From: Jiri Hana (2007). Czech Clitics in Higher Order Grammar. PhD Thesis, The Ohio State University.

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# CHAPTER 4

# CZECH SPECIAL CLITICS

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In this chapter, we provide an informal analysis of a certain class of Czech clitics. Many of the aspects presented here are then analyzed in Higher Order Grammar in the next chapter.

Clitics are units that are transitional between words and affixes, having some properties of words and some properties of affixes. Czech clitics (e.g. Avgustinova and Oliva 1995; Fried 1994; Hana 2004; Rosen 2001; Toman 1980, 1986, 1996, 2000), Slavic clitics (e.g. Franks and King 2000; Penn 1999*a*) and clitics in general (e.g. Anderson 1993; Zwicky 1977), present a great challenge to existing formalisms. Their ordering properties are often complex and quite different from the properties of both normal words and affixes. Also, they are subject to constraints coming from various levels of grammar – syntactic, morphological, phonological, pragmatic and stylistic.

This chapter is organized as follows: first we provide a brief discussion of clitics in general across languages, then we introduce the basic properties of Czech clitics; then we characterize the set of Czech clitics; identify their position within the clause and then the order of clitics within this cluster; and finally we analyze so-called clitic climbing. This chapter is by no means meant to be an exhaustive study of Czech clitics. Instead it focuses on core problems and especially ordering problems that are known to be hard to handle in other frameworks.

In the examples, all relevant clitics are given in italics for easier orientation. Often, numerical subscripts show the relation between clitics and the word governing them; the subscripts increase with the degree of embedding of the governors. Clitic auxiliaries have subscript zero. Otherwise the

examples and their sources are presented in the same way as in the previous chapter, see Appendix B for more details.

## 4.1 Clitics in General

Clitics have attracted attention for a long time. They are units that are transitional between words and affixes, having some properties of the former and some of the latter. The exact mix of these properties varies considerably across languages. This means there is a whole spectrum of units between clear affixes and clear words. Delimitation of the set of clitics, and if they are treated as a separate category at all, is to a great extent an arbitrary or theory-internal decision. In the next chapter, we treat clitics as special words, with some affix-like properties, but nevertheless words.

Wackernagel (1892) was one of the first to study clitic placement. He observed that, in Greek, enclitics follow the first word of the sentence and suggested that this was a rule in Proto-Indo-European. In recent decades, there has been a been significant amount of work on clitics in general (esp. Anderson 1992; Halpern 1995; Klavans 1985; Zwicky 1977) – see (Nevis et al. 1994) for a comprehensive list.

A clitic must attach to an adjacent word (possibly through another clitic), its *host*. Typical clitics are prosodically dependent on their host. A clitic following its host is called an *enclitic*; a clitic preceding it is called a *proclitic*. In addition, there are also *mesoclitics* occurring between the host and its affixes and *endoclitics*, analogous to infixes, occurring in the middle of their hosts. However, neither mesoclitics nor endoclitics are discussed in this dissertation.<sup>30</sup>

Zwicky (1977) divides clitics into two classes: *simple* clitics and *special* clitics.<sup>31</sup> A simple clitic is a clitic whose position within the sentence is the same as position of non-clitic words of the same class. Syntactically, simple clitics behave as other non-clitic words; the only difference is phonological. For example, English *has* and 's have the same word order properties. The position of special clitics, on the other hand, is determined by special constraints, different from the constraints determining the position of non-clitic words. The purpose of this chapter is to describe and analyze such special behavior of Czech special clitics, we leave simple clitics aside.

 $<sup>^{30}</sup>$ The status of mesoclitics and endoclitics is rather controversial. Klavans (1995) claims they are impossible. On the other hand, Harris (2002) argues that endoclitics do exists, providing evidence from Udi.

<sup>&</sup>lt;sup>31</sup>He also uses the term *bound words* for phrasal clitics, for example English possesive 's. However as Klavans (1982, p. 33) and others pointed out, the distinction between simple clitics and bound words is not clear.

## 4.1.1 Placement and other basic properties of clitics

Anderson (1992) identifies six places relative to some domain where special clitics can occur:

- Initial clitics.
- Final clitics. For example, English possessive -s within NP.
- Second-position clitics the clitics follow some initial element. For example, Warlpiri auxiliaries within certain S (Donohue and Sag 1999), Slavic clitics within S.
- Penultimate-position clitics the clitics precede some final element. For example, Nganhcara pronominals within S (Anderson 1994).
- Pre-head clitics. For example, Romance pronominal clitics.
- Post-head clitics. For example, Romance clitics in certain constructions, e.g., imperatives.

Clitics can also be characterized in terms of the the following three parameters:

- Anchor. The clitic is placed by reference to the first, head, or last element;
- Orientation. It precedes or follows the anchor.
- Domain (or scope). It is placed within a certain domain, e.g., S, VP, NP.

Table 4.1 shows how the combination of the anchor and orientation parameters corresponds to the 6 categories of (Anderson 1992).

Type of Clitics (Anderson 1992)	Anchor	Orientation	Schematically
initial	first	precedes	[ clitic anchor]
final	last	follows	[anchor clitic]
second-position	first	follows	[ anchor clitic]
penultimate-position	last	precedes	[clitic anchor]
pre-head	head	precedes	$[\ldots clitic head \ldots]$
post-head	head	follows	$[\dots$ head clitic $\dots]$

Table 4.1: Characterization of clitic position

The value of the orientation parameter usually determines the phonological attachment (proclitics precede their anchor, and enclitics follow the anchor). However, as Klavans (1985) shows, this

is not always the case. Thus she introduces an additional parameter expressing the direction of phonological *attachment* (*left* or *right*). For example, Kwakwala determiners are NP initial clitics (domain=NP, anchor=first, orientation=precedes) but attach to the left, i.e., to the word preceding the NP (Klavans 1985, p. 106). Consider the sentence in (1). Syntactically, xa 'OBJECT' and sa 'OBLIQUE' mark the following words, but phonologically they attached to the preceding words (this is marked by =). This means the Kwakala determiners are syntactically proclitics, but phonologically enclitics. In Klavans' words, they are clitics with *dual citizenship*.

(1) nəp'idi-da gənanəm =xa guk<sup>w</sup> =sa t'isəm throw-DEIC child OBJ house OBL rock
'The child hit the house with a rock by throwing.' [Klavans 1985 (32)]

We would also add that in the case of the second and penultimate position clitics, it is necessary to specify the nature of the *element* – for example a word, a constituent, or a fronted expression.

## 4.2 Basic Characteristics of Czech special clitics

Czech special clitics (henceforth just clitics<sup>32</sup>), like most other Slavic clitics, fall into the category of second-position clitics. They are another case of clitics with dual citizenship. Syntactically they are enclitics, following their anchor, a certain clause-initial unit, usually the first constituent. However, phonologically, they can be both enclitics and proclitics, depending on circumstances (see §4.2.2). This means the above parameters do not have to be constant for a given language or even for a given clitic.

In this section, we introduce some basic properties of Czech clitics. We show that they indeed behave differently in respect to the rest of the grammar than normal words or affixes do. We briefly talk about their phonological properties, position within the sentence, their position to each other, so-called clitic climbing and finally we will briefly discuss them from a historic perspective. The rest of the chapter then discusses most of these problems in more detail.

 $<sup>^{32}</sup>$ Czech also has clitics that are not special, i.e., they are ordered as other expressions of the same category (see §4.1 for more discussion of various types of clitics). For example, clitic prepositions immediately precede their NP, as non-clitic prepositions do. The negative marker *ne*- can be considered a clitic because unlike affixes it attaches to stems of various categories, but otherwise acts as a prefix. They are not discussed in this dissertation exactly for the reason that their word-order properties are straightforward.

#### 4.2.1 Clitics and word order

Clitics differ from the rest of Czech grammar in two important dimensions:

- Word-order freedom: Czech word order is very free as regards the possibility of moving entire phrases – virtually any scrambling is possible. By contrast, the position of clitics is very restricted – they occur most frequently in so-called Wackernagel or second position (Wackernagel 1892) and even their ordering within this position is for the most part fixed.
- Constituent discontinuity:<sup>33</sup> While the order of constituents is mostly free, scrambling resulting in discontinuous phrases is rather rare.<sup>34</sup> As we mention in (Hana 2004), clitics, however, are frequently associated with the presence of discontinuous phrases. This stems from the fact that, while their position is restricted, the positions of their governors, if any, are not. There are various factors that make a sentence with clitics more or less acceptable, but, perhaps surprisingly, the number of discontinuities caused by the clitics is not among them.

The rigidity of clitic placement can be illustrated by comparing clitics to full NPs. The indirect object (*Petrovi* 'Peter<sub>D</sub>') in sentence (2a) can also occur in any other place in that sentence (except within the PP) – for example in the theme position at the beginning of the sentence, as in (2b):

- (2) a. Dal Petrovi psa k vánocům.
   gave Peter<sub>D</sub> dog<sub>A</sub> for Christmas
   'He gave Peter a dog for Christmas.'
  - b. Petrovi dal psa k vánocům. Peter<sub>D</sub> gave  $dog_A$  for Christmas 'He gave Peter<sub>C</sub> a dog for Christmas.'

However, when the noun phrases here are replaced by the corresponding weak pronouns (one type of clitic), the above word-order freedom is lost – compare (2b) with the ungrammatical (3b):

<sup>&</sup>lt;sup>33</sup>For dependency grammar, the most prominent linguistic tradition in the analysis of Czech (Šmilauer 1947, more formally, e.g., Sgall et al. 1986), discontinuous constituents correspond to non-projective dependency trees (Hays 1964, p. 519, allegedly already in Hays 1960.)

<sup>&</sup>lt;sup>34</sup>(Hajičová et al. 2004, ftn. 1) report statistics for the training part of the layer of surface-syntax (so-called analytical layer) of PDT. According to them, about 1.9% of word dependencies in the analytical layer are non-projective and about 23% of sentences contain one or more non-projectivities. Note, however, that existence of many of these non-projectivities is dependent on the chosen linguistic theory or annotation scheme.

(3) a. Dal mu ho k vánocům. gave  $\lim_{D} \lim_{A}$  for Christmas 'He gave it to him for Christmas.'

> b. \* Mu dal ho k vánocům. him<sub>D</sub> gave him<sub>A</sub> for Christmas

The clitics themselves have a fixed position within a clitic cluster. So, while the order of the direct object (*psa* 'dog') and the indirect object (*Petrovi* 'Peter<sub>D</sub>') in sentence (2a) can be switched and still have the resulting sentence (4a) be fully grammatical, the corresponding change of word order in sentence (3a), with its clitics, results in the ungrammatical sentence (4b).

- (4) a. Dal psa Petrovi k vánocům. gave  $dog_A$  Peter<sub>D</sub> for Christmas 'He gave Peter a dog for Christmas.'
  - b. \* Dal ho mu k vánocům. gave  $him_A him_D$  for Christmas

The occurrence of multiple discontinuous phrases associated with clitics is also interesting. Sentence (5) is a normal sentence that can occur in everyday conversation. Yet the clitics *jsem*, *se*, *mu*, *to* here participate in several discontinuities, as the phrase structure in Figure 4.1 shows.

In (6), an analogous sentence without clitics (though contentwise a little bit odd), pronominal clitics are replaced by full NPs (*auto* 'car' for *to* 'it', *Petrovi* 'Petr<sub>D</sub>' for *mu* him<sub>D</sub>), the past tense formed with clitic auxiliary *jsem* is replaced by the future nonclitic auxiliary *budu*, and the reflexive clitic *se* is eliminated by replacing the reflexive verb *snažil se* 'try' by non-reflexive *zkoušet* 'try'. The sentence still contains the contrasted VP headed by *opravit* 'repair<sub>inf</sub>', but as can be seen in Figure 4.2, the structure is much simpler.

- (5) Opravit jsem se mu to včera snažil marně. to-repair  $\operatorname{aux}_{1sg} \operatorname{refl}_A \operatorname{him}_D \operatorname{it}_A$  yesterday tried fruitlessly 'I tried to repair<sub>C</sub> it for him yesterday WITHOUT SUCCESS<sub>R</sub>.'
- (6) Opravit Petrovi auto budu zítra zkoušet marně.
  to-repair Petr<sub>D</sub> car<sub>A</sub> will<sub>1sg</sub> tomorrow try<sub>inf</sub> fruitlessly
  'I will be trying to repair the car for Peter<sub>C</sub> tomorrow WITHOUT SUCCESS<sub>R</sub>.'

## 4.2.2 Phonology – Enclitics? Proclitics? Either? Neither?

Typically, Czech (2P) clitics are phonological enclitics. However there are systematic exceptions to this. Already Trávníček (1951, §103 2b) said that, after a pause, clitics procliticize to the following

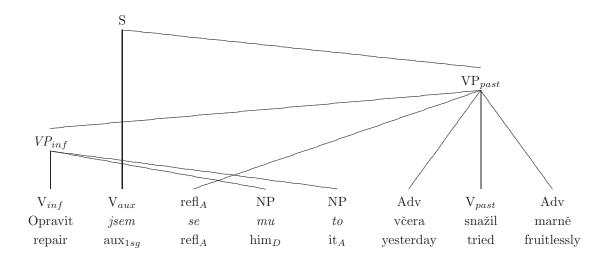


Figure 4.1: The syntactic structure of (5)

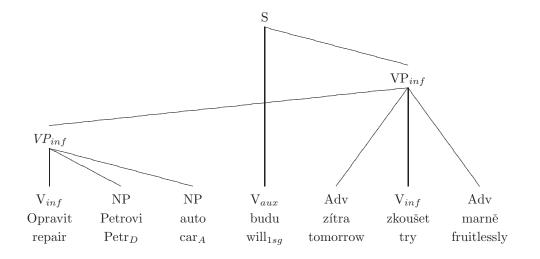


Figure 4.2: The syntactic structure of (6)

word. He claimed this was rare and unusual, which is not true in current Czech. A pause follows a heavy constituent (7), parenthetical (8), a contrastive theme (at least in some cases), or an initial constituent containing a clitic cluster (11). For example, in (7a), the clitic *se* forms a prosodic word with the material on its right, i.e., it procliticizes. It cannot encliticize, as (7b) shows (| marks a prosodic boundary).

- (7) a. Knihy, které tady vidíte, | se dnes platí zlatem. books which here see<sub>2pl</sub> refl<sub>A</sub> today pay with-gold<sub>I</sub>
  'The books you can see here are paid for with gold today.' [Toman 1996]
  b. \* Knihy, které tady vidíte, se | dnes platí zlatem. [Toman 1996]
- (8) Ve středu, | teď se podržte kolegyně, | *jsem* navštívila hypermarket Globus. on Wednesday, now refl<sub>A</sub> hold<sub>2pl</sub> colleagues<sub>fem</sub>,  $aux_{1sg}$  visited hypermarket Globus 'On Wednesday, and now hold on colleagues, I visited the supermarket Globus.' [ksk]

It is worth noting that, in Common Czech, clitics can occur even sentence-initially. The clitic *se* in (9a) and *jsme* in (9b) are obviously not enclitics. In Common Czech, sentence-initial clitics are not frequent but are possible, although they have a distinct "feel" and usually express (ostentatious) familiarity. They are are not approved in Literary Czech (if that's of any linguistic significance). Note however that (9b) was used by a governmental official on TV news.

- (9) a. Se ví. refl<sub>A</sub> knows<sub>3sg</sub> Of course.
  - b. (.. objevují [se] nějaké dokumenty, o kterých my jsme nevěděli.)

(... documents that we did not know of are surfacing.)

Jsme se domnívali, že je kompletní.  $aux_{1pl}$  refl<sub>A</sub> thought that is complete 'We thought, it [=the file] was complete.' [www.ceskenoviny.cz, 2006-05-22]

On the other hand, Czech clitics also cannot always be proclitics, as is clear from (10).

(10) Směju se. Laugh<sub>1sg</sub> refl<sub>A</sub> I am laughing.

Toman (1996) shows that whether a clitic procliticizes or encliticizes is not a lexical property of the clitic. The sentence in (11) contains the same clitic ji 'her<sub>A</sub>' twice in two different clitic clusters (see §4.6 for more information on multiple clitic clusters). As the object of the verb *nudilo*, it occurs in

the main cluster by ji. In the other case, it is a part of the phrase poslouchat ji – the subject of the sentence. The prosodic boundary is identical with the syntactical boundary of the subject phrase, following the first ji. Therefore, the first ji encliticizes, while the second procliticizes.<sup>35</sup>

- (11) a. Poslouchat<sub>2</sub>  $j_{i_2}$ ,  $| by_0 j_{i_1}$  as nudilo. to-listen her<sub>A</sub> would<sub>3</sub> her<sub>A</sub> probably bore. It would perhaps bore her (e.g., Ann) to listen to her (e.g., Mary).
  - b. \* Poslouchat<sub>2</sub> |  $ji_2$ ,  $by_0 ji_1$  as nudilo.
  - c. \* Poslouchat<sub>2</sub>  $ji_2$ ,  $by_0 \mid ji_1$  as nudilo.
  - d. \* Poslouchat<sub>2</sub>  $ji_2$ ,  $by_0 ji_1$  | asi nudilo. [Toman 1996]

Oliva (1998) even argues that clitics do not have to be a part of a larger prosodic unit at all and can be phonologically independent. According to him, in the most natural pronunciation of (12), the prosodic boundaries both precede and follow the clitic *bychom* 'would<sub>1pl</sub>'.

However, we do not think their example can be generalized. First, many consulted speakers found having the prosodic boundary on both sides of *bychom* only marginally acceptable and instead preferred to procliticize it with jak.<sup>36</sup> Second, it seems that even such marginal acceptability is limited only to conditional clitics; it does not seem to be possible for, say, *se* as (13) shows. This may be related to their special status within the set of clitics. As discussed in §4.3.4.2, they can be contrasted or rhematic. Moreover, up to about century or so ago they were also used as nonclitic conjunctions to express purpose (Trávníček 1951, §103 2c). Although this usage is now archaic and has been replaced by the conjunction *aby*, it is probably still part of our passive competence and can thus influence phonological properties of the clitic in rare constructions like the one in (12). In sum, it does not seem that (12) is an example of some general possibility of Czech clitics to be phonologically independent.

(12) My všichni, co spolu chodíme, | bychom, | jak říká Zilvar z chudobince, měliwe all, that together walk, would<sub>1pl</sub>, as says Zilvar from poorhouse, should<sub>pl</sub>držet za jeden provaz.to-hold by one rope

'As Zilvar from the poorhouse says, all of us friends should stick together.' [Oliva 1998]

 $<sup>^{35}</sup>Asi$  can but need not be a clitic in this example, see §4.3.6.

<sup>&</sup>lt;sup>36</sup>However, some speakers, including A. Rosen, consider the variant with both boundaries fully acceptable.

- (13) a. ?? My všichni, co spolu chodíme, | se, | jak říká Zilvar z chudobince, we all, that together walk, refl<sub>A</sub>, as says Zilvar from poorhouse, nemáme čeho bát.
  not-have<sub>1pl</sub> of-what to-be-scared<sub>inf</sub>
  'As Zilvar from the poorhouse says, all of us friends have nothing to be scared of.'
  - b. My všichni, co spolu chodíme, | se, jak říká Zilvar z chudobince, nemáme čeho bát.

## 4.2.3 Position

We refer to the word-order position of sentential clitics within the clause as 2P. While formally, this is just a label, it is motivated by the fact that in most of the cases, this position is really the second position within the clause, in the sense of immediately following the first clausal constituent as in (14) or the head of the clause as in (3a). However, as we discuss in §4.4, there are many deviations. 2P can be preceded by (i) a complementizer + another constituent, (ii) a multi-constituent contrastive theme, and (iii) a complex adjunct (e.g., from - to expressions), sometimes considered to be individual constituents on the clausal level. These cases are not necessary disjoint. We refer to the material preceding clausal clitics as 1P (in the case of the embedded clauses, it is slightly more complicated; see §4.4.6).

	1P			2P			
(14)	Příští	sobotu	bych	mu	to	mohl	dát.
	next	Saturday	would $1sg$	$\lim_{D}$	$\mathrm{it}_A$	could	$\operatorname{give}_{inf}$

'Next Saturday, I could give it to him.'

## 4.2.4 Multiple clitic clusters and climbing

Above, we talked about the position of clitics relative to the finite clause domain. We call this sequence of clitics the main or clausal clitic cluster. However a clause can contain additional embedded clusters in the domain of embedded infinitive VPs, NPs or APs, etc. In this case the clitics in general do not occur in second position; Toman (2000) uses the term clitics in non-canonical positions. In (15a), se is in the clausal cluster, mu in the cluster of the VP pomoct mu ho najút and ho in the cluster of the VP najút ho. Recall that a verb and clitics it governs are labeled with the same numerical subscripts increasing with the depth of verb embedding. Clitic auxiliary verbs get the zero subscript.

