Concealed questions and specificational subjects. *Linguistics and Philosophy*, 28(6):687–737.
- Rothstein, S. (1995). Small clauses and copular constructions. Small clauses, pages 27-48.
- Sauerland, U. (2005). Don't interpret focus! In *Proceedings of Sinn und Bedeutung*, volume 9, pages 370–84.
- Schwarzschild, R. (1999). GIVENness, AvoidF and other constraints on the placement of accent. *Natural language semantics*, 7(2):141–177.
- Sgall, P., Hajičová, E., and Panevová, J. (1986). *The meaning of the sentence in its semantic and pragmatic aspects*. D. Reidel Publishing Company.
- Sharvit, Y. (1999). Connectivity in specificational sentences. *Natural Language Semantics*, 7(3):299–339.
- Sharvit, Y. (2003). Tense and identity in copular constructions. *Natural Language Semantics*, 11(4):363–393.
- Soames, S. (1982). How presuppositions are inherited: A solution to the projection problem. *Linguistic inquiry*, 13(3):483–545.
- Sternefeld, W. and Müller, G. (1994). Scrambling as A-bar movement. Studies on Scrambling. Berlin: Mouton de Gruyter, pages 331–85.

- Sturgeon, A. (2008). The Left Periphery: The interaction of syntax, pragmatics and prosody in Czech. John Benjamins Publishing Company.
- Sudo, Y. et al. (2012). On the semantics of  $\phi$ -features on pronouns. PhD thesis, Massachusetts Institute of Technology.
- Szczegielniak, A. (2014). Copular clauses in English and Polish: Structure, derivation, and interpretation by Anna Bondaruk. *Journal of Slavic Linguistics*, 22(2):293–312.

Tomaszewicz, B. (2009). Subjunctive mood in Polish. Citeseer.

Uličný, O. (2000). Instrumentál v struktuře české věty. Nakladatelství Karolinum.

- Veselovská, L. (1995). Phrasal Movement and X-Morphology: Word Order Parallels in Czech and English Nominal and Verbal Projections. PhD thesis, Palackỳ University, Olomouc.
- Veselovská, L. (2003). Analytické préteritum a opisné pasivum v češtině: dvojí způsob saturace silného rysu <+ v> hlavy v. *Sborník filozofické fakulty Masarykovy univerzity*.
- Veselovská, L. (2004). The extended verbal projection in Czech: Three variants of the verb'be'. *Formal Description of Slavic Languages*, 5.
- Veselovská, L. and Karlík, P. (2004). Analytic passives in Czech. Zeitschrift fur Slawistik, pages 163–235.
- von Fintel, K. (2008). What is presupposition accommodation, again? *Philosophical perspectives*, 22(1):137–170.
- Zamparelli, R. (2000). *Layers in the determiner phrase*. PhD thesis, University of Rochester.