Clitics with more embedded governors can, under certain circumstances, occur in the clitic clusters of the larger domains, possibly in the clausal one – see (15b). This is traditionally referred to as

clitic climbing. We analyze clitic climbing in more detail in §4.6; for now it is enough to say that clitic climbing is subject to several constraints and various preferences. For the following discussion it is also important to note that two clitic clusters can be adjacent, as in (16). The clitic mu is in the cluster of the VP pomoct mu, which in turn serves as the host for the clausal clitic cluster containing se. Phonologically mu is an enclitic while se is a proclitic, ' and there is a potential prosodic boundary between them.

- (15) a. Všichni  $se_1$  snažili<sub>1</sub> [ $mu_2$  pomoct<sub>2</sub> [ $ho_3$  najít<sub>3</sub>.]] all refl<sub>A</sub> tried him<sub>D</sub> help<sub>inf</sub> him<sub>A</sub> find<sub>inf</sub> 'Everybody tried to help him to find it.'
  - b. Všichni  $se_1 mu_2 ho_3 \operatorname{snažili}_1 [\operatorname{pomoct}_2 [\operatorname{najit}_3]].$
  - c. [Pomoct<sub>2</sub> mu<sub>2</sub> ho<sub>3</sub> [najít<sub>3</sub>]] se<sub>1</sub> snažili<sub>1</sub> všichni.
- (16)  $[Pomoct_2 = mu_2] | se_1 = snažili_1 všichni.$ help<sub>inf</sub> him<sub>D</sub> refl<sub>A</sub> tried all 'Everybody tried to help him.'

#### 4.2.5 Diachronic aspects

The constraints on the placement of Czech clitics have changed over time. According to Pavel Kosek (p.c.), the placement of Czech clitics after the first constituent is a rather new development; clitics probably did not occur in this position even in the early 1300's. In Old Czech and in Old Slavonic, clitics usually encliticized to the first phonological word, as in (17a) (see also Trávníček 1962, p. 149). Non-functional clitics also often accompanied the finite verb, usually following it as in (17b), sometimes preceding it, as in (17c). According to Večerka (1989) the Wackernagel position after the first word is the primary position, while according to P. Kosek (p.c) the verb adjacent position was more common. Moreover, the modern accusative pronominal clitics and the conditional auxiliary were probably not constant clitics in the early stages of Czech.

(17)	a.	ten sĕ pes počĕ radovati that $\operatorname{refl}_A$ dog started to-be-happy	
		'that dog started to be happy'	$[{\rm Trávníček}\ 1962,$ p. 149/passion l $(1300{\rm 's})]$
	b.	Gdyž přiblížieše sě Ježúš k Jeruzalému When approached $\mathrm{refl}_A$ Jesus to Jerusalem	
		'When Jesus approached Jerusalem $\dots$ '	[P. Kosek p.c./Mt 21,1-9]

c. Přědmluva Mistra Vavřincova v Kniehy snového vykládanie tuto sě počíná ... foreword master Vavřinec to Books of-dream interpretation here refl<sub>A</sub> starts 'Here starts the foreword of Master Vavřinec to the Interpretation of Dreams ...'
[P. Kosek p.c./Vavřinec z Březové: Foreword to Snář ... (early 1400's)]

While placement of clitics after the first prosodic word is still possible in modern Serbo-Croatian (Halpern 1995), this is in general not true in modern Czech. Czech clitics do follow a certain clause initial unit. However, what this unit is determined mainly by syntax – by constituent structure and to certain extent by information structure – and only marginally by phonology. A similar development happened in other Slavic languages, including Slovak or Slovenian. So it is possible to say that historically, Slavic clitics could be roughly characterized by the following parameter configuration: domain=S, anchor=first, orientation=follows, element=phon-word and attachment=left. In Modern Czech, two parameters have different values: element=constituent and attachment=left/right. However the value of the element parameter is a simplification; there are many exceptions, as we briefly mentioned above and discuss in more detail below.

#### 4.3 The set of Czech clitics

The set of Czech clitics is similar to that in many other Slavic languages: so-called weak pronouns, certain auxiliaries and some particles or adverbs. Clitics can be categorized as either *constant* or *inconstant* (see e.g., Karlík et al. (1996), already in Trávníček (1951,  $\S103$ ,  $\S104$ )).<sup>37</sup> Constant clitics always behave as clitics; inconstant clitics can function as clitics but can also function as normal words (that is they can occur outside of a clitic cluster).<sup>38</sup>

#### 4.3.1 Testing clitic-hood

Enumerating the exact set of clitics is far from trivial and probably impossible. The set is often different for different authors,<sup>39</sup> but the core stays the same – weak personal pronouns (including

<sup>&</sup>lt;sup>37</sup>Avgustinova and Oliva (1995) use the terms *pure clitics* and *semi-clitics*.

 $<sup>^{38}</sup>$ An inconstant clitic can be seen as a single word functioning two different ways or as two distinct words. The former view is implicit in most analyses of clitics; the latter view is adopted by for example Avgustinova and Oliva (1995) or Esvan (2000). We do not see any benefit in resolving this problem. As is seen in the following chapter, we choose the former possibility, but nothing hinges on that choice.

 $<sup>^{39}</sup>$ For example, to is considered to be a clitic by (Karlík et al. 1996, p. 649), but not by (Rosen 2001, p. 212). All traditional sources list li 'whether' alongside the other 2P clitics, but this is disputed by (Fried 1994) and (Avgustinova and Oliva 1995). (Rezac 2005) leaves out the copula and most of the fringe clitics.

reflexives), past and conditional auxiliary. Inclusion of other clitics depends on the author: li 'if', to 'it', other auxiliaries and various short particles and adverbs, etc. are all sometimes included.

To identify that a particular unit is a clitic and not a regular affix or word, one has to obviously show it has properties different from those of normal affixes and properties different from those of normal words. Various criteria for clitic-hood have been suggested (e.g. Carstairs 1981; Klavans 1995); we use tests based on a subset of properties suggested by (Zwicky 1977, 1985; Zwicky and Pullum 1983).

It is relatively easy to distinguish all the clitic candidates from affixes. With the exception of -li 'if' and -s 'aux<sub>2sg</sub>' in Official Czech, all candidates for clitic-hood discussed below can be hosted by any syntactic category. Affixes are selective of the stems they attach to. Pronominal clitics, in addition, often climb from embedded clauses (§4.6); such freedom of movement is also not found for affixes.

It is far more challenging to decide whether a particular candidate is a clitic or a normal word. Many authors use as the main or only criterion of clitic-hood the inability of clitics to carry accent on their own. However, as Zwicky (1985) remarks, this is the most unreliable test. First, there are many words that are not clitics and usually occur without accent. Second, (Klavans 1982, §2) shows that some clitics can bear accent under certain circumstances. In Czech, this is the case for proclitic prepositions. The conditional auxiliary can even bear contrastive accent – see §4.3.4.2. Moreover, unlike in many other languages, prosody plays only a secondary role in the grammar of Czech clitics – their direction of prosodic dependence is unspecified (§4.2.2), and prosody is nearly irrelevant in their placement. Obviously, the test is also hard to apply to inconstant clitics. For these reasons, we decided to exclude the test of prosodic deficiency. We consider a word to be a clitic when at least one of the following tests holds. The first two tests are useful only for identifying constant clitics, the third test can be used to identify (some) inconstant clitics. Note that while the features of clitics motivating these tests are rather universal, the tests themselves are dependent on the interplay of those features with the rest of the Czech grammar, and are thus suited only for identification of Czech clitics and not clitics in general.

1. [\*Alone] Clitics cannot occur in isolation, e.g., as an answer to a question.

In this respect clitics are similar to bound morphemes. The test is an instantiation of a more general *binding* principle formulated by (Zwicky 1977, p. 2): "Bound morphemes are affixes". The strength of the binding principle is language and clitic dependent. For example, in Czech the negative proclitic *ne*- or the enclitic *-li* (see this section below) cannot be separated from their host by a parenthetical. On the other hand, Czech 2P clitics can be preceded by a

parenthetical. (However, in that case they attach phonologically to the following word, see  $\S4.4.$ )

2. [\*Final] Clitics cannot occur sentence-finally.

Clitics cannot stand sentence finally, unless the final position is 2P at the same time (the example must be constructed in such a way that such interpretation is impossible). This is a consequence of a more general property of clitics: clitics have more restricted distribution than normal words (although not as much as affixes). As mentioned in §4.1, in Czech, they occur in so-called 2P in the sentence. Because it is not easy to exactly identify that position, we use the slightly weaker test above.

It is also true that, apart from a very colloquial register (§4.2.2), clitics cannot be sentenceinitial. However, it is sometimes hard to separate this and other registers when making grammaticality judgments in less common cases. Note that this restriction does not follow from the prosodic deficiency of clitics. As mentioned above, Czech clitics do not need to lean phonologically on the expression preceding them; they can procliticize when preceded by a prosodic boundary.

3. A member of a clitic cluster is a clitic.

This property can be instantiated in two specific tests:

(a) [1P-Cl] A word between 1P and a clitic is a clitic.

When true, the candidate is in 2P - (i) because it follows 1P, it is either in 2P or follows an empty 2P; (ii) since the candidate is followed by a clitic, 2P cannot be empty. One must make sure the candidate actually follows 1P and is not part of it. Using an uncontrasted proper name for 1P is a safe bet; the candidate cannot form a constituent with it, and none of the multiconstituent cases for 1P discussed in §4.4.4 are possible. This test was used by Rosen (2001, p. 208). This test is not able to identify clitics that are either required to be on the end right of the cluster, or that are separated from the end by such clitics. Unlike the previous two tests, this test can identify inconstant clitics.

(b) [Cl-Cl] A word between two clitics without possibility of any prosodic boundaries between the three, is a clitic.

This means all three words belong to the same clitic cluster and thus obviously all are clitics. It must be clear that the two surrounding clitics belong to the same cluster, see §4.6 for discussion of multiple clusters.

		dative		genitiv	e/accusative			
	weak	either	strong	weak	either	strong		
1sg	mi	mně [mpɛ]			mě [mnε]	mne*		
2sg	ti [cɪ]		tobě [tobjε]	tě [cɛ] ho, jej*		tebe		
3sg m	mu		jemu	ho, jej*		jeho		
3sg n	mu		jemu	ho, jej <sup>*</sup> , je <sup>*</sup> <sub>acc</sub>		jeho		
3sg f		jí [jiː]			ji [jɪ]			
1pl		nám			nás			
2pl		vám			vás			
3pl		jim			$\mathrm{jich}_G/\mathrm{je}_A$			
	$(* - \text{rare; } je_A - \text{only in accusative, } jich_G - \text{only in genitive})$							

 Table 4.2: Personal pronouns in genitive, dative and accusative

However, as is evident from the rest of this section, the boundary between clitics and non-clitics is often fuzzy. There are some obvious cases of clitics such as the weak personal pronouns but then there are less clear cases, especially among inconstant clitics. In one view, any short word without much lexical content can be considered an inconstant clitic – under certain conditions, when deaccented in theme, it can appear at the boundary of the clitic cluster. We discuss some of these borderline cases in §4.3.6. However, we are more interested in the complex word-order properties of clitics than in exactly enumerating them. For this purpose it is enough to limit the set of clitics to the more obvious cases.

#### 4.3.2 Personal Pronouns

The Czech personal pronouns are summarized in Table 4.2. It is traditional to distinguish weak and strong forms of pronouns. Weak forms, e.g., ti 'you<sub>sgD</sub>', are prototypical constant clitics, strong forms, e.g.,  $tob\check{e}$  'you<sub>sgD</sub>', are never clitics.<sup>40</sup> Forms that can be either weak or strong, e.g.,  $n\acute{am}$  'us<sub>D</sub>', are inconstant clitics. Initial *j*- changes to  $\check{n}$ - [ŋ] after a preposition,<sup>41</sup> e.g., jej 'him<sub>G/A</sub>' vs. bez  $n\check{ej}$  'without him<sub>G</sub>'.

Originally,  $mn\check{e}$  'me<sub>D</sub>' (pronounced [mŋɛ], the same way as  $m\check{e}$  'me<sub>G/A</sub>') was only a strong pronoun, but now is frequently used as a weak one, too, as (18) shows.

<sup>&</sup>lt;sup>40</sup>According to Veselovská (p.c.), in Moravia, the eastern region of Czechia, mu 'him/it<sub>D</sub>' and ho 'he/it<sub>GA</sub>' (and in some regions also mi 'me<sub>D</sub>' and ti 'you<sub>D</sub>') are used as strong pronouns, Bohemian Czech strong pronouns being rarely used.

<sup>&</sup>lt;sup>41</sup>In spelling,  $\check{n} + i \to ni$ :  $ji \to ni$  'her<sub>GA</sub>',  $ji \to ni$  'her<sub>D</sub>',  $jich \to nich$  'them<sub>G</sub>',  $jim \to nim$  'them<sub>D</sub>'; and  $\check{n} + e \to n\check{e}$ :  $jej \to n\check{e}j$  'him/it<sub>GA</sub>',  $jeho \to n\check{e}ho$  'him/it<sub>GA</sub>',  $jemu \to n\check{e}mu$  'him/it<sub>D</sub>',  $je \to n\check{e}$  'it<sub>A</sub>/them<sub>A</sub>'.

(18) Dej  $mi/mn\check{e}$  to! Give me<sub>D</sub> it 'Give it to me!'

In Common Czech, dative and accusative forms in the first and second person singular are sometimes used interchangeably – for example mi 'me<sub>D</sub>' is sometimes used as an accusative clitic (20).<sup>42</sup>

(20) Vidíš  $m \check{e}/mi$ ? See  $m e_A$ 'Do you see m e?'

In the 3rd person feminine, this neutralizations is complete – the pronoun can be pronounced with short vowel [ji] and long vowel [jii] in both cases, although the long form is more common. The pronunciation and spelling of Official Czech must be learnt at school. Still many speakers, including myself, have to pause and think when they are required to use the "correct" form. On the other hand, mne 'me<sub>G/A</sub>', jej 'he/it<sub>G/A</sub>' and je 'it<sub>A</sub>' are formal and are rarely used; mě, ho and ho, respectively are used instead. However, the preposition forms něj and ně are common. Note also that in Czech the demonstrative pronoun to, an inconstant clitic, is often used where English would use a 3rd person personal pronoun.

Examples (21 - 23) show the difference between the three types of personal pronouns. From (21), it is obvious that strong pronouns  $tob\check{e}$  'you<sub>sgD</sub>' and inconstant ji 'her<sub>D</sub>' can be rhematic and stand sentence-finally, similarly to full NPs, while weak pronouns cannot. Instead, weak pronouns must occur in 2P, roughly following the first constituent, as in (21b) or (22). The sentence in (22) also shows that ji can be a clitic. Similarly to ti 'you<sub>sgD</sub>', a constant clitic, it occurs in the middle of a clitic cluster, surrounded by constant clitics bych 'would<sub>1sg</sub> and ho 'him<sub>A</sub>'. This is not possible for  $tob\check{e}$  'him<sub>D</sub>', a strong pronoun, or for a full NP. Similarly, (23) shows that while NPs and strong pronouns can occur in isolation, weak pronouns cannot.

[syn5/M. Viewegh: Účastníci zájezdu; fiction 1996]

<sup>&</sup>lt;sup>42</sup>Some speakers judge this as ungrammatical in such sentences, but most accept it in more expressive utterances like:

<sup>(19)</sup> Kurva, Jituš, neser mi, co je na dluhách výhodnýho? expletive Jituš not-piss-off  $me_A$  what is prep debts advantageous approx: 'Jituš, do not piss me off, what is it that's advantageous about debts?'

- (21) *[\*Final] a clitic cannot occur sentence finally:* 
  - a. Marie dala sešit Petrovi / tobě / \*ti / jí. Marie gave notebook Petr<sub>D</sub> / you<sub>sgD</sub> / you<sub>sgD</sub> / her<sub>D</sub>.
    'Marie gave a notebook to Petr / you / \*you / her.'
  - b. Marie ti / ji dala sešit. Marie you<sub>sg D</sub> / dather gave notebook 'Marie gave you / her a notebook.'
- (22) [Cl-Cl]

Nedal bych ti /ji /\*tobě /\*Petrovi ho ani za nic. not-gave would<sub>1sg</sub> you<sub>sgD</sub>  $/her_D$   $/you_{sgD}$   $/Petr_D$   $him_A$  not-even for nothing. 'I would not give it to you /her /\*you /Petr for anything.'

- (23) [\*Final] a clitic cannot occur sentence finally:
  - A: Komu dala Marie sešit?

'Who did Marie gave a notebook to?'

B: Petrovi. / Tobě. / \* Ti. / Jí. Petr<sub>D</sub> / you<sub>sgD</sub> / you<sub>sgD</sub> / her<sub>D</sub>. 'To Petr.' / 'To you.' / \*'To you.' / 'To her.'

# 4.3.3 Reflexives

As (24-27) show, accusative *se* and dative *si* reflexive pronouns are constant clitics. The strong form *sebe* corresponds to *se*, and *sobě* corresponds to *si*. In addition, there are two contractions with the second-person singular present auxiliary (used to form past tense) – ses = jsi + se and sis = jsi + si. The contractions are not obligatory but are preferred: in the spoken corpus Oral2006, 84% of cases are contractions, in the private correspondence corpus KSK, it is 73%.

- (24) [\*Final] a clitic cannot occur sentence finally:
  - a. Marie chválila v posudku Petra / sebe / \*se. Marie praised in review Petr / refl<sub>A</sub> / refl<sub>A</sub>.
    'Marie praised PETR<sub>R</sub> / HERSELF<sub>R</sub> / \*HERSELF<sub>R</sub> in the review.'
  - b. Marie se chválila v posudku. Marie refl<sub>A</sub> praised in review . 'Marie praised herself in the review.'
- (25) [\*Alone] a clitic cannot stand alone:
  - A: Koho chválila Marie v posudku?

'Whom did Marie praise in the review?'

- B: Petra. / Sebe. / \*Se. Petr<sub>A</sub> / refl<sub>A</sub> / refl<sub>A</sub> 'Petr. / Herself / \*Herself.'
- (26) [\*Final] a clitic cannot occur sentence finally:
  - a. Marie poslala e-mail Petrovi / sobě / \*si.
    Marie sent e-mail Petr<sub>D</sub> / refl<sub>D</sub> / refl<sub>D</sub>.
    'Marie sent an e-mail to Peter / herself / \*herself.'
  - b. Marie si poslala e-mail. Marie  $refl_D$  sent e-mail 'Marie sent an e-mail to herself.'
- (27) [\*Alone] a clitic cannot stand alone:
  - A: Komu poslala Marie e-mail?'Who did Marie send an e-mail to?'
  - B: Petrovi. / Sobě. / \*Si. Petr<sub>D</sub> / refl<sub>D</sub> / \*refl<sub>D</sub> 'Petr. / Herself. / \*Herself.'

In addition to the reflexive anaphoric use, Czech reflexives are used in several other constructions: the so-called *reflexive passive* (28a), reciprocals (28b) and reflexive tantum verbs like *smát se* 'laugh' (28c). See (Králíková 1981; Panevová 1999) for more details. In all these cases, only the clitic form can be used.

(28)	a. V Jičíně $by$ se postavily dva kruhové objezdy. In Jičín would <sub>3</sub> refl <sub>A</sub> built <sub>pl</sub> two roundabouts. 'In Jičín, they would build two roundabouts.'	
	b. Ani nevím, kdy <i>jsme si</i> naposledy psaly, tak Even not-know <sub>1sg</sub> when $aux_{1pl}$ refl <sub>D</sub> last-time wrote <sub>pl</sub> , so	[1 1]
	'I even don't know, when was the last time we wrote to each other, so'	[ksk]
	c. Celou prohlídku <i>jsem se</i> musel smát. Whole inspection $aux_{1sg}$ refl <sub>A</sub> must $augh_{inf}$	
	'I had to laugh during the whole inspection.'	[ksk]

As clitics, all reflexives, regardless of their meaning, have the same word-order properties.

		copula/passive auxiliary	past auxiliary	future auxiliary	conditional auxiliary
$\operatorname{sg}$	1	jsem	jsem	budu	bych/bysem
	2	jsi/jseš	jsi/-s	budeš	bys/bysi/by+-s
	3	je		bude	by
pl	1	jsme	jsme	budeme	bychom/bysme
	2	jste	jste	budete	byste
	3	jsou		budou	by

Table 4.3: Copula in present tense and auxiliaries

### 4.3.4 Auxiliaries

The forms of the verb  $b\acute{yt}$  'to be', see Table 4.3, can serve as a copula or as an auxiliary in these periphrastic constructions (see also §A.1.5):

- past tense: auxiliary in present tense + past participle; the auxiliary is not present in the 3rd person. E.g., *psal jsem* 'I wrote/was writing<sub>masc</sub>', *psal* 'he wrote'. Note that even the verb být 'to be' forms past tense periphrastically: byl jsem 'I was<sub>masc</sub>', byl 'he was<sub>masc</sub>'. Note that we use the term *past auxiliary* to refer to the auxiliary used to form the past tense, the verb být 'to be' in present tense.
- future tense: auxiliary in future tense + imperfective infinitive. E.g., *budu psát* 'I will write'. *být* forms future tense by the future auxiliary alone: *budu* 'I will be'.
- conditional: conditional auxiliary + past participle. E.g., *psala by* 'she would write<sub>fem</sub>'. Similarly as with past tense, the verb  $b\acute{y}t$  forms the conditional the same way: *byl bych* 'I would be'.
- past conditional: conditional auxiliary + auxiliary in past participle (possibly in frequentative)
  + past participle. E.g., byla by psala 'she would have written<sub>fem</sub>', bývala bych psala 'I would use to write', byla bych byla 'I would have been'. The past conditional is rare in Common Czech, and the simple conditional is used instead.
- passive: copula in the appropriate tense and mood + passive participle. E.g., jsem obdivován 'I am adored<sub>masc</sub>', byl jsem obdivován, 'I was adored<sub>masc</sub>', budeme obdivováni, 'we will be adored<sub>masc</sub>', byl by obdivován, 'he would be adored<sub>masc</sub>', byla bys bývala obdivována, 'you would have been adored<sub>fem</sub>'.

The different position of the auxiliaries in these examples is due to the fact that, as discussed below, some of the auxiliaries are or can be clitics, while others cannot. It is not natural for clitics to occur initially even in such fragments. The past tense and conditional auxiliary are constant clitics; the non-negated copula and passive auxiliary are inconstant clitics and the future auxiliary is never a clitic.

#### 4.3.4.1 Future auxiliary

The future auxiliary (see Table 4.3) is not a clitic. Thus its position in the sentence is relatively unrestricted, it can be rhematic or contrasted, as in (29) or it can form a single-word sentences, as in (30). Contrast these sentences with similar sentences with the other auxiliaries below.

#### (29) Unrestricted position:

- a. V pondělí mu bude Petr pomáhat. On Monday  $\lim_{D} \text{will}_{3sg}$  Petr help<sub>inf</sub> 'On Monday, Peter will help him.'
- b. V pondělí mu Petr bude pomáhat.
- c. V pondělí *mu* Petr pomáhat bude. (\*Final test fails)
- d. Bude mu v pondělí Petr pomáhat?
- (30) [<sup>OK</sup>Alone] \*Alone test fails:
  - A: Budete *mu* pomáhat? 'Will you be helping him?'
  - B: Budeme. will<sub>1pl</sub> 'We will.'

#### 4.3.4.2 Conditional auxiliary

The forms of the conditional auxiliary are listed in Table 4.3. The forms *bysem*, *bysi* and *bysme* are colloquial variants. The form *bysme* is closer to the official language than the other two forms. The 2sg form *by* is used with reflexives and is discussed below. The auxiliary is a constant clitic. Unlike the future auxiliary and other verbs, the conditional auxiliary cannot in general stand sentence finally – compare (31) with (29). And the auxiliary cannot form sentences by itself, for example as an answer to a question – compare (32) with (30).

(31) *[\*Final] a clitic cannot occur sentence finally:* 

a. \* Petr mu pomáhal by. Petr  $him_D$  helped<sub>m.sg</sub> would<sub>3</sub> [1P-Cl]

b. Petr by mu pomáhal. Petr would<sub>3</sub> him<sub>D</sub> helped<sub>m.sg</sub> 'Petr would help him.'

- (32) [\*Alone] a clitic cannot stand alone:
  - A: Pomohl bys mu to udělat?'Would help him to do it?'
  - B: \* Bych. Would<sub>1sg</sub>
  - B: Pomohl. helped<sub>m.sg</sub> 'I would.'

**Aby, kdyby.** The auxiliary is also present in contractions with subordinate conjunctions in *aby* 'in order' (conj. of purpose/order/wish) and *kdyby* 'if', e.g., *abych*, *abys*, *abysme*, *kdybyste* – see example (33). These contractions are obligatory. See §4.4.6 on discussion on the position of the main clitic cluster relative to the complementizer contractions.

(33) Chee po nás, abychom mu koupaliště převedli bezúplatně. wants<sub>3sg</sub> prep us so-that<sub>1pl</sub> him<sub>D</sub> swimming-pool transferred without-charge 'He wants us to transfer the swimming pool to him free of charge'. [syn5]

**Diachrony and current reanalysis.** Historically, the conditional auxiliary forms are a orist forms of the verb  $b\dot{y}t$  'to be' and the construction with past participle, now expressing conditional, had the meaning of past perfect tense (Rejzek 2001). Neither aorist nor past perfect are part of modern Czech. These idiosyncratic forms (from a present point of view) show the effect of reanalysis into particle by + past tense auxiliary. One and the same speaker can have both forms – whether two competing grammars or two competing forms is a different issue that is irrelevant here. The reanalysis is probably caused by the similarity of the 2nd and 3nd persons of both auxiliaries and by the presence of past participles in both periphrastic constructions. Many speakers have even taken the next logical step and write them as two words: by jsme for bychom, aby jsme for abychom, kdyby jsme for kdybychom, etc., see for example (34) (notice that in the second example, one conditional is reanalized, while the other is not). Table 4.4 shows that the reanalyzed forms of the 1st person plural

		Oral	PMK	KSK	
original:	(a kdy)bychom	57	66	312	
reanalyzed:	(a kdy)bysme,	541	355	185	(86,  or  46%  as two words)
percentage o	90	84	37		
original:	(a kdy)bych	2612	2084	3002	
reanalyzed:	(a kdy)bysem,	33	13	12	(12,  or  100%  as two words)
percentage o	1.2	0.6	0.4		

Table 4.4: Prevalence of reanalyzed forms in spoken and correspondence corpora

are clearly replacing the original forms, while they are rare in 1st person singular. Such reanalysis means that the original clitic is replaced by two clitics – the undeclined particle by and the finite past tense auxiliary. The finite auxiliary then governs the particle.

(34) a. Pokud by jste se setkal s nestandartním chováním aplikace ... If would  $\operatorname{aux}_{2pl} \operatorname{refl}_A$  met with nonstandard behavior application<sub>G</sub> ... 'If you encountered any nonstandard application behavior ...'

[mojebanka e-mail support 2007/05]

b. Chtěla bych Ti taky zavolat, aby jsme pokecaly. Wanted would<sub>1sg</sub> You also call<sub>inf</sub> so-that  $aux_{1pl}$  chated. 'I would also like to call you to chat.' [ksk]

**Reflexive contractions.** Just as past tense auxiliaries form contractions with reflexives,  $jsi + si \rightarrow sis$ , and  $jsi + se \rightarrow ses$ , so do conditional auxiliaries:  $bys + si \rightarrow by sis$  (35),  $bys + se \rightarrow by ses$ , also aby sis, etc. This is another feature showing the similarity of morphological properties of both auxiliaries. While in the case of the past tense auxiliaries the contractions are optional (although preferred), in the case of the conditional auxiliaries they are obligatory (\*bys si, \*abys si), probably to avoid double s. Note however, that when the second person form bys is reanalyzed as the full form auxiliary by jsi, the contraction is also optional (36).

- (35) a. A myslím, že by sis ho měla přečíst. And think<sub>1sg</sub>, that would aux-refl<sub>2sg</sub> him<sub>A</sub> should read<sub>inf</sub> And I think, you should read it.' [ksk]
  - b. \* A myslím, že bys si ho měla přečíst. And think $_{1sg}$ , that would $_{2sg}$  refl $_D$  him $_A$  should readinf

(36) No umíš si to představit, že by [j]si si postavil třeba chatu někde Well can refl<sub>D</sub> it imagine<sub>inf</sub> that would  $aux_{2sg}$  refl<sub>D</sub> built<sub>m.sg</sub> say cottage somewhere na hřbitově? at cemetery

'Well, can you imagine, you would build say, a cottage, somewhere at a cemetery?' [Oral2006]

**Dissyllabic clitics?** One might argue that the bi-syllabicity of certain conditional auxiliary forms (*bychom*, *bysme*, etc.) means they are not clitics at all. However, they have exactly the same distribution as monosyllabic conditional auxiliaries, which in turn have distribution similar to other clitics. However, the bi-syllabicity might be another reason why the conditional clitics are being reanalyzed as a sequence of by + past auxiliary.

**Stressed conditional auxiliary** The conditional auxiliary can under certain circumstances be in contrastive theme – see (37). However, even then, surprisingly, they are still in 2P, not at the beginning of the sentence as contrastive themes usually are. The contrast is expressed purely prosodically; this is similar to marking certain other morphemes as rhematic/contrasted, e.g., past tense morpheme -l. One could thus say, that by is a syntactically constant clitic, but phonologically inconstant.<sup>43</sup> This is a different situation from Slovenian (Franks and King 2000) or Serbo-Croatian (Spencer 1991, p. 353), where the conditional auxiliaries are clearly inconstant clitics – only deaccented variants occur in 2P.

- (37) A: Takže Petr to udělá?'So Petr will do it?'
  - B: Říkal, že  $by_C$  to udělal, kdyby ... said that would it do if ... 'He said, he would<sub>C</sub> do it, if ...'

This is not possible with other clitics. This is not surprising, since for all of them there are other, less exceptional, options available. Most of the clitics have corresponding strong nonclitic forms that can be used  $(ti \rightarrow tob\check{e}, se \rightarrow sebe)$ . Also there is no need to put contrast on the past tense auxiliary. It is more a marker of person than of "pastness" (the past morpheme -*l* of the past participle can indeed be stressed), and to put contrast on person, one simply puts it on the subject as in (38).

(38) a. Navrhoval jsi, abysme sem šli. suggested  $aux_{2sg} \operatorname{conj}_{1pl}$  here gone. 'You suggested going here.'

 $<sup>^{43}</sup>$ We could also simply assume, following (Klavans 1995) that clitics do not need to be prosodically deficient.

- b. \*Navrhoval  $JSI_R$ , abysme sem šli.
- c.  $\mathsf{Ty}_C jsi$  navrhoval, abysme sem šli. (Tak nenadávej.) you  $\operatorname{aux}_{2sg}$  suggested  $\operatorname{conj}_{1pl}$  here gone. It was  $\mathsf{you}_C$ , who suggested going here. (So don't complain.)

#### 4.3.4.3 Past and Passive auxiliary, copula

The present tense forms of the verb  $b\acute{yt}$  'to be', see Table 4.3, are used as (i) a copula, (ii) a passive auxiliary or (iii) past auxiliary. The 2sg copula form *jseš* is colloquial.

**Past tense auxiliary** The past tense auxiliary is a clitic and thus is restricted to 2P. In general, it cannot occur sentence finally<sup>44</sup> (39) and cannot stand isolated (40). Non-clitic auxiliaries do not have such restrictions – see for example the future auxiliary in (29) and (30), above, or the copula in (41) and (42) below.

- (39) [\*Final] a clitic cannot occur sentence finally:
  - a. \* A museli ho dát zpátky [j]sme. And must him<sub>A</sub> give<sub>inf</sub> back aux<sub>1pl</sub>
  - b. A museli [j]sme ho dát zpátky. And must  $\operatorname{aux}_{1pl} \operatorname{him}_A$  give<sub>inf</sub> back 'And we had to give him back.'
- (40) [\*Alone] a clitic cannot stand alone:
  - A: Nabídli *jste mu to*? (past auxiliary) offered<sub>pl</sub>  $aux_{2pl} him_D it_A$ 'Have/Did you offered it to him?'
  - B: \* Jsme.  $\operatorname{aux}_{1pl}$
  - B: Nabídli (jsme). offered<sub>pl</sub>  $aux_{1pl}$ 'We did.'

**Copula and passive auxiliary** On the other hand copula and passive auxiliary are inconstant clitics. This means they can be contrasted or rhematic. Outside of the clitic cluster their position is not restricted – they can stand sentence finally (41) or occur in isolation (42). However, they can

[oral2006]

 $<sup>^{44}</sup>$ Note that while the auxiliary stands finally in the (40)B, this is the special case where the final position is 2P at the same time – see the discussion of the test [\*Final] in §4.3.1.

be also clitics, as Rosen (2001, p. 210) shows. In (43) the copula is a part of a larger clitic cluster. As shown in §4.4.4, a clitic cluster can be preceded by more than one constituent only when these constituents express path, period, stage or are contrasted. None of these is the case here, thus it is logical to call the copula a clitic in these sentences. Moreover, it is subject to the constraint on morpho-lexical ordering of clitics (§4.5) and occurs initially in the cluster, as auxiliary clitics do.

(41) [<sup>OK</sup>Final] can be final when non-clitic

	a. Já si myslim, že zrovna vy taková [j]ste. (copula) I refl <sub>D</sub> think that just you such <sub>fem</sub> $\operatorname{are}_{2pl}$ 'I think that $\operatorname{you}_C \operatorname{ARE}_R$ like that.'	[Oral2006]
	b. Pro ostatní kategorie limity stanoveny jsou. (passive) For rest-of categories limits set are. 'The limits $ARE_R$ set for the $rest_C$ of the categories.'	[syn5]
(42)	[ <sup>OK</sup> Alone] can occur alone when non-clitic	
	<ul> <li>a. A: Jste dneska doma? (copula)</li> <li>'Are you at home today?'</li> <li>B: Jsme. are<sub>1pl</sub></li> </ul>	
	'We are.' b. A: Jsi pozván na pondělí? (passive auxiliary) 'Are you invited for Monday?'	
	B: Jsem. $am_{1sg}$ 'I am.'	
(43)	[1P-Cl]	
	a. [Jedinou radostí] <i>jsou mu</i> dopisy z domova, Only joy $\operatorname{are}_{3pl} \operatorname{him}_D$ letters from home 'The only joy for him are the letters from home,'	[Rosen 2001 p. 210 / syn0]
	b. [Nakonec] je ti ho skoro líto. at-the-end is $\lim_{D} A$ him nearly sorry 'At the end, you feel nearly sorry for him.'	[Rosen 2001 p. 210]
	c. [A ted] <i>je ho</i> tam taková spousta. and now is $him_G$ there so much	
	'And now there is so much of him/it'	$[{\rm Rosen~2001~p.~210~/~syn0}]$

d. [To] je mu podobný.
that is him<sub>D</sub> similar
'That's exactly him.'

[Rosen 2001 p. 210 / syn0]

**Comparison** The difference in clitic-hood between the copula/passive auxiliary and past tense auxiliary is not surprising – Toman (1980) lists several other aspects where the copula and the past tense auxiliary differ. They all show that the past tense auxiliary is more idiosyncratic than the copula, which behave more like a normal verb.

- Negation prefix ne- attaches to the copula/passive auxiliary, but not to the past tense auxiliary. Sentences in past tense are negated by negating the past participle. Toman (1980) says this might be a consequence of the clitic-hood of the past auxiliary, assuming Czech clitics cannot be prefixed. Note that this is not a universal principle; Klavans (1985) mentions examples of affixes attaching to clitics.
- 2. The past tense auxiliary can form -s contractions in 2nd person singular. This is not possible for the copula or passive auxiliary.
- 3. The past tense auxiliary can be omitted in 1st person singular. Again, this is not possible with the copula or passive auxiliary.
- 4. Colloquially, (j)seš<sup>45</sup> is often used for the copula/passive auxiliary in the 2nd person singular. As Toman (1980) argues, the jseš form is probably by analogy with regular conjugation á la píš-eš 'write<sub>2sg</sub>', nes-eš 'carry<sub>2sg</sub>', etc. In many Moravian dialects, this goes even further with (j)su being used in 1st person singular, analogously to píš-u 'write<sub>1sg</sub>', nes-u 'carry<sub>1sg</sub>'. Again, this is not possible in the case of the past tense auxiliary.

It is worth noting that regarding the use of the past tense auxiliary, Czech is somewhere between Russian and Serbo-Croatian. In Russian, the past tense does not use any auxiliary, while in Serbo-Croatian the auxiliary is used in all persons. In Czech, the auxiliary is used in the first and second persons, while the third person is formed by a bare past participle. However, in Czech passive, the auxiliary occurs in all three persons.

 $<sup>^{45}</sup>$ As with other forms of  $b\acute{y}t$  'to be', the initial j is usually not pronounced. In written Common Czech, the j is often omitted, too.

- (44) a. Psal *jsem* dopis. (Czech) wrote  $aux_{1sg}$  letter<sub>A</sub>
  - b. Ja pisal pismo. (Russian) I wrote letter<sub>A</sub>
  - c. Pisao sam pismo. (S-C) wrote aux<sub>1sg</sub> letter<sub>A</sub>
    'I was writing a letter.'
- (45) a. Psal dopis. (Czech) wrote letter<sub>A</sub>
  - b. On pisal pismo. (Russian) He wrote letter<sub>A</sub>
  - c. Pisao je pismo. (S-C) wrote  $aux_{3sg}$  letter<sub>A</sub> 'He was writing a letter.'

#### 4.3.5 tu 'here'

The adverb tu 'here' is a constant clitic, with tady or zde being nonclitic counterparts used in rheme or under contrast. However, the status of tu is less clear than that of the other constant clitics. The examples (46) with tu sentence-final or (47)) with tu isolated do not seem outright wrong (as, say, the corresponding sentences with the past tense auxiliary are), but instead sound hypercorrect or regional. Also there are a few expressions where tu is used sentence initially, for example (48), without having the strong colloquial flavor of other sentence initial clitics, as in (9). Also, there are some dialects where tu is clearly an inconstant clitic.

- (46) [\*Final] a clitic cannot occur sentence finally:
  - a. Kdyby se pořádně snažili, byl by ten zápas tady / v Praze / ?tu. if refl<sub>A</sub> really tried been would that match here / in Prague / here 'If they really tried, the match would be  $\text{HERE}_R$  / in  $\text{PRAGUE}_R$  /  $\text{HERE}_R$ .'
  - b. Kdyby se pořádně snažili, byl by tu aspoň ten zápas. if refl<sub>A</sub> really tried been would here at-least that match 'If they really tried, at least the MATCH<sub>R</sub> would be here.'
- (47) [\*Alone] a clitic cannot stand alone:
  - A: Kde bude ten zápas?

'Where is the the match going to take place?'

- B: V Praze. / Tady. / ?*Tu*.
  in Prague / here / here
  'In Prague.' / 'Here.' / ?'Here.'
- (48) Tu máš. Here have<sub>2sg</sub> 'Here you are.'

[syn5]

Note that tu is also an adverb 'at that moment' (49) and a determiner 'this<sub>fem.acc</sub>' (50), neither a clitic. While all three are etymologically related, we regard them as three separate homonymous words.

(49) Tu se Jirka zarazil.
 Suddenly refl<sub>A</sub> Jirka paused
 'Suddenly, Jirka paused/balked'

[syn5]

(50) Tu knížku jsem mu četl. That<sub>fem.acc</sub> book<sub>fem.acc</sub>  $\operatorname{aux}_{1sg} \operatorname{him}_D$  read. 'I read that book.'

#### 4.3.6 Fringe clitics

The set of inconstant clitics is hard to clearly enumerate. Various short particles or adverbs with relatively little semantic content can be destressed and thus (seemingly?) function as clitics. An incomplete list of possible clitics, based on (Franks and King 2000, p. 103), is given in (51). Short (1993, p. 495) (similarly also (Karlík et al. 1996)) adds pronouns with prepositions to the list but he comments that "rules are impossible to give in this area of considerable subtlety".

(51) tam 'there', však 'though, but', ale 'though, but', už 'already', prý/prej 'allegedly',<sup>46</sup> teda/tedy
'so', asi 'probably', snad 'possibly (I hope)'

Note about translation: It is hard to find English expressions corresponding to these words in their clitic usage – it such usage they seem to have much less content and are much more backgrounded than their usual English counterparts. It many cases it seems that the speaker assumes the content communicated by the clitic is already known to the hearer. In addition, the words prý/prej are very close to being a modality marker – the speaker somehow distances himself from the statement, 'allegedly' the usually given translation, seems too strong in many cases. už 'already' is often subsumed by present perfect tense, while však/ale seem to be 'though' in clitic use while 'however' in their nonclitic use.

When clitics, these words usually follow the pronominal clitics in the clitic cluster (apart from being not the most typical, this is another reason why we label them as *fringe*). However, this implication does not go the other way – when a word from (51) is adjacent to clitics in a clitic cluster it can be either a clitic and be part of that cluster or be a non-clitic and be just adjacent to that cluster.

<sup>&</sup>lt;sup>46</sup> Prý is a hypercorrection that replaced the original form prej in Official Czech: pravi 'say<sub>3sg/pl</sub>'  $\rightarrow$  praj  $\rightarrow$  prej  $\rightarrow$  prý. See for example Rejzek (2001). In Common Czech, prej is more common.

All the tests suggested in  $\S4.3.1$  are useless in such case. One guide can be provided by phonology. Franks and King (2000, p. 113, ftn. 21) discuss this for *asi* in example (52) – it can be a clitic, with the initial vowel reduced or deleted, or it can be rhematic or contrasted and thus not be a clitic.

(52) Poslouchat<sub>2</sub> ji<sub>2</sub>, | by<sub>0</sub> ji<sub>1</sub> asi nudilo.
to-listen her<sub>A</sub> would<sub>3</sub> her<sub>A</sub> probably bore.
'It would perhaps bore her (e.g., Ann) to listen to her<sub>C</sub> (e.g., Mary).

The words  $v \check{s} a k$  and  $prej/pr \check{y}$  are the easiest to classify as clitics because they can also occur at the beginning of the cluster following the host, as in (53), and therefore clearly part of the cluster (per the [1P-Cl] test).

(53)se<sub>1</sub> snaží<sub>1</sub> udržovat "rodinné" ovzduší a. Delta prýmezi zaměstnanci, ... Delta allegedly  $\operatorname{refl}_A$  strives maintaining family-like atmosphere among employees . . . 'Delta allegedly strives to maintain family-like atmosphere among employees ...' [syn6] b. Chtěl prýse naučit ping-pong, ale ... wanted allegedly  $\operatorname{refl}_A$  learn ping-pong, but ... 'He wanted to learn ping-pong, but ...' [syn6] c. Osobně  $v \check{s} a k$ bychpovažoval úplné zapomenutí těch událostí za nejlepší Personaly though would<sub>1sq</sub> considered complete oblivion those events as best řešení. solution Personaly though, I would consider a complete oblivion of those events to be the best solution. [syn6]

Note that the word  $v \check{s} a k$  has at least two distinct meanings: either 'though/but', as in (54), or it a meaning similar to 'vždyť' that can be translated as *either*, *too*, sometimes *well*, etc., as in (55). It can be a clitic only in the former meaning.

- (54) Zatím se jim to však nepodařilo. so-far refl<sub>A</sub> them<sub>D</sub> it<sub>A</sub> though not-succeeded 'So far they did not succeed though.'
- (55) Však ty víš, kde bydlím. particle you know<sub>2sg</sub> where live<sub>1sg</sub>
  'Well, you know where I live.' or 'You do know where I live' [ksk]

# 4.3.7 li 'whether'

Traditionally (Karlík et al. 1996; Petr 1987), *li* 'whether/if' is considered to be a sentential clitic. However, Fried (1994) notices that, synchronically, *li* is a rather peripheral example of such a clitic. Unlike other clitics and more like affixes it can be hosted only by certain syntactic categories. It mostly attaches to a finite verb (56), past participle and the particle ne 'not' (57). Other hosts, as the adverb *doma* 'home' in (58), are possible but very rare, sounding archaic and/or poetic.<sup>47</sup>

- (56) V horším případě[,] má -li špatnou náladu a potřebuje *si ji* vybít, přijde osobně. In worse case has<sub>3sg</sub> if bad mood and needs refl<sub>D</sub> her vent-on, comes in-person 'In a worse case, if he is in a bad mood and needs to vent it on, he comes in person.' [ksk]
- (57) Navíc na výzo budu mít pět dvojek a za to mě rovnou přizabijou, Moreover at final-report<sub>colloq</sub>. will have five twos and for that me<sub>A</sub> right-way nearly kill ne -li zabijou ! not if kill At the final report, I will have five [Bs] and for that they will nearly kill me right away, if not completely. [ksk]
- (58) Dobrý den, doma -li pan Hordubal?
   Good day home if Mister Hordubal
   Hello, is Mister Hordubal at home? [syn5/K. Čapek: Hordubal; fiction 1933]

Avgustinova and Oliva (1995) do not consider li to be a sentential clitic at all. Instead, they claim, it is a word clitic attaching to the first word in the sentence. li appears to be the first member of the clitic cluster because the word it is usually hosted by, the finite verb, is a possible host for other clitics as well. They provide (a rather poetic, but still grammatical) example (59) showing that it can be detached from the cluster. The corresponding sentence where li does not split the NP *lásce své* 'your love' and immediately precedes *se* is worse, which would be highly unusual if li were a normal sentential clitic.

(59) Lásce -li své se v žití budeš protiviti, žebrákem půjdeš světem. love<sub>D</sub> if own refl<sub>A</sub> in living will<sub>2sg</sub> oppose beggar<sub>I</sub> go<sub>2sg</sub> world<sub>I</sub>
'If you oppose your love in your life, you will go through the world as a beggar.' [Avgustinova and Oliva 1995 (16)]

However, at least sometimes li can attach to multi-word phrases. In (62), it attaches to two coordinated verbs *poslouchám* 'listen<sub>1sg</sub>' a *čtu* 'read<sub>1sg</sub>'. Pragmatically it would be odd to interpret the

<sup>47</sup>Fried (1994) mentions only finite verbs as potential hosts, however *ne* 'not' (*ne-li* 'if not') is a common host, too. Syn2005, a balanced corpus of current *written* Czech, contains about 46,000 cases of finite verbs as hosts, about 3,100 cases of past participles, about 1,100 cases of *ne*, and some cases of *zda* 'if' and *než* 'than'. There are a few cases of other types of hosts in the corpus, but all that we checked were in fiction written in the first half of the 20th century (although the query produced about 700 such cases, many of them are tagging errors).

first verb as a separate clause. It seems that these cases are rather limited and we did not find any more complicated hosts in the corpora.<sup>48</sup>

(62) [Poslouchám a čtu] -li některé předvolební sliby kandidátů do Senátu, tak .... listen and read if some pre-election promises of-candidates<sub>G</sub> to Senate then ... 'When I listen and read some of the pre-election promises of the candidates for Senate, ....' [Rosen (p.c.)/Syn2006pub]

li is actually very rare in Common Czech, as usually the conjunctions  $jestli(\tilde{z}e)$  (originating from jest, an archaic form of 'is' + li), pokud and most frequently  $kdy\tilde{z}$  are used instead.<sup>49</sup> So it is hard for a native speaker to make any robust judgments on the clitic. We thus exclude this clitic from

<sup>48</sup>Rosen (2001) provides even more interesting example given in (60) to support his claim that li can be a sentential clitic. We could analyze the sentence in two ways: either -li is hosted by the coordination of the two verbs vstanu 'get up<sub>1sg</sub>' and obléknu 'dress<sub>1sg</sub>' as in (61a) or only by the second verb as in (61b). Pragmatically, (61a) seems much more plausible. However, while this is an attested utterance, in our view it seems to be a performance error. All consulted speakers judged the sentence as incorrect or marginal (Some of the speakers did not want to judge the grammaticality with claims similar to "I know what the sentence is supposed to mean and there are probably no rules about these things".) or insisted it must have the meaning of (61b). Note also that (61a) is problematic for another reason: the clitic cluster contains li, a clitic related to the whole coordination, and se, a clitic related only to the second verb (obléknu se means 'I dress myself', there is no vstanu se), moreover separated from that verb by li - a highly unusual situation.

- (60) Vstanu a obléknu  $-li \ se$ , je tím vyčerpán můj příděl energie pro zbývající den. get-up and get-dressed if refl<sub>A</sub> is by-that spent my quota energy<sub>G</sub> for rest day 'If I get up and get dressed, my quota of energy for the rest of the day is spent.' [Rosen 2001 p. 210]
- (61) a. [Vstanu a obléknu] -li se, je tím ...
  - b. [Vstanu] a [obléknu -li se, je tím ...]

 $^{49}$ The following table shows that the preference is clearly different in different registers. It compares distribution of various (potentially) conditional complementizers in the syn2005 corpus (written, mostly Official Czech) and Oral2006 corpus (spoken, mostly Common Czech). While *li* accounts for 11% of those complementizers in syn2005, its share is negligible in Oral2006. Note that *když* is ambiguous between conditional 'if' and temporal meaning 'when'.

	syn5		Oral2006	
	tokens	%	tokens	%
li	51,588	11	18	0
když	$293,\!459$	63	4,287	73
jestliže	15,093	3	19	0
jestli	39,711	8	1,450	25
pokud	69,277	15	120	2
Total	469,128		5,894	

further consideration. However, if one decided that it *is* a sentential clitic, the modifications to the presented analysis would be only slight and straightforward.

# 4.3.8 Summary of §4.3

Overall, the set of Czech clitics is similar to that in many other Slavic languages. It can be divided into *constant* clitics and *inconstant* clitics. Constant clitics always behave as clitics; inconstant clitics can function as clitics but can also function as normal words. Enumerating the exact set of clitics is far from trivial and probably impossible. We have used the following tests to distinguish them from regular words:

• Clitics cannot occur in isolation ([\*Alone]).

Unlike normal words but similarly to affixes, they cannot occur in isolation.

• Clitics have restricted position ([\*Final]).

Their position is also more restricted than the position of normal words, although not as much as the position of affixes – they occur in so-called 2P in the sentence. Because, it is not easy to exactly identify that position, we use a slightly weaker test – they cannot stand sentence finally (unless it is 2P). Moreover, apart from a very colloquial register, they also cannot be sentence initial.

• A word followed by a clitic and preceded by 1P ([1P-Cl]) or another clitic (with no prosodic boundary between the clitics; [Cl-Cl]) is a clitic.

Unlike the previous two tests, this test can identify inconstant clitics. The problem is that it fails short for clitics occurring on the right edge of the clitic cluster.

In addition there are other less, easily applicable tests – clitics are usually short monomorphemic units, they cannot bear contrastive accent by themselves, etc.

Using these tests, we obtained the following set of clitics.

#### 1. Constant clitics:

- (a) all weak pronouns: mi 'me<sub>D</sub>', ti 'you<sub>sgD</sub>, ho '<sub>A</sub>him, etc. See Table 4.2.
- (b) weak reflexives: se (accusative), si (dative), and contractions with jsi  $aux_{2sg}$ : ses, sis.
- (c) past and conditional auxiliary
- (d) tu 'here' (however, in some dialects this is an inconstant clitic)

- 2. Inconstant clitics:
  - (a) some personal pronouns: ji 'her<sub>D</sub>', nám 'us<sub>D</sub>', etc.
  - (b) *to* 'it'
  - (c) non-negated copula, passive auxiliary
  - (d) fringe clitics various short particles or adverbs with a relatively little semantic content: tam 'there', však 'though, but', ale 'though, but', už 'already', prý/prej 'allegedly', ... As the label suggests, fringe clitics are the most uncertain group.

# 4.4 Position of the main clitic cluster

As mentioned earlier in this chapter, the position of clitics is rather restricted. This applies both to the position of clitic clusters within the sentence and the relative position of clitics within a single clitic cluster. In this section, we address the possible positions of the whole clitic cluster, the next section discusses order of clitics within a single cluster.

Note: This dissertation discusses only position of the main clitic cluster, it does not address the position of clitics in embedded non-finite clauses. These clitics either precede or immediately follow their governor. There is very little work on the position of embedded clitic clusters; one exception is (Toman 2000).

Clitics usually follow the first clausal constituent in a phrase. However, there are many exceptions to this placement. The main cluster can be preceded by a partial constituent on the one hand or by several constituents on the other. In the following, we argue that these are not unusual clitic positions but instead, unusual frontings. We also argue that clitics can be positioned either relative to the first constituent or to the fronted expressions, which in most cases results into the same placement.

#### 4.4.1 Following a clausal constituent

Usually, the main clitic cluster follows a single clausal constituent (a full sister of the head of the clause), as shown in (63). This constituent can be of various complexity ranging from a single word to a coordinated phrase, subordinate clause or a phrase modified by several clauses. The examples also show that both the head of the phrase and the word immediately preceding the clitic cluster can have any category.

(63) a. Noun:

	Vražda <i>by</i> vzbudila zbytečný rozruch. Murder would <sub>3</sub> cause unnecessary disturbance.	
	'A murder would cause an unnecessary disturbance.'	[syn0]
1	b. Adverb:	
	Právě $jsem$ ti chtěl volat. just $aux_{1sg}$ you <sub>D</sub> wanted to-call.	
	'I have just wanted to call you.'	[syn5]
	c. Particle	
	Tak $si$ na něj dávejte pozor. So refl <sub>D</sub> at <sub>A</sub> him pay <sub>2pl</sub> attention	
	'So, be careful about him.'	[syn0]
	d. Pronoun	
	Ono $by$ $mu$ to vadilo? It <sub>PP</sub> would <sub>3</sub> him <sub>D</sub> it <sub>A</sub> minded.	
	'He would mind it?'	[syn0]
	e. PP	
	[Na koho jiného než na šéfa hádankářské rubriky] $by$ se Konipas obráti To whom else than to chair of-quiz section would <sub>3</sub> refl <sub>A</sub> Konipas turned	
	'To whom else than to the chair of the quiz section should Konipas turn?'	[syn5]
	f. Coordinated NPs:	
	[Sociální demokraté a odbory] $se$ domnívají, že Social democrats and unions refl <sub>A</sub> think that	
	'The Social Democrats and the unions think that'	[pdt]
	g. Complex NP with a relative clause and an apposition:	
	Advokát, který zastupuje v České republice otce, JUD r. Hráský, se domníva Attorney which represents in Czech Republic fa ther JUDr. Hráský refl <sub>A</sub> thinks	á, že that
	'The attorney representing my father in the Czech Republic, JUDr. Hráský thin	ks that
	'	[pdt]

# 4.4.2 Past participle

A well known exception to the above situation are sentences with an initial past participle – only the participle precedes the clitic cluster, while its complements follow it – see (65). One of the reasons

for this could be that speakers probably perceive the past participle as the head of S rather than the finite auxiliary (the finite auxiliary being some kind of detached morpheme or a specifier of the participle).<sup>50</sup> This is especially true in the 3rd person, where there is no auxiliary, as (65) shows. Sometimes there is no auxiliary in the 1st person as well, see  $\S4.3.4.3$ .

- (64) Podíval<sub>1</sub> jsem<sub>0</sub> se<sub>2</sub> na hodinky. Looked aux<sub>1sg</sub> refl<sub>A</sub> at watch
  'I looked at my watch.' [syn5]
  (65) Podíval<sub>1</sub> se<sub>2</sub> na hodinky.
- Looked refl<sub>A</sub> at watch 'He looked at his watch.'

Note that from the point of view of dependency grammar theories, finite verbs preceding 2P clitic cluster are a similar type of exception – the finite verb is the root of the dependency tree – see Figure 4.3.

(66) Nelíbí se mi jeho pes. not-like refl<sub>A</sub> me<sub>D</sub> his  $dog_N$ 'I do not like his dog.'

Figure 4.3: The dependency structure of (66)

nelíbí 'not-like' se 'refl<sub>A</sub>'  $mi \text{ me}_D$  pes 'dog' jeho 'his'

[syn5]

[syn5]

 $<sup>^{50}</sup>$ Actually, this is the way past tense is analyzed in Functional Generative Description (FGD; Sgall et al. 1986), the most prominent linguistic theory analyzing Czech. The auxiliary is considered to be similar to a morphological affix. The annotation in the Prague Dependency Treebank (Böhmová et al. 2001) follows this. Some other researchers, for example Ackerman and Webelhuth (1998), view auxiliaries similarly. However, in FGD, all auxiliaries are analyzed in this a way, including the future tense auxiliary or modals. In both of these cases, the main verb in infinitive can occur in the 1P with other dependents, excluding the auxiliaries.

# 4.4.3 Following a partial clausal constituent

While in most cases clitics are preceded by a full clausal constituent, sentences with clitics preceded by a partial clausal constituent are not rare.

The partial clausal constituent in 1P may be a full constituent at some level of embedding. For example ten wordovský dokument 'that Word document' in (67a) is a full object of the embedded infinitive otevřít 'open'. But the 1P expression may also be a true partial constituent, containing a head with only some of its daughters (the case of several daughters without a head is discussed in the next section). The head may be a head of a clausal constituent as in (67b) or a more embedded constituent (67c).<sup>51</sup>

(67) a. Full embedded constituent

[Ten wordovský dokument]  $se_1 mu_1$  nepodařilo<sub>1</sub> otevřít<sub>2</sub>. that Word document refl<sub>A</sub> him<sub>D</sub> not-succeeded open<sub>inf</sub> 'He did not manage to open that Word document.'

b. Partial clausal constituent

[Pohlídat<sub>2</sub> děti]  $si_1$  možná troufnu<sub>2</sub> [Novákům] (ale určitě ne Hanům) watch<sub>inf</sub> children refl<sub>D</sub> maybe dared Nováks<sub>D</sub> 'I might dare to babysit<sub>C</sub> FOR THE NOVÁKS<sub>R</sub>. (but certainly not for the Hanas)'

c. Partial embedded constituent

'I would not wish you to watch children for the Nováks. (but the Hanas are fine)'

Not every partial constituent can precede the clitic cluster. For example, determiners seem to be out even when contrasted, as the example in (68) shows.

(68) \* Tenhle mi slíbil peníze člověk. this me<sub>D</sub> promissed man money Intended: 'This<sub>C</sub> man promised me money.' [Rosen 2001 (191a)]

Rosen (2001) analyzes the constraints on possible partial constituents in such position as constraint on clitic placement. However, as the examples below show, the distribution of partial constituents is independent of clitics. Instead, it can be simply explained by constraints on split-fronting ( $\S3.4.2$ ), what-ever they are. The sentences in (69), parallel to (67) but with no clitics, show that the clitic

<sup>&</sup>lt;sup>51</sup>In the following examples, *pohlídat* is a perfective variant of the imperfective verb hlídat 'watch<sub>inf</sub>'.

simply follows the first part of an independently split constituent. The sentences in (70) show that the distribution also corresponds to possible long-fronted expressions. Note that in all examples below, we translate the fronted expression as contrasted. The reason is that they are the easiest to accept without a context. However in an appropriate context, the fronted expression may be interpreted as non-contrastive theme proper or as rheme proper; see §3.4 for more details.

- (69) Short fronting, no clitics:
  - a. Full embedded constituent (no clitic)

[Ten wordovský dokument] nešlo<sub>1</sub> otevřít<sub>2</sub>. that Word document was-not-possible open<sub>inf</sub> 'It was impossible to open that Word document<sub>C</sub>.'

b. Partial clausal constituent (no clitics)

[Pohlídat děti] můžu [Novákům] watch<sub>inf</sub> children  $can_{1sg}$  Nováks<sub>D</sub> 'I can babysit<sub>C</sub> FOR THE NOVÁKS<sub>R</sub>.'

c. Partial embedded constituent (no clitics)

[Pohlídat děti] budu moct [Novákům] watch<sub>inf</sub> children will<sub>1sg</sub> be-able<sub>inf</sub> Nováks<sub>D</sub> 'I will be able to  $\mathsf{babysit}_C$  FOR THE NOVÁKS<sub>R</sub>.'

### (70) Long fronting:

a. Full embedded constituent

[Ten wordovský dokument] vím, že  $se_1 mu_1$  nepodařilo<sub>1</sub> otevřít<sub>2</sub>. that Word document know<sub>1sg</sub> that refl<sub>A</sub> him<sub>D</sub> not-succeeded open<sub>inf</sub> 'That Word document, I know that he did not manage to open.'

b. Partial clausal constituent

[Hlídat<sub>2</sub> děti] říkal Martin, že  $si_1$  možná troufne<sub>2</sub> [Novákům]. watch<sub>inf</sub> children said Martin that refl<sub>D</sub> maybe dared Nováks<sub>D</sub> 'Martin said that he might dare to **babysit**<sub>C</sub> FOR THE NOVÁKS<sub>R</sub>.'

c. Partial embedded constituent

[Hlídat<sub>2</sub> děti] říkal Martin, že  $by_0$   $ti_1$  nepřál<sub>1</sub> [Novákům]. watch<sub>inf</sub> children said Martin that would<sub>3</sub> you<sub>D</sub> wished Nováks<sub>D</sub> 'Martin said that he he would not wish you to babysit<sub>C</sub> FOR THE NOVÁKS<sub>R</sub>.'

- (71) Impossible split:
  - a. \*  $[\mathsf{Tenhle}_C]$  slibuje peníze každému člověk. this promises money everybody<sub>D</sub> man Intended: ' $\mathsf{this}_C$  man is promising money to everybody.'
  - b.  $[\text{Tenhle}_C \text{ člověk}]$  slibuje peníze každému. this promises money everybody<sub>D</sub> man 'This<sub>C</sub> man is promising money to everybody.'
  - c. \*  $[\text{Tenhle}_C]$ říkal Martin, že mu slíbil peníze člověk. this said Martin that me<sub>D</sub> promised man money Intended: 'Martin said that this<sub>C</sub> man had promised him money.'
  - d.  $[\text{Tenhle}_C \text{ člověk}]$ říkal Martin, že mu slíbil peníze. this man said Martin that me<sub>D</sub> promised money 'Martin said that this<sub>C</sub> man had promised him money.'

### 4.4.3.1 Splitting a constituent

According to general grammar books, a clitic cannot split a constituent. For example, M. Grepl in (Karlík et al. 1996, §840) says:

If the first position is occupied by a complex syntactic unit [i.e., by a multiword constituent], infinitival construction or a sentence, clitics are positioned in a way not to separate the expressions forming the [multiword constituent], infinitival construction or sentence, including an apposition or a subordinate clause.<sup>52</sup>

Similarly, Fried (1994, p. 158, ftn. 5), Toman (1986, p. 124) and others claim this is not possible (unlike in Serbo-Croatian). The examples used to prove this point are usually along the lines of (72). While Serbo-Croatian allows the clitic mi to either split the NP taj pesnik 'that poet' or to follow it, in Czech the NP cannot be split.

### (72) Serbo-Croatian:

- a. [Taj pesnik] mi čita knjigu.
  That poet me<sub>D</sub> reads book
  'That poet is reading a book to me.'
- b. [Taj] mi [pesnik] čita knjigu. That me<sub>D</sub> poet reads book 'That poet is reading a book to me.'

[Comrie 1981 p.22]

 $<sup>^{52}</sup>$ In original: "Pokud tedy první pozici obsazuje rozvitý větný člen, infinitivní konstrukce nebo věta, umisťují se příklonky tak, aby nerozdělily výrazy, které tvoří jeden větný člen, infinitivní konstrukci nebo větu, včetně přístavku a vedlejší věty."

### Czech:

- c. [Ten básník] mi čte ze své knihy. That poet  $me_D$  reads from his book 'That poet is reading from his book to me.'
- d. \* [Ten] mi [básník] čte ze své knihy.

While it is true that in *this* Czech sentence the split is impossible, the generalization that clitics cannot split sentence initial constituents is incorrect. There are many possible cases of constituent split by clitics in Czech. A common case is a partial infinitival VP, as in (73) – the clitic *si* separates the contrastive theme *pohlídat děti* 'to watch children' from the theme *Novákům* 'for Nováks'. The difference between this sentence and a similar sentence in (67b) above is that here the constituent *pohlídat děti Novákům* would be continuous if it weren't for the clitic.

(73) [Pohlídat děti] si [Novákům] troufnu. (ale opravit auto ne.) watch<sub>inf</sub> children<sub>A</sub> refl<sub>D</sub> Nováks<sub>D</sub> dare<sub>1sg</sub>
'I DARE<sub>R</sub> to watch children<sub>C</sub> for Nováks. (but not to repair their car)'

In (73), the material preceding the clitics is a partial constituent and includes its head. However the head can also follow the clitic. In such case, usually the clitic is preceded by a single full subconstituent of the interrupted constituent:

(74) a. Context: Discussing what one can watch for the Nováks:

[Děti] si [Novákům pohlídat] troufnu. (ale psa ne.) children<sub>A</sub> refl<sub>D</sub> Nováks<sub>D</sub> watch<sub>inf</sub> dare<sub>1sg</sub> 'I DARE<sub>R</sub> to watch children<sub>C</sub> for Nováks. (but not the dog)'

b. Context: Discussing for whom one can watch children:

[Novákům] si [děti pohlídat] troufnu. (ale Císlerům ne.) Nováks<sub>D</sub> refl<sub>D</sub> children<sub>A</sub> watch<sub>inf</sub> dare<sub>1sg</sub> 'I DARE<sub>R</sub> to watch children for Nováks<sub>C</sub>. (but not for Císlers)'

Clitics can also split NPs in a similar fashion:

(75) a. Context: In an answer to a letter talking about various topics, including a request for photographs of the other person's son: Pošli mi prosím nějaký fotky s Martinem, ať vidím, jak vyrostl. – 'Send me please some photos with Martin, so I can see how he is growing.'
[Fotky] ti [nějaký] určitě pošlu, ale ... Photos<sub>A</sub> you<sub>sgD</sub> some<sub>A</sub> definitely send, but ...
'I will send you some photos<sub>C</sub>, but ...' b. Context: They speared horses with spears. I saw it myself.

[Patricka] jsem [probodnutého] neviděl, ale nepochybuji, že ho probodli. Patrick<sub>A</sub>  $aux_{1sg}$  speared<sub>A</sub> not-seen but not-doubt that  $him_A$  speared. 'I DID NOT SEE<sub>R</sub> speared Patrick<sub>C</sub>, but no doubt they speared him.' [syn5]

- (76) a. [Střízlivého] *jsem* [Patrika] neviděl, ani nepamatuju. sober<sub>A</sub>  $aux_{1sg}$  Patrik<sub>A</sub> not-seen not-even not-remember<sub>1sg</sub> 'I do not remember when I saw Patrik **sober**<sub>C</sub> the last time'
  - b. A comment to somebody showing his new shoes:

[Hezké] sis [botky] koupil. nice<sub>A</sub> refl<sub>D</sub>-aux<sub>2sg</sub> shoes<sub>A</sub> bought 'You bought NICE<sub>R</sub> shoes.' (easiest to interpret in subjective ordering)

The clitics can even be preceded by several subconstituents of the split constituent – see (77). These cases are exactly parallel to cases covered in  $\S4.4.4$  and thus do not need any further discussion here.

(77) a. Path:

[[Z Chebu] [do Prahy]] bych [pěšky jít] nechtěl. From Cheb to Prague would<sub>1sg</sub> by-foot go<sub>inf</sub> not-wanted 'I would not like to walk from Cheb to Prague<sub>C</sub> by foot.'

b. Multiple contrasted:

[[Petra] [do Francie]] bych [poslat] ještě mohl, ale Martina do Maďarska ani Petr<sub>A</sub> to France would<sub>1sg</sub> send<sub>inf</sub> still could but  $Martin_A$  to Hungary not-even náhodou. by-accident 'I could send Petr<sub>C</sub> to France<sub>C</sub>, but never  $Martin_C$  to  $Hungary_C$ .'

In all the sentences in (73-77), the clitic cluster follows a fronted part of a split constituent. From the point of clitic placement, it is only an accident that the rest of the constituent immediately follows the clitic cluster.<sup>53</sup>

Other properties follow from properties of fronting as well. The fact that the split by clitics is optional simply follows from the fact that split-fronting is optional, as discussed in  $\S3.4.2$ . The

 $<sup>^{53}</sup>$ This means the motivation for split constituents is different in Serbo-Croatian and Czech. In Serbo-Croatian, the clitic splitting a constituent in so-called 2W placement, is positioned by rules of prosody – the clitic follows the first prosodic word. In Czech it is information structure.

In addition, Serbo-Croatian clitics have the same option as Czech clitics – so-called 2D placement when its position is determined mainly by syntax – it roughly follows the first constituent. As Halpern (1996) argues that many cases of 2W can be analysed as 2D placement with 1D being an independently motivated partial constituent.

fact that the sentences in (73-77) seem to be less common than sentences where the clitics are not followed by the second part in (67) again follows from the properties of split fronting. A split is more likely when the two parts of the constituent have large difference in Information Structure. However, a fronted expression is usually thematic (it is rhematic in subjective ordering, but that is less frequent) and expressions following clitics immediately are usually thematic too. Finally, the resistance of most determiners to being split fronted also explains the impossibility of (72).

# 4.4.4 Following several constituents

Under certain circumstances, they can be also preceded by expressions that have been traditionally regarded as multiple constituents. This applies to path, period and stage adverbials and to multiple contrasted expressions, the same type of expressions that allow multiple fronting ( $\S3.4.4$ ).

### 4.4.4.1 Path, Period, and Stage Adverbials

Avgustinova and Oliva (1995) observed that the initial position can also contain several local or temporal adverbials expressing path (78a) or period (78b), or providing a "stage" for the sentence event (78c).

- a. [Od hrobky Caecilie Metelly na předměstí Říma] [přes vyprahlé roviny Apulie] (78)from tomb of-Caecilia Metella on suburb of-Rome over dried plateaus of-Apulia až po jižní pobřeží poloostrova]  $se_1$  jako nikde nepřerušená rovná čára táhne<sub>1</sub> of-peninsula refl<sub>A</sub> as never interrupted straight line runs up to southern coast nejznámější ze všech antických cest – Via Appia. roads – Via Appia. most-famous from all ancient 'From the tomb of Caecilia Metella in the Rome suburbs over the dried plateaus of Apulia up to the southern coast of the peninsula runs the best known of all ancient roads, the Via Appia, in an uninterrupted straight line.' [Avgustinova and Oliva 1995 (41)] b. [Od pátku] [do neděle] se zde narodilo pět miminek. From Friday till Sunday  $refl_A$  here born five babies.
  - 'From Friday to Sunday, five babies were born here.'
  - c. [Včera] [na Rudém náměstí] se stejná skupina starobolševických demonstrantů Yesterday on Red Square refl<sub>A</sub> same group of-old-bolshevik demonstrants opět střetla s milicí. again clashed with militia

'Yesterday on the Red Square, the same group of old-bolshevik demonstrants again clashed with militia.' [Avgustinova and Oliva 1995 (55)]

[syn5]

Note that (79b) is incorrect. While the adverbials are identical to (79a), they cannot be interpreted as a path.

- (79)chalupy v Krkonoších] do bytu na pražském sídlišti] a. Z semuFrom cottage in Krkonoše Mts. to apartment at Praguian neighborhood refl<sub>A</sub> him<sub>D</sub> povedlo přivézt jen málo věcí. managed take only few things 'From the cottage in Krkonoše Mountains to his apartment at a Prague housing development, he managed to take only few things.' [Avgustinova and Oliva 1995] (46a)]
  - b. \* [Z chalupy v Krkonoších] [do bytu na pražském sídlišti] se mu From cottage in Krkonoše Mts. to apartment at Praguian neighborhood refl<sub>A</sub> him<sub>D</sub> hodilo jen málo věcí. came-in-handy only few things intended: 'From the cottage in Krkonoše Mountains, only few things were useful for his apartment at a Prague housing development.' [Avgustinova and Oliva 1995 (46b)]

Many speakers prefer the constituents in a particular order – the path and period in from – through – to, and the stage in time – place. we would also add, that the adverbials must have the same function in the Information-Structure.

### 4.4.4.2 Multiple contrasted constituents

As Avgustinova and Oliva (1995) show, the clitic cluster can be preceded by several contrasted constituents. Consider their example in (80). Although the expression *[na chatu]* [ $v \ l\acute{e}te$ ] denotes place + time, it does not seem to be possible to argue that it is a similar case to the spatio-temporal adverbials in (78c) – the two PPs are contrasted with two independent PPs in the previous clause. However, even if such analysis were possible in this case, it is definitely impossible for the contrasted constituents in (82).

(80)[V našem pražském bytě] jsme příbuzné ze Saarbrückenu o vánocích ještě In our Praguian apartment  $aux_{1pl}$  relatives from Saarbrücken during Christmas still snesli, ale [na chatu] v létě nějak jsme je raději nepozvali. somehow bore but to weekend-house in summer  $aux_{1pl}$  them<sub>A</sub> better not-invited. 'In our Prague apartment, we bore the relatives from Saarbrücken during Christmas time somehow, but we decided it was better not to invite them to our weekend house in summer. [Avgustinova and Oliva 1995 (59)]

According to Avgustinova and Oliva (1995), the nature of the multiple constituents is rather restricted – the constituents must satisfy all the conditions in (81).

- (81) Conditions on multiple contrasted constituents in 1P according to Avgustinova and Oliva (1995, pp. 36/37; my wording):
  - 1. All the constituents must be adverbials.
  - 2. Either all the constituents must be adjuncts or they must all be complements.
  - 3. If the constituents are complements, they must form a single "semantic" modification being of the same type, express path/period or stage (§4.4.4.1).

However, as the sentences in (82) show, the constraint is not correct. For example, in (82a), *Petra* is not an adverbial; in (82c) *Petra* is a complement while *na Smíchově* is an adjunct.

(82) a. Context: I am a member of a travel-committee, reviewing requests for travel to different conferences. Petr requested France and Australia, Martin Hungary, etc. The money is limited so not everybody can go everywhere

[Petra] [do Francie] bych ještě poslal, ale Martina do Madarska ani<br/>Petr<sub>A</sub> to France would<sub>1sg</sub> still send but Martin<sub>A</sub> to Hungary not-even náhodou.<br/>by-accident

'I would send  $Petr_C$  to  $France_C$ , but never  $Martin_C$  to  $Hungary_C$ .'

b. [Petrovi] [do Francie] bych to ještě poslal, ale Martinovi do Maďarska ani to Peter to France would<sub>1sg</sub> it<sub>A</sub> still send but to Martin to Hungary not-even náhodou. by-accident

'I would send it to  $Peter_C$  to  $France_C$ , but never to  $Martin_C$  to  $Hungary_C$ .'

- c. [Petra] [na Smíchově] *jsem* viděl, ale Martina na Václaváku ne. Petr at Smíchov  $aux_{1sg}$  saw but Honza<sub>A</sub> at Wenceslas Square not 'I saw Petr<sub>C</sub> at Smíchov<sub>C</sub>, but I did not see Honza at Wenceslas Square.'
- d. [Všechny sny] [najednou] se mu určitě nesplní. All dreams at-once  $\operatorname{refl}_A \operatorname{him}_D$  definitely not-fulfill. 'There is no way all his dreams will come true at the same time.'

The restriction on possible multiple contrasted constituents preceding clitics appears to be again a restriction on fronting. Any multiple fronted constituents can be followed by clitics. In  $\S3.4.4$ , we left the problem of restriction on multiple fronted constituents open, but in our opinion, the restrictions are rather of pragmatic than syntactic nature. Certain sentences with multiple frontings (and thus sentences with clitics preceded by multiple constituents) *seem* impossible simply because it is harder to imagine a context for them.

### 4.4.4.3 Splitting a fronted expression

There is another option: the clitic can split the string of multiple fronted elements and follow only the first contrasted constituent. In fact, this is the more common case. The sentences with both contrasted constituents preceding the clitic seem to put more stress on the contrast.

(83) [Petra] bych [do Francie] ještě poslal, ale Honzu do Maďarska ani náhodou. Peter<sub>A</sub> would<sub>1sg</sub> to France still send but Honza<sub>A</sub> to Hungary not-even by-accident 'I would probably send Peter<sub>C</sub> to France<sub>C</sub>, but never Honza<sub>C</sub> to Hungary<sub>C</sub>.'

As (84) show, this option is available only for multiple short-fronting. A long-fronted expressions must stay continuous.<sup>54</sup>

- (84) a. [Petra do Francie] poslal hned. Petr<sub>A</sub> to France sent immediately 'He sent Petr to  $France_C$  immediately.
  - b. [Petra] [do Francie]  $bych_0$  poslal hned. Petr<sub>A</sub> to France would<sub>1sg</sub> sent immediately 'I would send Petr to France<sub>C</sub> immediately.
  - c. [Petra]  $bych_0$  [do Francie] poslal hned. Petr<sub>A</sub> would<sub>1sg</sub> to France sent immediately 'I would send Petr to France<sub>C</sub> immediately.
  - d. [Petra do Francie]  $si_1$  myslím<sub>1</sub>, že Martin pošle hned. Petr<sub>A</sub> to France refl<sub>D</sub> think<sub>1sg</sub> that Martin will-send immediately 'I think Martin will send Petr to France<sub>C</sub> immediately.
  - e. ?\* [Petra]  $si_1$  [do Francie] myslím<sub>1</sub>, že Martin pošle hned. Petr<sub>A</sub> refl<sub>D</sub> to France think<sub>1sg</sub> that Martin will-send immediately 'I think Martin will send Petr to France<sub>C</sub> immediately.

### 4.4.4 Summary of §4.4.4

In sentences with multiple fronting (stage/period/path adverbials and multiple contrastive themes), the main clitic cluster can either follow the whole fronted expression or the first, possibly partial, constituent.

In the case of multiple contrasted constituents, the contrast seems to be stronger when the whole fronted expression preceded the clitics than when only the first fronted constituent does and the

<sup>&</sup>lt;sup>54</sup>This restriction is similar the similar restriction to multiple wh-long-movement discussed by Lenertová (2001, p. 297). However, we disagree with her conclusion that the position of clitics in short multiple wh-movement determines whether single versus multiple pair readings is possible.

others are marked for contrast prosodically. Some multiply fronted constituents are more ready to appear in such position than others (e.g., adjuncts), but in general the constraints seem to be pragmatic rather than syntactic.

# 4.4.5 Analysis, Version 1

The above data can be analyzed as clitics following two possible anchors:

- 1. the first constituent
- 2. the fronted expression

Because most sentences contain a fronted expression and because most fronted expressions consists of a single constituent (possibly partial), in most cases, these two choices results in the same clitic position. There is no fronting in rheme-only sentences in objective ordering and clitics simply follow the first constituent. On the other hand, in sentences with multiple fronting, there are two possible anchors – either the first fronted constituent or the whole fronted expression. We will revisit this view below.

# 4.4.6 After a Complementizer/Discourse particle

Clitics cannot follow coordinating conjunctions like a 'and', i 'even and', and they also cannot follow ale 'but'. However, in the case of subordinate conjunctions (e.g.,  $\check{z}e$  'that',  $jen\check{z}e$  'but', proto $\check{z}e$  'because', jestli 'if'), there is a choice. One possibility is that clitics are adjacent to the complementizer as in (85a). The other possibility is that clitics are separated from the complementizer by the theme proper (usually contrasted) as in (85b), or, in subjective ordering, by rheme proper (with a proper intonation and in a proper context *Petr* in (85b) can be interpreted as either.)

(85) a. Helena říkala, že se Petr odstěhoval. Helena said that $\operatorname{refl}_A$ Petr moved	
'Helena said that Petr had moved.'	[Fried 1994 (9a)]
b. Helena říkala, že [Petr] $se$ odstěhoval. Helena said that Petr $\operatorname{refl}_A$ moved	
'Helena said, $Petr_C$ had moved.'	[Fried 1994 (9b)]

The examples in (86) show that the constituent can be rather complex. As Uhlířová (1987, p. 91) mentiones, the complementizer can be even followed by a parenthetical as in (87).

- (86) a. ... nějaký ženský hlas mi sdělil, že [paní inženýrka ani pan inženýr] se zatím ... some female voice me<sub>D</sub> told that Ms. engineer<sub>F</sub> nor Mr. engineer<sub>M</sub> refl<sub>A</sub> so-far domů nevrátili.
  home not-returned
  '... some female voice told me that neither Ms. engineer nor Mr. engineer have come back home yet.' [syn5]
  b. Grégr včera sdělil, že [o přechodném období při liberalizaci energetického Grégr vesterday said that about transitional period prep liberalization energy
  - Grégr yesterday said that about transitional period prep liberalization energy trhu] se s EU stále jedná a ... market refl<sub>A</sub> with E.U. still negotiate and ... 'Grégr said yesterday that the transitional period in energy markets liberalization<sub>C</sub> is still being negotiated with E.U. and ...' [syn5]
- (87) ... protože, [jak známo,] [mnozí lidé] se do konce života nenaučí správně mluvit ... ... because as known many people refl<sub>A</sub> till end of-life not-learn correctly speak ...

Usually all the cited examples use the complementizer  $\check{z}e$  'that'. Veselovská (1995, §9.3.5) even explicitly states that sentences with other complementizer, such as (88) with *jestli* 'whether' are ungrammatical (?# judgment is mine):

(88) ?# Ptal se, jestli [Petr] mu to nedal. asked refl<sub>A</sub> whether Petr him<sub>D</sub> it<sub>A</sub> not-gave
'He asked whether Peter gave it to him.' [Veselovská 1995]

However, the sentence seems more pragmatically odd (in an out-of-the-blue context) than ungrammatical. A similar sentence in (89) is fine. And so are the sentences in (90) taken from corpora. Therefore, we can conclude that the construction is not limited to  $\tilde{z}e$  'that' but is possible with other complementizers as well.

- (89) Ptal se, jestli [třeba Petr] by mu to nedal. asked refl<sub>A</sub> whether perhaps Petr would<sub>3</sub> him<sub>D</sub> it<sub>A</sub> not-gave 'He asked whether perhaps Peter would not give it to him.'
- (90) a. Nepamatuju se, jestli [tenhleten] se z toho vyvlíknul, nebo ne. not-remember<sub>1sg</sub> refl<sub>A</sub> whether this-one refl<sub>A</sub> from that backed-out or not 'I do not remember if this one managed to back out of it.' [syn5]
  - b. Nejsem překvapen, že se na to ptáte, protože [Kanadané] mi dávají tuhle not-am surprised that refl<sub>A</sub> prep it ask because Canadians me<sub>D</sub> give this otázku pořád dokola. question all around

'I am not surprised you ask me about this because the Canadians ask me that question all the time.' [syn6] Fried (1994, ftn. 7) also notices that matrix sentences introduced with a discourse particle pattern similarly:

(91) a. Vždyť se Petr odstěhoval! Particle refl<sub>A</sub> Petr moved
'But Petr moved away (so how can you be surprised that Helena is upset)!' [Fried 1994 p. 160]
b. Vždyť [Petr] se odstěhoval!

Particle Petr  $refl_A$  moved

'But  $\mathsf{Petr}_C$  moved away (why are you therefore counting on his help?)!'[Fried 1994 p. 160]

The prevalence of the two constructions is hard to measure exactly with the current state of corpora annotation and search tools. However the numbers in (92) can give a rough idea, showing at least that neither of them is rare (the opposite of what Veselovská (1995, §4.6) claims).

- (92) a. ...  $\check{z}e$  'that' se 'refl<sub>A</sub>' noun ... about 10,000 occurrences
  - b. ... že 'that' noun se 'refl<sub>A</sub>' ... about 6,000 occurrences

### 4.4.6.1 Verbs

in September.'

Uhlířová (1987, p. 89) claims that a verb cannot occur between the complementizer and the clitic cluster. Veselovská (1995, §4.6) argues similarly, based on example in (93). However, their claim is simply not true. First, insertion of a constituent between the complementizer and the clitic cluster is used to express certain Information Structure of the clause, thus the context is extremely important. That the sentence fragment in (93) seems wrong out of the blue, does not mean it would not be judged as appropriate in some other context. The real sentences in (94) indeed show that the verb (incl. infinitive, finite verb, past participle) *can* occur between the complementizer and the clitic cluster.

- (93) \*...že nedal by mu to. (judgment by Veselovská)
  ... that not-gave would<sub>3</sub> him<sub>D</sub> it<sub>A</sub>
  '... that he would not give<sub>C</sub> it to him.' [Veselovská 1995 (§4.6)]
- (94) a. Petrová uvedla, že [jednat] by se mělo koncem druhého Petrová put-forward that negotiate<sub>inf</sub> would<sub>3</sub> refl<sub>A</sub> should<sub>p.part</sub> at-the-end second zářijového týdne. September week.
  'Petrova put forward that the negotiation should take place in the end of the second week

[syn6]

b. Context: A and B do not share a common language. A: I have good wine at home. B: I don't drink.

Špičkovou pantomimou jí vysvětlil, že [pil] by on. perfect mime her<sub>D</sub> explained that drank would<sub>3</sub> he 'He explained miming perfectly, that HE<sub>R</sub> would drink<sub>C</sub>.' [syn5]

c. Petr říkal, že [prodá] mu to určitě, a možná i dá. Petr said that sells  $\lim_{D} it_A$  definitely and maybe even gives 'Petr said he will definitely sell<sub>C</sub> it to him it and maybe he will even give it to him.'

d. Nemluvě o tom, že [stačilo] si jednou za čas pustit zprávy not-talking about that<sub>loc</sub> that<sub>comp</sub> was-enough refl<sub>D</sub> once prep time turn-on<sub>inf</sub> news na Nově, aby mi došlo, že ... on Nova,

'And it goes without saying that it was enough to turn on the Nova news sometime and it would come to my mind that ...' [syn5]

As (95) illustrates, the past participle can occur in this position only alone, which is similar to the restriction on past participle in main clauses discussed in §4.4.2.

(95) \* Špičkovou pantomimou jí vysvětlil, že [pil víno] by on. perfect mime her<sub>D</sub> explained that drank wine would<sub>3</sub> he Intended: 'He explained miming perfectly, that HE<sub>R</sub> would drink wine<sub>C</sub>.'

### 4.4.6.2 Multiple constituents

While all the linguistic sources available to us (e.g. Daneš et al. 1987, p. 619, Uhlířová 1987, p. 89, Veselovská 1995, §4.6) claim that there can be only one constituent between the complementizer and the clitic cluster, in fact the data show that there can be more of them as long as they are one of the following: path/period adverbials (96), stage adverbials (97) or they are all part of the contrastive theme (98). These constructions are analogous to the similar constructions in the matrix sentences, discussed above.

(96) a. Psali, že [od pátku] [do neděle] se zde narodilo pět miminek. wrote<sub>3pl</sub> that from Friday till Sunday refl<sub>A</sub> here born five babies. 'They wrote from Friday to Sunday, five babies were born here.'

- (97) a. Nechci, před vámi tajit pane Holmesi, že [u nás] [ve vyšetrovacím oddělení] want<sub>1sg</sub> before you conceal Mr. Holmes that prep us in investigative department si myslíme, že ... refl<sub>D</sub> think<sub>1pl</sub> that ...
  'I do not want to conceal from you, Mr. Holmes, that at our investigative department we think that ...' [syn5]
  - b. ... že [vocud] [hned] by šel tamhle, ...
    ... that from-here righ-away would<sub>3</sub> went over-there ...
    '... that from here, he would go there right away ...' [Oral2006]
- (98) a. Helena říkala, že [Petr] [Pavlovi] by to dal, ale Honza Marii ne. Helena said that Petr<sub>A</sub> Pavel<sub>D</sub> would<sub>3</sub> it gave but Honza Marie<sub>D</sub> not.
  'Helena said that Petr<sub>C</sub> would give it to Pavel<sub>C</sub> but Honza<sub>C</sub> would not to Marie<sub>C</sub>.'
  - b. Helena říkala, že [Honzu] [do Francie] by poslali, ale ... Helena said that Honza<sub>A</sub> to France would<sub>3</sub> send but ... 'Helena said that they would send Honza<sub>C</sub> to France<sub>C</sub> but ...'
  - c. Předpokládá se, že [ropa] [do tuzemska] by mohla začít proudit již dnes. assumes refl<sub>A</sub>, that oil to inland would<sub>3</sub> could start<sub>inf</sub> flow<sub>inf</sub> already today 'It is assumed that oil could start to flow to our country already today.' [syn6]

### 4.4.6.3 Partial constituents

As (99) shows, the complementizer can be followed by various partial constituents parallel to the cases in §4.4.3 – compare examples (99) with the corresponding examples above: (99a) with (67b), (99b) with (73), (99c) with (75a), (99d) with (74b).

(99) a. (Partial clausal constituent)

Helena říkala, že [pohlídat děti] si troufne [Novákům]. Helena said that watch<sub>inf</sub> children refl<sub>D</sub> dare Nováks<sub>D</sub> 'Helena said that she dares to watch children<sub>C</sub> FOR NOVÁKS<sub>R</sub>.'

b. (Split constituent, Verbal head first)

Helena říkala, že [pohlídat děti] si [Novákům] troufne. (ale opravit auto ne.) Helena said that watch<sub>inf</sub> children<sub>A</sub> refl<sub>D</sub> Nováks<sub>D</sub> dare<sub>1sg</sub> 'Helena said that she DARES<sub>R</sub> to watch children<sub>C</sub> for Nováks. (but not to repair their car)'

c. (Split constituent, Nominal head first)

Helena říkala, že [fotky] ti [nějaký] určitě pošle, ale ... Helena said that photos<sub>A</sub> you<sub>D</sub> some<sub>A</sub> definitely send, but ... 'Helena said that she would send you some photos<sub>C</sub>, but ...' d. (Split constituent, Verbal head later)

Helena říkala, že [Novákům] si [děti pohlídat] troufne. (ale Císlerům ne.) Helena said that Nováks<sub>D</sub> refl<sub>D</sub> children<sub>A</sub> watch<sub>inf</sub> dare<sub>1sg</sub> 'Helena said that she DARE<sub>R</sub> to watch children for Nováks<sub>C</sub>. (but not for Císlers)'

# 4.4.6.4 Aby

As (100) shows, the main clitic cluster surprisingly does not have to be adjacent to the contraction of complementizer with the conditional (*abychom*, *kdybychom*, etc. see §4.3.4). Although in most cases it is. This would mean that forms of *aby* are sometimes treated as contractions, i.e., the complementizer *aby* followed by an auxiliary clitic, and sometimes as a declined one-word complementizer similar to those in certain Germanic dialects (see for example, Bayer 1984; Kathol 2000*b*, and the references cited therein).

- (100) a. Chceme, aby [stát] se k těmto závazkům přihlásil a vyplatil námwant<sub>1pl</sub> that-should state refl<sub>A</sub> to these obligations acknowledged and paid  $us_D$ ho například později v rámci státního rozpočtu. him for-example later in scope state budget 'We want the state<sub>C</sub> to acknowledge these obligations and pay it to use later as, for example, a part of the budget.' [syn5]
  - b. Spíš chtějí, abych [já] se svěřoval jim. rather want<sub>1pl</sub> that-should I refl<sub>A</sub> confided them<sub>D</sub> 'They would prefer that  $I_C$  confide to THEM<sub>R</sub>' [syn5]

# 4.4.7 Analysis, Version 2

It is common to analyze sentences with complementizers in the following way: the complementizers that are able to host clitics occupy the first position (1P) and in addition, there is an optional position that can be occupied by a contrasted/stressed constituent. This route is followed, for example, by Veselovská (1995, §4.6) and Meyer (2005, p. 91).<sup>55</sup> However, such analysis is losing generalizations. As we have shown, the set of possible expressions between the complementizer and the clitic cluster is the same as the set of possible expressions occupying 1P in matrix sentences under the same conditions: it can contain partial constituents or multiple constituents, and when it contains a past participle it cannot contain anything else. We have also shown that the alleged restrictions on the so-called optional position (no verbs, no multiple constituent) that would differentiate it from the

<sup>&</sup>lt;sup>55</sup>Svoboda (2000) puts complementizers into a position before 1P (*initial* and *pre-initial* field in his terminology). However, as far as we know, he does not provide any reasons for that.

pre-clitic position in matrix sentences, in fact, do not exist. Thus in this view, one has to restate the conditions on 1P for the new optional slot.

In §4.4.5 above, we concluded that in matrix sentences, 1P can be either the first constituent or the fronted expression. One way how to interpret the data in the previous section is that (a) the clitics are positioned relative to the whole complementized sentence ( $\bar{S}$  or CP), and that (b) there is a third possible anchor for clitic blending the previous two cases: 1P can be also the first fronted constituent.

Consider the example in (101) which illustrates all three possibilities. The clitic might be placed after the first constituent (i.e., the complementizer), after the first fronted expression or after all fronted expressions (which is the actual attested case).

(101) Předpokládá se, že (by) ropa (by) do tuzemska by mohla začít proudit již assumes refl<sub>A</sub>, that oil to inland would<sub>3</sub> could start<sub>inf</sub> flow<sub>inf</sub> already dnes. today 'It is assumed that oil could start to flow to our country already today.' [syn6]

In fact, a similar situation can be found in matrix sentences when a multiple fronted expression is preceded by certain particles such as  $v\tilde{z}dy\check{t}$  (c.f. (91)):

(102) Vždyť (by) ropa (by) do tuzemska by mohla začít proudit již dnes. Particle oil to inland would<sub>3</sub> could start<sub>inf</sub> flow<sub>inf</sub> already today 'But oil could start to flow to our country already today.'

However, examples such as these are rather rare. In the majority of cases, all the three possibilities come to one. The reason is that:

- 1. Usually one and only one constituent is fronted; exceptions are rheme-only sentences where nothing is fronted, and multiple frontings.
- 2. Fronted expressions are usually initial, exceptions are complementizers and the infrequent cases of particles such as  $v \check{z} dy \check{t}$ .

In example (103), the position of the clitic can be analyzed in either of the three ways: it follows the first constituent, all fronted expressions or the first fronted constituent.

(103) Hejtmana by navrhla ODS. local-governor<sub>A</sub> would<sub>3</sub> nominated ODS. 'The governor would be nominated by ODS.' [syn6]

# 4.4.8 Summary of §4.4

In this section, we have shown that while in a typical sentence the main clitic cluster follows the first clausal constituent, this is not the case in general. Clitics can be positioned in respect to three anchors:

- 1. the first constituent this may be the first fronted constituent, the first constituent in rhemeonly sentences without fronting, or the complementizer;
- 2. the first fronted constituent (possibly preceded by a complementizer)
- 3. the whole fronted expression

In an embedded clause with a complementizer, the clitics are positioned relative to the whole complementized clause. The constituents are partial in case of split-fronting, otherwise they are full constituents. In majority of cases, all these three possibilities come to one.

# 4.5 Morpholexical ordering

As mentioned in §4.2, sentential clitics not only have a fixed position relative to the rest of the clause; they also have a relatively fixed order relative to one another. A clitic cluster can be quite complex: clitics governed by different verbs (or even adjectives, etc.) can cluster together in one place due to clitic climbing (see §4.6). In the present section, we describe a constraint which orders clitics based on their morpholexical properties, so that certain clitics, and clitics in certain forms, must occur before certain other clitics. We present data and constraints that hold for Czech, but similar constraints are valid in other Slavic languages as well; for a comparison see, for example, (Franks and King 2000).

The examples in (104) illustrate the basic point: the order of clitics in (104a), reflexive – dative – accusative, is grammatical, while the order in (104b) is not.

- (104) a. Martin  $se_1$   $ti_2$   $ho_2$  nakonec rozhodl<sub>1</sub> koupit<sub>2</sub>. Martin<sub>N</sub> refl<sub>A</sub> you<sub>sgD</sub> him<sub>A</sub> finally decided buy<sub>inf</sub> 'Martin finally decided to BUY<sub>R</sub> it for you.'
  - b. \* Martin  $se_1$   $ho_2$   $ti_2$  nakonec rozhodl<sub>1</sub> koupit<sub>2</sub>. Martin<sub>N</sub> refl<sub>A</sub> him<sub>A</sub> you<sub>sgD</sub> finally decided buy<sub>inf</sub>

It is important to note that, for the relative acceptability of the sentences in (104), it is irrelevant whether or not the positioning of the verbs governing the relevant clitics (*rozhodl* 'decided' and *koupit* 'buy<sub>inf</sub>') yields more or less discontinuous phrases. Consider the various possibilities in (105): the examples differ in their topic/focus structure, sometimes in very subtle ways, but all of them are grammatical.

- (105) a. Martin  $se_1$   $ti_2$   $ho_2$  koupit<sub>2</sub> nakonec rozhodl<sub>1</sub>. (Ale Eva ještě váhá) Martin<sub>N</sub> refl<sub>A</sub> you<sub>sgD</sub> him<sub>A</sub> buy<sub>inf</sub> finally decided 'Martin finally DECIDED<sub>R</sub> to buy it for you. (But Eva is still hesitating.)'
  - b. Koupit<sub>2</sub>  $se_1$   $ti_2$   $ho_2$  nakonec rozhodl<sub>1</sub> Martin. buy<sub>inf</sub> refl<sub>A</sub> you<sub>sgD</sub> it<sub>A</sub> finally decided Martin 'MARTIN<sub>R</sub> finally decided to buy<sub>C</sub> it for you.'
  - c. Rozhodl<sub>1</sub>  $se_1$   $ti_2$   $ho_2$  nakonec koupit<sub>2</sub> Martin. decided refl<sub>A</sub> you<sub>sgD</sub> it<sub>A</sub> finally buy<sub>inf</sub> Martin 'MARTIN<sub>R</sub> finally decided<sub>C</sub> to buy it for you.'

The examples in (104) and (105) show that reflexives (the accusative reflexive *se* and the dative reflexive *si*) precede nonreflexive dative pronouns (like ji 'her<sub>D</sub>', mi 'me<sub>D</sub>', etc.), which in turn precede nonreflexive accusative pronouns (such as *ho* 'him<sub>A</sub>', similarly  $m\check{e}$  'me<sub>A</sub>', etc.). Schematically then:

(106) reflexives < nonreflexive dative < nonreflexive accusative<sup>56</sup>

# 4.5.1 Reflexives

Only one of the four reflexive clitics (accusative, dative and contractions – see  $\S4.3.3$  above), can occur in the same clitic cluster, as (108) shows.<sup>57</sup> For cases of reflexives governed by different heads see  $\S4.6.1$ .

(108) a. \* Smál se si.laughed refl<sub>A</sub> refl<sub>D</sub>

(107) Barabanchikât si se usmixva. drummer.the  $\operatorname{refl}_D \operatorname{refl}_A$  smiles 'The drummer smiles at himself.'

[Rivero 2005 (27)]

 $<sup>^{56}</sup>$ Slovak, Slovenian and Sorbian follow the same pattern, but Serbo-Croatian requires reflexives to follow accusatives.

<sup>&</sup>lt;sup>57</sup>In this respect, Czech differs from Bulgarian, a South Slavic language, where only identical reflexives cannot co-occur in the same cluster.

b. Smál se (sám) sobě. laughed refl<sub>A</sub> (alone) refl<sub>D</sub> 'He laughed to himself.'

# 4.5.2 Datives

The situation with dative clitics is slightly more complicated, in that the ordering shown in (106) above holds only for complement dative clitics. There are two other types of nonreflexive dative clitics: ethical dative clitics and adjunct clitics. Second-person ethical dative clitics roughly corresponding to English phrase *you know* and the like.<sup>58</sup> Adjunct dative is used for somebody who benefits from or is affected by a process, in examples below, we translate it as for me/her/...

Ethical dative clitics can follow a reflexive like any other dative clitic, but they can also precede it. In (109a), the ethical dative ti follows the reflexive se, while in (109b), it precedes the reflexive. Some speakers prefer them to precede the complement datives (110a, 110b), but some allow also the opposite order (110c). It is necessary to mention that there is a great variety in speakers' constraints on the order of the ethical-dative clitics relative to the other dative clitics. However, all speakers perceive violations of their constraints on ethical dative placement as much less disturbing than violations of other constraints: e.g., violations of the relative ordering of dative and accusative clitics.

- (109) a. On se ti vůbec nebál. he refl<sub>A</sub> you<sub>D</sub> at-all not-scared 'You know, he wasn't scared at all.'
  - b. On ti se vůbec nebál. he you<sub>D</sub> refl<sub>A</sub> at-all not-scared 'You know, he wasn't scared at all.'
- (110) a. On se ti jí ani nepředstavil. he refl<sub>A</sub> you<sub>D</sub> her<sub>D</sub> even not-introduced 'You know, he did not even introduce himself to her.'
  - b. On ti se ji ani nepředstavil. he you<sub>D</sub> refl<sub>A</sub> her<sub>D</sub> even not-introduced 'You know, he did not even introduce himself to her.'

<sup>&</sup>lt;sup>58</sup>As Rosen (2001) points out, in addition to the second person clitics ti 'you<sub>SgD</sub>' and vám 'you<sub>PlD</sub>', there is also a third-person plural ethical dative clitic *jim* 'them<sub>D</sub>', formerly used in polite address. Such usage is now obsolete, and the second person plural pronoun is used instead.

c. ? On se ji ti ani nepředstavil. he refl<sub>A</sub> her<sub>D</sub> you<sub>D</sub> even not-introduced 'You know, he did not even introduce himself to her.'

The position of adjunct datives is after ethical datives/reflexives, as seen in (111), and before complement datives, as seen in (112):

- (111) a. Zbláznil se jí manžel. Went-crazy refl<sub>A</sub> her<sub>D</sub> husband 'Her husband went crazy.' (Lit: The husband went crazy to her.)
  - b. \* Zbláznil ji se manžel. Went-crazy her<sub>D</sub> refl<sub>A</sub> husband
- (112) a. On se mi ji ani nepředstavil. He refl<sub>A</sub> me<sub>D</sub> her<sub>D</sub> even not-introduced 'He did not even introduce himself to her, for me.' ?'He did not even introduce himself to me, for her.'
  - b. On se ji mi and nepředstavil. He refl<sub>A</sub> her<sub>D</sub> me<sub>D</sub> even not-introduced 'He did not even introduce himself to me, for her.' ?'He did not even introduce himself to her, for me.'

# 4.5.3 Genitives

Although it is clear that genitive clitics occur close to the right edge of the clitic cluster, following for example reflexives (113a) or datives (113b), their position relative to accusative clitics is not entirely clear, as discussed for example by Franks and King (2000). One of the reasons is that sentences containing both accusative and genitive clitics are rather rare. Mostly, the genitive clitic is extracted from a numeral expression or an expression of amount (sometimes called numerative or partitive). The syn2005 corpus contains sentences exhibiting both orders, although a genitive following an accusative, e.g., (113c), is more frequent than a genitive preceding an accusative, e.g., (113d). The judgments are largely speaker dependent, some speakers judging both orders as incorrect or marginal. I prefer genitive following accusative, although in certain cases both possibilities seem equally acceptable to me, for example (113e) and (113f).

(113) a. Nemohl *jsem se jí* nabažit. not-could  $aux_{1sg}$  refl<sub>A</sub> her<sub>G</sub> get-tired-of 'I could not get tired of her.' b. On se ti mě nebál. He refl<sub>A</sub> you<sub>D</sub> me<sub>G</sub> not-scared 'You know, he wasn't scared of me.'

c. Kontaktovalo <i>nás jich</i> asi osm, ale Contacted $us_A$ them <sub>G</sub> about eight but	
'About eight of them [sport clubs] contacted us, but '	[syn5]
d. Ano, třicet <i>jich nás</i> přišlo zachránit, Yes thirty them <sub>G</sub> us <sub>A</sub> came rescue <sub>inf</sub>	
'Yes, thirty of them [scouts] came to our rescue,'	[syn5]
e. Napadá <i>mě jich tu</i> vždycky spousta.	

f. Napadá *jich mě tu* vždycky spousta.

come-upon  $me_A$  of-them<sub>G</sub> here always a-lot

'I always come upon a lot of them [e.g. jokes] here.'

# 4.5.4 Auxiliaries

As explained in §4.3.4, some forms of the auxiliary verb  $b \acute{y}t$  'to be' (the past auxiliary, conditional auxiliary, non-negative passive auxiliary and non-negative copulas) are, or can be, clitics. They occur at the beginning of the clitic cluster, as for example in (114). Unsurprisingly, when the conditional auxiliary is reanalyzed as a conditional particle by + (past tense) auxiliary, the particle comes before the auxiliary, as (114c) shows.

- (114) a. Martin by se ji ho nakonec rozhodl koupit. Martin would<sub>3</sub> refl<sub>A</sub> her<sub>D</sub> him<sub>A</sub> finally decided to-buy 'Martin would decide to buy it for her at the end.'
  - b. Seznámila jsem se se zajímavým klukem. Met  $aux_{1sg}$  refl<sub>A</sub> with interesting boy 'I met an exciting boy.' [ksk]
  - c. Mohli by jsme si k tomu sehnat i různé věci a potřeby. could would  $aux_{1pl}$  refl<sub>D</sub> for that get even various things and requisities 'We could even get various things and requisities for that.' [ksk]

# 4.5.5 to

When clitic, to 'it<sub>A</sub>' follows accusative/genitive personal pronouns<sup>59</sup> as (115) shows. In most cases it precedes však, prý, prej, už and the other inconstant clitics in (51) – see (116). In the corpus

 $<sup>^{59}</sup>$ Recall, that to is a demonstrative pronoun, accusative singular neuter form of ten, with the meaning roughly as this and that without expressing closeness/distance. Usually, English personal pronoun it is the closest translation.

syn2005, sequences  $\langle \text{constant clitic} \rangle + to + v \check{s}ak | pr \check{y} | prej | u \check{z}$  are 25 times more frequent than sequences  $\langle \text{constant clitic} \rangle + v \check{s}ak | pr \check{y} | prej | u \check{z} + to$  (we require the sequences to start with a constant clitic to exclude most of the non-clitic uses of  $v \check{s}ak$ ,  $pr \check{y}$  etc.).

- (115) a. Šána kouká do země, jako by se ho to netýkalo. Šána looks into ground as would refl<sub>A</sub> him<sub>G</sub> it<sub>A</sub> not-affected. 'Šána looks into the ground as if he weren't involved.' [syn5]
  - b. \* Šána kouká do země, jako by se to ho netýkalo.
- (116) Stalo se mi to už několikrát a vím, že ... happened refl<sub>A</sub> me<sub>D</sub> it<sub>A</sub> already several-times and know<sub>1sg</sub> that ... 'It has happened to me several times and I know that ...' [syn5]

# 4.5.6 však, prý, prej, ale, už

Clitic však 'however/though' can occur at the beginning or preferably at the end of the clitic cluster following to 'it', as shown by the examples in (117), or the real examples in (118).

- (117) a. Opravit  $v \check{s} a k j sem se mu to$  včera snažil marně. repair however  $\operatorname{aux}_{1sg} \operatorname{refl}_A \operatorname{him}_D \operatorname{it}_A$  yesterday tried fruitlessly 'However, I tried to repair it yesterday without success.'
  - b. Opravit jsem se mu to však včera snažil marně.
- (118)a. V osobní komunikaci očí do očí by  $\mathbf{Z}$ se $v \acute{a} m$ to však In personal communication from eyes to eyes would<sub>3</sub> refl<sub>A</sub> you<sub>plD</sub> it<sub>A</sub> however nemuselo podařit. may-not succeedinf 'In personal eye to eye communication, you would not necessary succeed though.' [syn5]  $v\check{s}ak$ nelíbilo, když jsem jí donesla učení b. Vůbec se jí na Not-at-all refl<sub>A</sub> her<sub>D</sub> however not-liked when  $aux_{1sg}$  her<sub>D</sub> brought studying to doplnění. catch-up. 'She did not like at all though when I brought her study materials to catch up.' [ksk]
  - c. Naštěstí však se mu to nikdy nepodařilo a ... Luckily however  $\operatorname{refl}_A \lim_D \operatorname{it}_A$  never not-succeeded and ... 'Luckily he never succeeded though.' [syn5]

Some speakers allow  $v \check{s} a k$  to occur anywhere within the clitic cluster, see (119) or (120). Other speakers judge these sentences as marginally acceptable, or even ungrammatical. The syn2005 corpus contains nearly 150,000 occurrences of  $v \check{s} a k$ . 64-80% of them are not adjacent to a clitic; 19-33% occur at the end of the clitic cluster, around 1% occur at the beginning of the clitic cluster, occurrence in the middle of a clitic cluster is close to 0%.<sup>60</sup>

(119) a. Opravit jsem však se mu to včera snažil marně.

b. Opravit jsem se však mu to včera snažil marně.

c. Opravit jsem se mu však to včera snažil marně.

(120) a. Právě proto jsem se však mu snažil co nejvíce vyhnout.  
Just therefore 
$$aux_{1sg}$$
 refl<sub>A</sub> however  $him_D$  tried what most avoid<sub>inf</sub>  
'Exactly because of that, I tried to avoid him as much as possible.' [syn5]

b. Těsto pořádně promícháme, aniž bychom však ho silně hnětli. Dough thoroughly mix without would<sub>1pl</sub> however  $\lim_{A}$  hard kneaded 'We mix the dough thoroughly; however without kneading it hard.' [syn5]

A similar distribution can be observed for *ale*, also an inconstant clitic, but much less formal and much more frequently used as a non-clitic. Also prý/prej 'allegedly', see (121), and  $u\check{z}$  'already' also occur mostly at the beginning or the end of the cluster, rarely internally.

(121)	a. Mluvil jsem s Rosensteinem a ten $mi$ oznámil, že $jsem$ $si$ $t\check{e}$ talked $aux_{1sg}$ with Rosenstein and that $me_D$ informed that $aux_{1sg}$ $refl_D$ $you_A$ $pr\acute{y}$ najal. allegedly hired	
	'I talked with Rosensteinem and he told me, that allegedly I had hired you.'	[syn5]
	b. Mohlo <sub>1</sub> $by_0$ $se_2$ $to_2$ $pry_0$ snadno stát <sub>2</sub> . Could would <sub>3</sub> refl <sub>A</sub> it allegedly easily happen <sub>inf</sub> .	
	'It could allegedly easily happen.'	[syn5]
	c. Vaří $n \acute{a}m tu$ zatím dobře, ale $pr \acute{y}$ se to má zhoršit. Cook <sub>3pl</sub> us <sub>D</sub> here so-far well but allegedly refl <sub>A</sub> it <sub>A</sub> should get-worse <sub>inf</sub>	
	'They cook for us well so far, but it should allegedly get worse.'	[ksk]
	d. Tím, že jsem mu přinesl celý rukopis, udobřil jsem prý By-that that $aux_{1sg} him_D$ brought whole manuscript, reconciled $aux_{1sg}$ allegedly ho. him <sub>A</sub>	sirefl <sub>D</sub>
	'Allegedly, I reconciled with him by bringing the whole manuscript.'	[syn0]

<sup>&</sup>lt;sup>60</sup>The frequencies are provided as ranges because the corpus does not contain information about clitic-hood, and even the morphological and lexical information that could provide partial clues contains errors. The lower ends of the ranges are obtained by considering only unambiguous tokens as clitics (*bych* 'would<sub>1sg</sub>, but not *se* 'refl'/preposition or *nás* 'us<sub>G/A</sub>' an inconstant clitic), the higher ends by considering all tokens that can potential by clitics.

The relative position of these clitics to each other is probably mostly free. Although, based on the frequency in the corpus the order  $v \check{s} a k < pr \acute{y}/pr e j < u \check{z}$  seems to be preferred,<sup>61</sup> all consulted speakers judged any possible variations as equally acceptable.

a. No, ale ve Španělsku *se* (122)prý $u\check{z}$ opalují. Well, but in Spain refl<sub>A</sub> allegedly already sun-bathe<sub>3pl</sub> 'Well, but they say that it is already possible to sunbathe in Spain.' [ksk] b. No, ale ve Španělsku se  $u\tilde{z} pr\hat{y}$  opalují. c. Daří mu to však jen proto, že připravuje... seprýsucceeds refl<sub>A</sub> him<sub>D</sub> it<sub>A</sub> though allegedly only because prepares  $\ldots$ 'However he is allegedly successful only because he prepares ....' [syn5] d. Na Žižkově však prý  $u\check{z}$ podepsal smlouvu s platností od července at Žižkov but allegedly already signed agreement with effectiveness from July 2004.2004'But allegedly he already signed an agreement at Žižkov effective July 2004.' [syn5] e. Její muž zatím během kampaně utratil okolo 48 mil. dolarů (zhruba 1,7 miliardy Kč), - 'Her husband spent about \$48 million (roughly 1.7 billion CZK) during the campaign sofar, disponuje *však* 70miliónovým fondem a  $u\check{z}$ prýhowever already allegedly 70-million fund dispose and ...

# however, he has allegedly 70-million fund at his disposal and ...' [syn5]

# 4.5.7 Summary of §4.5

In Czech, similarly as in other languages, clitics within a clitic cluster are ordered according to their morpholexical features.

(123) auxiliaries < reflexives < adjunct dative < complement dative < accusative/genitive < to

Genitive usually follows accusative. In addition,

• ethical dative occurs anywhere after the position of auxiliaries and before the position of complement datives (or accusatives for some speakers);

<sup>&</sup>lt;sup>61</sup>The corpus syn2005 contains only 3 sentences containing all 3 words in a sequence, two of them in (122), the syn2000 contains another 6 such sentences, ksk or pmk none (this is not surprising since one of them -  $v \bar{s} a k$  is quite infrequent in Common Czech). However taken by pairs (for syn2005), vsak preceds pr y'/prej in 78% cases, prej < u z 68%, vsak < u z 86%. It is worth noting, that some of the cases may include non-clitic usages of these words.

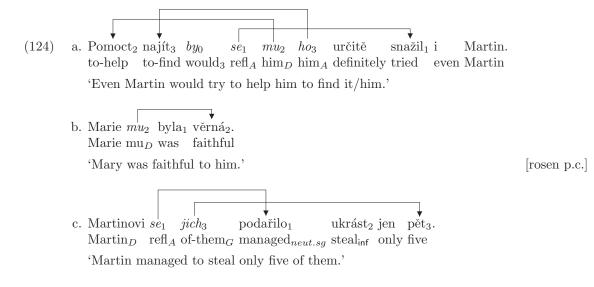
other clitics, e.g., tu, však, prý/prej, už, ale follow the position of to. však, prý/prej, už can also precede the position of auxiliaries; for some speakers they can even be freely positioned anywhere within the clitic cluster. With a higher but still small frequency, they occur before to.

# 4.6 Clitic Climbing

In a clause, clitics governed by the highest non-clitic governor (usually a non-auxiliary finite verb, see below for other possibilities) obligatorily occur in Wackernagel position – in the main clitic cluster. However, there can be other clitic clusters in the domain of more embedded phrases. Clitics governed by those words can, or even tend, under certain circumstances to occur in the clitic clusters of less embedded governors, possibly in the main one. Within a finite clause, clitics governed by infinitives (124a), adjectives (124b), adverbs, and numerals (124c) can climb up into a higher clitic cluster.

An embedded cluster is within the phrase of its governor either preceding it or immediately following it. See (Toman 2000) for more details. Two adjacent clusters are potentially separated by a prosodic boundary. Thus impossibility to separate two clitics by a boundary means they are in the same cluster.

In this section, we discuss various rules on climbing. Some of them are strict rules and some are merely preferences. Most of the rules are well known, but some modification or corrections, we believe, are original.



### 4.6.1 Co-occurrence constraints

### 4.6.1.1 Restriction on Identical Clitics

A clitic cluster cannot contain two morphologically identical clitics with different governors. For example, in (125), the embedded clitic mi 'me<sub>D</sub>' cannot climb to the main cluster when another token of that clitic is already there. As Avgustinova and Oliva (1995) show this is not a restriction on two clitics of the same case – a clitic cluster can contain for example two dative clitics (see §4.6.3.3 for more details).

(125)	a.	Kamila $mi_1$ slíbila <sub>1</sub> $mi_2$ $to_2$ vrátit <sub>2</sub> . Kamila me <sub>D</sub> promissed me <sub>D</sub> it <sub>A</sub> return <sub>inf</sub>	
		'Kamila promised me to return it to me.'	[Rosen 2001 (221d)]
	b.	* Kamila $mi_1 mi_2 to_2$ slíbila <sub>1</sub> vrátit <sub>2</sub> . Kamila me <sub>D</sub> me <sub>D</sub> it <sub>A</sub> promissed return <sub>inf</sub>	
			$[\text{Rosen } 2001 \ (221b)]$
	с.	Kamila $mi_2$ $to_2$ slíbila <sub>1</sub> vrátit <sub>2</sub> . Kamila me <sub>D</sub> it <sub>A</sub> promissed return <sub>inf</sub>	
		'Kamila promised to return it to me.'	[Rosen 2001 (221c)]

A clitic cluster can contain two identical clitics if they have the same governor, even if they climbed, as (126) shows. However, it is necessary to note that none of the searched corpora contain such a sentence, and some speakers, although accepting (126), suggested replacing the second ji by demonstrative to.<sup>62</sup>

(126) (Už umí Marie násobilku?)

('Has Marie mastered multiplication (tables)'? )

Ne, ale Martin  $by_0$   $ji_2$   $ji_2$  mohl<sub>1</sub> naučit<sub>2</sub> rychle. No but Martin would<sub>3</sub> her<sub>A</sub> her<sub>A</sub> could teach<sub>inf</sub> fast 'No, but Martin could teach it to her fast.'

A similar constraint was formulated by Rosen (2001, p. 227), however his formulation is unnecessary restrictive: "Two phonologically identical clitics cannot co-occur in a single clitic cluster as a result of clitic climbing." First, his constraint incorrectly rules out the sequence  $si \ si \ (aux_{2sg} \ refl_D)$ , as in (127).

<sup>&</sup>lt;sup>62</sup>Sentences with two feminine pronouns ji sound better than sentences with two, say, masculine pronouns ho ho. In our view, this is because the ji can be pronounced both with short or long vowel (see §4.3.2) and thus in the sequence ji ji the vowels can dissimilate and be pronounced as [ji:ji]. This option is not available with other clitics.

(127) a. Ty  $[j]si_0 si_1$  pokecal<sub>1</sub> ponožku. You aux<sub>2sg</sub> refl<sub>D</sub> sloshed sock roughly: 'You spilled on your sock.'

[oral2006]

b. Ty [j]si<sub>0</sub> si<sub>2</sub> chtěl<sub>1</sub> hrát<sub>2</sub>?
You aux<sub>2sg</sub> refl<sub>D</sub> wanted play<sub>inf</sub>
'Did you want to play?'

Second, it incorrectly rules out two identical clitics that climb but are governed by the same verb, as in (126), where ji ji are governed by an embedded infinitive and climbed to the main clitic cluster. Sentences with multiple identical clitics are not always accepted by speakers, but whether the clitics climbed or not does not influence the acceptability.

### 4.6.1.2 Haplology of reflexives

While a clitic cluster can contain at most one reflexive ( $\S4.5.1$ ), certain combinations of reflexive clitics can undergo so-called *haplology* – only the more embedded reflexive is realized (see e.g., Avgustinova and Oliva 1995,  $\S2.1.2$ , Rosen 2001,  $\S7.3$ ).

Note that phonological identity of clitics is neither a necessary nor a sufficient condition for haplology as some authors claim (e.g., Avgustinova 2000, Rosen 2001, p. 229<sup>63</sup>).

First, haplology does not need to occur when clitics are phonologically identical: (127) shows the reflexives can be immediately preceded by jsi 'aux<sub>2sg</sub>', usually pronounced as [si], thus homophonous with si. (j)si + si 'aux<sub>2sg</sub> + refl<sub>D</sub>' can be replaced by the contraction sis, but this is not obligatory. The perception of this repetition is clearly different from the perception of (126) and similar cases of repeated pronominal clitics – all speakers accept examples like (127). Similarly, as in (128), reflexives can be followed by a preposition se 'with', a proclitic, which can be homophonous with accusative reflexive se when the reflexive proclitizises (§4.2.2). This should not be surprising – as Stemberger (1981, p. 802) documents by examples from various languages, haplology may be present with one affix, but is absent with another, homophonous one.

(128) Ti, co  $m\check{e}$  neznají, |se| se mnou začnou hádat, ... Those what me<sub>acc</sub> not-know refl<sub>A</sub> with me start argue<sub>inf</sub>... 'Those that do not know me start to argue with me, ...' [syn6]

Second, haplology can occur when clitics are not phonologically identical: si can stand for se + a more embedded si as (129) shows. The fact that it is the higher se and not the lower si that is lost,

<sup>&</sup>lt;sup>63</sup>According to Rosen, the phonological identity is not a necessary condition for haplology to occur, but it is still a sufficient one. We agree with the first part of his claim, but disagree with the second one.

is in line with Stemberger (1981, p. 802) cross-language observation that the morpheme that is lost in haplology dominates the other morpheme. For some reason the opposite haplology (si + a more embedded se) is not attested as Rosen (2001, p. 232)'s (130) shows.

(129)	a. Jan $se_1$ bál <sub>1</sub> vzít <sub>2</sub> $si_2$ kravatu. Jan refl <sub>A</sub> was-afraid take <sub>inf</sub> refl <sub>D</sub> tie 'Jan was afraid to take a tie.'	
	b. Jan $si_2$ bál <sub>1</sub> vzít <sub>2</sub> kravatu. Jan refl <sub>D</sub> was-afraid take <sub>inf</sub> tie 'Jan was afraid to take a tie.'	[Rosen 2001 (233) / K. Oliva]
	c. *Jan $se_1$ bál <sub>1</sub> vzít <sub>2</sub> kravatu. Jan refl <sub>A</sub> was-afraid take <sub>inf</sub> tie	
(130)	a. Troufla <sub>1</sub> $si_1$ usadit <sub>2</sub> $se_2$ v první řadě. dared refl <sub>D</sub> to-sit refl <sub>A</sub> in first row 'She dared to sit in the first row.'	[Rosen 2001 (233)]
	b. * Troufla <sub>1</sub> $si_1$ usadit <sub>2</sub> v první řadě. dared refl <sub>D</sub> to-sit refl <sub>A</sub> in first row	
	c. * Troufla <sub>1</sub> $se_2$ usadit <sub>2</sub> v první řadě.	

### 4.6.2 Constraints on the climbing path

dared  $refl_A$  to-sit in first row

• Clitics can climb only from infinitive phrases (124a), predicative adjective (124b), and in case of quantified genitives from quantified phrases (124c) (NPs, APs, or AdvPs); see for example (Rosen 2001, pp. 226f). Thus climbing is impossible from finite clauses, nominal, nonpredicative adjectival and adverbial participles and non-quantifying nominal phrases.

This might be explained, in our view, by a requirement on a single path of climbing – there is only one sequence of embedded infinitives and one predicative nominal, but there can be several NPs or clauses with embedded clitics. Such requirement thus limits the possible governors of climbing clitics, therefore significantly decreasing the cognitive load on hearer processing a sentence with climbing clitics.

However, there is an exception – quantified genitives can climb from subject and objects at the same time. Consider example (131). The genitive clitic  $n\acute{as}$  'us<sub>G</sub>' belongs to the subject NP *většina nás* 'most of us', and the other genitive clitic *jich* 'them<sub>G</sub>' belongs to the object NP *pět jich* 'five of them' (the order of the two clitics is probably free). Such sentences are rare

but possible. We are not ready to explain this deviation and will have to leave it for further research.

(131) Je jich sedm, ale včera  $n\acute{as}$  jich většina viděla jen pět. is them<sub>G</sub> seven but yesterday us<sub>G</sub> them<sub>G</sub> most<sub>fem</sub> saw<sub>fem</sub> only five<sub>non-oblique</sub> 'There are seven of them, but yesterday most of us saw only five of them.'

Also, Dotlačil (2006) nicely shows why it is logical that climbing out of CPs is impossible: As mentioned in §3.4.3, only contrastive or focused items can climb out of Czech CPs, clitics cannot be contrasted nor focused.

- Clitics nearly always climb out of phrases governed by auxiliaries, especially in case of past tense and conditional.
- Clitics tend to climb out of a phrase governed by a modal verb (Karlík et al. 1996, p. 651). Thus (132a) is usually preferred to (132b).
  - (132) a. V pondělí  $mu_3$   $to_3$  budu<sub>1</sub> muset<sub>2</sub> konečně vrátit<sub>3</sub>. On Monday him<sub>D</sub> it<sub>A</sub> will<sub>1sg</sub> must<sub>inf</sub> finally return<sub>inf</sub> 'On Monday, I will have to return it finally to him'
    - b. V pondělí budu<sub>1</sub> muset<sub>2</sub> konečně  $mu_3$   $to_3$  vrátit<sub>3</sub>. On Monday will<sub>1sg</sub> must<sub>inf</sub> finally him<sub>D</sub> it<sub>A</sub> return<sub>inf</sub> 'On Monday, I will have to return it finally to him'
- (Karlík et al. 1996, p. 651) claim that a clitic usually does not climb from phrases governed by nonmodal verbs, if its governor has other non-clitic dependents. However, this does not seem true. As Rosen (p.c.) notes, the example (133a), with climbing ho is better than with nonclimbing ho in (133b), even though dát 'give<sub>inf</sub>' has another complement: Petrovi 'Petr<sub>D</sub>'.

(133)	a. Marie $ho_2$ slíbila <sub>1</sub> dát <sub>2</sub> Petrovi.	
	Marie $\lim_A$ promissed give <sub>inf</sub> Petr <sub>D</sub>	
	'Marie promised to give it to Petr.'	[rosen p.c.]
	b. Marie slibila <sub>1</sub> dát <sub>2</sub> $ho_2$ Petrovi. Marie promissed give <sub>inf</sub> him <sub>A</sub> Petr <sub>D</sub>	
	'Marie promised to give it to Petr.'	[rosen p.c.]

### 4.6.3 Structural constraints

### 4.6.3.1 Climbing is monotonic

A clitic cannot climb over another clitic. More precisely:

(134) A clitic can climb to a particular cluster only if all clitics with a less embedded governor climbed to that or a higher cluster as well.

In (135a), clitics stay with their verbs so that the only clitic in Wackernagel position is se 'refl<sub>A</sub>'. In (135b), mu 'him<sub>D</sub>' climbs from the verb *pomoci* 'to-help' to Wackernagel position, and ho 'him<sub>A</sub>' climbs one level up, to the verb *pomoci*. Sentence (135d) is ill-formed, because the clitic ho 'him<sub>A</sub>' is more embedded than the clitic mu 'him<sub>D</sub>' (i.e., in ho's governor is more embedded than mu's governor), yet it occurs in a less embedded cluster than mu - ho is in the main cluster and mu is in the cluster of *pomoci*.

- (135) a. Všichni  $jsme_0 se_1$  snažili<sub>1</sub> [ $mu_2$  pomoci<sub>2</sub> [ $ho_3$  najít<sub>3</sub>.]] all  $aux_{1pl}$  refl<sub>A</sub> tried  $him_D$  to-help  $him_A$  to-find 'All of us tried to help him to find it.'
  - b. Všichni  $jsme_0 se_1 mu_2 snažili_1 [ <math>ho_3 \text{ pomoci}_2 najít_3. ]$
  - c. Všichni *jsme*<sub>0</sub> *se*<sub>1</sub> *mu*<sub>2</sub> *ho*<sub>3</sub> snažili<sub>1</sub> pomoci<sub>2</sub> najít<sub>3</sub>.
  - d. \* Všichni  $jsme_0 se_1 ho_3 snažili_1 [mu_2 pomoci_2 najít_3.]$

Note that the surface ordering of verbs does not have to correspond to their embeddedness; c.f. (136a) &

- (136) a. Pomoci<sub>2</sub> najít<sub>3</sub>  $jsme_0 se_1 mu_2 ho_3$  snažili<sub>1</sub> všichni.
  - b. [  $Pomoci_2 mu_2 ho_3 najít_3$  ]  $jsme_0 se_1 snažili_1 všichni.$

The (rather artificial) examples in (137) show that this applies even to more embedded clusters. While the sentence in (137a) with all clitics climbing to the main cluster is preferred, only the over the examples with partially climbing clitics, only (137de) violating the monotonicity constraint is are clearly out.

(137) a. [Zítra]  $se_2 mu_3 ho_4$  určitě všichni začnou<sub>1</sub> snažit<sub>2</sub> pomoct<sub>3</sub> najít<sub>4</sub>. Tomorrow refl<sub>A</sub> him<sub>D</sub> him<sub>A</sub> definitely all start try<sub>inf</sub> help<sub>inf</sub> find<sub>inf</sub> 'Tomorrow, all will definitely start to try to help him to find him/it.'

- b. ? [Zítra] určitě všichni začnou<sub>1</sub> se<sub>2</sub> snažit<sub>2</sub> pomoct<sub>3</sub> mu<sub>3</sub> ho<sub>4</sub> najít<sub>4</sub>.
- c. ? [Zítra] určitě všichni začnou $_1 se_2 mu_3 ho_4 snažit_2 pomoct_3 najít_4.$
- d. \* [Zítra] určitě všichni začnou<sub>1</sub>  $se_2 ho_4$  snažit<sub>2</sub> pomoct<sub>3</sub>  $mu_3$  najít<sub>4</sub>.
- e. \* [Zítra]  $se_2 ho_4$  určitě všichni začnou<sub>1</sub> snažit<sub>2</sub> pomoct<sub>3</sub>  $mu_3$  najít<sub>4</sub>.

# 4.6.3.2 Control Constraints

### Subject Control Constraint?

Thorpe (1991) has argued that clitics cannot climb from object-controlled infinitives. The clitic ho 'him<sub>A</sub>' in (139a) governed by a subject-controlled infinitive may climb to the main clitic cluster, as in (139b). On the other hand, the clitic ho 'him<sub>A</sub>' in (140) governed by a object-controlled infinitive cannot climb.<sup>64</sup>

(139)	a. Alena $ho_2$ slíbila <sub>1</sub> navštívit <sub>2</sub> , jakmile to bude možný. Alena him <sub>A</sub> promised visit <sub>inf</sub> as-soon-as it will be-possible <sub>inf</sub> 'Alena promised to visit him as soon as possible.'
	b. Alena slíbila <sub>1</sub> navštívit <sub>2</sub> $ho_2$ , jakmile to bude možný. Alena promised visit <sub>inf</sub> him <sub>A</sub> as-soon-as it will be-possible <sub>inf</sub> 'Alena promised to visit him as soon as possible.'
(140)	a. * Alenu $ho_2$ nutili <sub>1</sub> navštívit <sub>2</sub> . Alena <sub>A</sub> him <sub>A</sub> forced <sub>3pl</sub> visit <sub>inf</sub> intended: 'They were forcing Alena to visit him.'
	b. Alenu nutili <sub>1</sub> navštívit <sub>2</sub> $ho_2$ . Alena <sub>A</sub> forced <sub>3pl</sub> visit <sub>inf</sub> $him_2$ 'They were forcing Alena to visit him.'

 $<sup>^{64}</sup>$ Veselovská (1995, §9.5) argues that a similar constraint applies to all Exceptional Case Marking structures, including perception verbs that can be analyzed as object raising verb such as *vidět* 'see<sub>inf</sub>':

(138)	a.	Viděl <sub>1</sub> ji <sub>1</sub> dát <sub>2</sub> h saw <sub>3sg</sub> her <sub>A</sub> him <sub>A</sub> g	-		
		'He saw her give it to l	Maruška.		[Veselovská 1995]
	b.	* Viděl <sub>1</sub> ji <sub>1</sub> ho <sub>2</sub> o saw <sub>3sg</sub> her <sub>A</sub> him <sub>A</sub> g	2	(judgment by Veselovská)	
		'He saw her give it to l	Maruška.		[Veselovská 1995]

However all questioned speakers accepted the sentence in (138b) with ho climbing out of the domain of the verb  $d\acute{a}t$  with object raised subject.

### (141) Subject Control Constraint (SCC)

Clitics do not climb from object-controlled VPs.

However, this constraint is too strong. Consider the example in (142). The embedded infinitive *vy*hodit 'fire<sub>inf</sub>' is controlled by the indirect object  $\check{s}\acute{e}fovi$  'boss<sub>D</sub>' of the verb doporučila 'recommended', yet ho 'him<sub>A</sub>' governed by *vyhodit* climbs to the main cluster.

(142) Martinovi se v práci moc nedařilo, a když ho<sub>2</sub> i perzonalistika doporučila<sub>1</sub> šéfovi vyhodit<sub>2</sub>,
 byl v háji.

'Martin was not very successful at his job and when even human resources recommended his boss to fire him, he was screwed.'

- $\dots$  a když  $ho_2$  i perzonalistika doporučila<sub>1</sub> šéfovi vyhodit<sub>2</sub>,  $\dots$
- ... and when  $\lim_{A}$  even human-resources recommended  $\operatorname{boss}_D$  fire<sub>inf</sub> ...
- '... and when even human resources recommended his boss to fire him, ....'

Moreover, George and Toman (1976) show that a clitic can climb from an infinitive headed by a causative. Also, it can climb from (at least some) infinitives that are neither subject-controlled nor causatives, when it has non-animate referent (in the non-linguistic sense).

# **Reflexives and Control Constraint?**

In (Hana 2004), unaware of the work by Thorpe (1991) and Veselovská (1995), we formulated the constrain in (145), weaker than (141). This was motivated by the fact that while the reflexive can climb from the subject controlled infinitives in (144), it cannot climb from the object controlled infinitives in (143).

(143)	a. '	<sup><math>k</math></sup> Martin $se_2$	$zakázal_1$	Petrovi o	$divat_2$	na televizi.
		Martin $\operatorname{refl}_A$	forbid	$\operatorname{Peter}_D$ t	to-watch	on TV
		'Martin forb	id Peter t	o watch	TV.'	
	b.	Martin zaká: Martin forbi		-		
		'Martin forb	id Peter t	o watch	TV.'	

- c. \* Neviděl<sub>1</sub> jsem<sub>0</sub> si<sub>2</sub> ještě Martina mýt<sub>2</sub> ruce.
  not-seen aux<sub>1sg</sub> refl<sub>D</sub> yet Martin<sub>A</sub> to-wash hands<sub>A</sub>
  'I haven't seen Martin wash his hands yet.'
- d. Neviděl<sub>1</sub> jsem<sub>0</sub> ještě Martina mýt<sub>2</sub>  $si_2$  ruce. not-seen  $aux_{1sg}$  yet  $Martin_A$  to-wash  $refl_D$  hands<sub>A</sub> 'I haven't seen Martin wash his hands yet.'

- e. \* Vláda  $se_2$  občanům doporučila<sub>1</sub> pojistit<sub>2</sub>. government refl<sub>A</sub> citizens<sub>D</sub> recommended to-insure 'The government recommended the citizens get insurance.'
- f. Vláda občanům doporučila<sub>1</sub>  $se_2$  pojistit<sub>2</sub>. government citizens<sub>D</sub> recommended refl<sub>A</sub> to-insure 'The government recommended the citizens get insurance.'
- (144) a. Při výběru  $si_2$  zákazník musí<sub>1</sub> všímat<sub>2</sub> i ceny. during selection refl<sub>D</sub> customer must to-pay-attention also price<sub>G</sub> 'During selection, the customer must pay attention also to price.'
  - b. Ekonomika  $se_2$  začíná<sub>1</sub> zlepšovat<sub>2</sub>. economy refl<sub>A</sub> starts to-improve 'The economy starts to improve.'
  - c. Martin  $se_2$  potřebuje<sub>1</sub> zeptat<sub>2</sub>, jak ... Martin refl<sub>A</sub> needs to-ask how .... 'Martin needs to ask how ....'
  - d. Martin  $se_2$  snažil<sub>1</sub> dokončit<sub>2</sub> všechno včas. Martin refl<sub>A</sub> tried to-finish everything on-time 'Martin tried to finish everything on time.'

### (145) Reflexives and Control Constraint (RCC)

Reflexive clitics do not climb from object-controlled VPs.

It seems clear that for non-reflexive clitic a more fine grained distinction of verbs than that based on control is needed. We leave this for further research.

# 4.6.3.3 Ordering by Governors' Degree of Embeddedness (GDEC)

Rosen (2001, p. 233) points out that if multiple dative clitics occur in a single clitic cluster they have to be ordered according to the relative embedding of their governors – a clitic governed by a more embedded verb follows a clitic with a less embedded verb. This can be seen in the example (146) containing two dative clitics mi 'me<sub>D</sub>' and mu him<sub>D</sub>. Since mi precedes mu in (146a), mi's governor must be less embedded than mu's governor – the opposite interpretation, as in (146b) is impossible. The other order of the dative clitics requires the opposite interpretation.<sup>65</sup>

<sup>&</sup>lt;sup>65</sup>This could be analyzed in terms of crossing dependencies, which would mean the negation of Pesetskys (1982) Path Containment Condition holds. Note however that a clitic with a more embedded verb is required to come later in word order even when its verb is fronted.

(146) a. Poslat<sub>2</sub> kurýrem  $se_1 mi_1 mu_2 ho_2$  dnes nepodařilo<sub>1</sub>. to-send by-courier refl<sub>A</sub> me<sub>D</sub> him<sub>D</sub> him<sub>A</sub> today not-succeeded 'I did not succeed in sending it to him by a courier today'

[Avgustinova and Oliva 1995 (20)]

- b. ?? Poslat<sub>2</sub> kurýrem  $se_1 mi_2 mu_1 ho_2$  dnes nepodařilo<sub>1</sub>. to-send by-courier refl<sub>A</sub> me<sub>D</sub> him<sub>D</sub> him<sub>A</sub> today not-succeeded 'He did not succeed in sending it to me by a courier today.'
- c. Poslat<sub>2</sub> kurýrem  $se_1 mu_1 mi_2 ho_2$  dnes nepodařilo<sub>1</sub>. to-send by-courier refl<sub>A</sub> him<sub>D</sub> me<sub>D</sub> him<sub>A</sub> today not-succeeded 'He did not succeed in sending it to me by a courier today.'
- d. ?? Poslat<sub>2</sub> kurýrem  $se_1 mu_2 mi_1 ho_2$  dnes nepodařilo<sub>1</sub>. to-send by-courier refl<sub>A</sub> him<sub>D</sub> me<sub>D</sub> him<sub>A</sub> today not-succeeded 'I did not succeed in sending it to him by a courier today.'

Similarly, in (147a), the dative pronoun mu 'him<sub>D</sub>' goes before the dative pronoun ji 'her<sub>D</sub>', therefore mu is governed by the highest verb – zakázal 'forbade' and ji by the embedded verb kupovat 'tobuy'. In (147b), the situation is reversed. Sentence (147c) shows that the linear order of the verbs is irrelevant, only their embedding is important.

- a. Martin  $mu_1 ji_2$  včera (147)zakázal<sub>1</sub> kupovat<sub>2</sub> takové dárky. Martin  $\lim_{D} \lim_{D} \lim_{$ 'Martin forbade him to buy her such presents yesterday.' ?'Martin forbade her to buy him such presents yesterday.' b. Martin  $ji_1$  $mu_2$  včera zakázal<sub>1</sub> kupovat<sub>2</sub> takové dárky. Martin  $her_D him_D$  yesterday forbade to-buy such presents 'Martin forbade her to buy him such presents yesterday.' ?'Martin forbade him to buy her such presents yesterday.' c. Kupovat<sub>2</sub> takové dárky  $mu_1 ji_2$  včera Martin zakázal<sub>1</sub>. to-buy such presents  $\lim_{D} her_{D}$  yesterday Martin forbade 'Martin forbade him to buy her such presents yesterday.' ?'Martin forbade her to buy him such presents yesterday.' Although co-occurrence of two accusatives in a single cluster is rather rare, the same constraint seem to apply, as (148) shows.
- (148) a. Martin  $ji_1 \quad ho_2 \quad \text{učil}_1 \quad \text{napsat}_2.$ Martin  $her_A \quad him_A \quad taught \quad write_{inf}$ 'Martin taught her to write it. (e.g., *článek* 'article\_masc')'

- b. ? Martin  $ji_2$   $ho_1$  učil<sub>1</sub> napsat<sub>2</sub>. Martin her<sub>A</sub> him<sub>A</sub> taught write<sub>inf</sub> Intended: 'Martin taught her to write it.'
- c. Martin  $ho_1$   $ji_2$  učil<sub>1</sub> napsat<sub>2</sub>. Martin him<sub>A</sub> her<sub>A</sub>taught write<sub>inf</sub> 'Martin taught him to write it.' (e.g., *povídku* 'novel<sub>fem</sub>')
- d. ? Martin  $ho_2$   $ji_1$  učil<sub>1</sub> napsat<sub>2</sub>. Martin him<sub>A</sub> her<sub>A</sub> taught write<sub>inf</sub> Intended: 'Martin taught him to write it.'

### (149) Ordering by Governors' Degree of Embeddedness Constraint (GDEC)

All (nonreflexive) dative clitics in the same cluster with the same case are ordered by the degree of embedding of their governors: namely, a clitic governed by a less deeply embedded verb precedes a clitic governed by a more deeply embedded verb. The surface order of the governors is irrelevant. The same probably holds also for personal accusative clitics.

### 4.6.3.4 Bonet's Person-Case Constraint

(Bonet 1991, 1994) presents so-called Person-Case Constraints, a universal constraint<sup>66</sup> that disallows co-occurence of 1st and 2nd person accusatives with dative pronominal arguments of the same verb. It appears that in Czech such constraint holds only for some speakers, if at all. Rezac (2005) claims that that sequence of dative + non-3rd accusative is indeed impossible, except with ethical dative. For example, according to him, (150) is not grammatical.

(150) Ukážu mu tě zítra. show<sub>1sg</sub> him<sub>D</sub> you<sub>A</sub> tomorrow 'I will show you to him tomorrow' [Rezac 2005]

However, for all questioned speakers, the sentence is fully acceptable and so are other sentences violating this constraint, including these two corpus examples:

(151)	Chci $mu$ tě ukázat. want <sub>1sg</sub> him <sub>D</sub> you <sub>A</sub> show <sub>inf</sub>	
	'I want to show you to him.' [s	syn0]
(152)	Pořád $mi$ říkal, jak $je mu$ $t \check{e}$ líto. all-the-time me <sub>D</sub> told how is him <sub>D</sub> you <sub>A</sub> sorry	

<sup>&#</sup>x27;He was telling me all the time how he felt sorry for you' [syn5]

<sup>&</sup>lt;sup>66</sup>She formulates the constraint in Optimality Theory, where all constraints are universal and only their ranking is language specific.