# Manuscript title: Intervention effects in Czech clitic climbing

Guy Tabachnick

This file was last updated on January 17, 2024

## 1 Introduction

Czech has a number of short, clitic-like elements that tend to appear together in a cluster after the first element of a sentence—thus known as "second position clitics". Under certain circumstances, clitics associated with the argument structure of an embedded clause can instead appear in the matrix clause, a phenomenon known as clitic climbing. Previous work on Czech clitic climbing has shown limitations on clitic climbing out of infinitival complements of object control verbs (Rosen, 2001; Lenertová, 2004; Rezac, 2005; Hana, 2007). After a brief overview of Czech clitics in Section 2, I discuss empirical evidence clarifying these restrictions. I provide new evidence for a contrast between monoclausal and biclausal structures: within a single TP, clitics may cross one another in moving from their merged position to the clitic cluster (Section 3), but in object control constructions, clitics usually cannot climb if they would have to cross over the controller to do so (Section 4). In Section 5, I account for these generalizations with a clitic probe containing a novel mechanism: a nested case hierarchy (Caha, 2009) that interacts with a DP by successively shedding layers until matching its case. If the probe reaches a DP in the wrong order, it will have already discarded the layer required to match it. This analysis explains both the standard clitic order and case-based intervention effects in object control sentences. I derive the contrast between monoclausal sentences and object control sentences from the fact that clitics may scramble (and thus reorder themselves to match the required hierarchy), but only within a TP. I then provide an overview of my account's predictions and discuss outstanding issues. Section 6 concludes with

# 2 Background

- <sup>25</sup> Before discussing the details of clitic climbing, I present my basic assumptions about
- 26 the position and behavior of clitics.

additional paths for future research.

#### 2.1 Clitics come "second"

- 28 In (1) we see that the clitics (emphasized here) can appear after the main verb, as in
- <sup>29</sup> (1-a), or a phrase, like the adverb in (1-b):

- (1) a. Omluvil **jsem se mu**.
  apologized PST.1SG REFL.ACC him.DAT
  'I apologized to him.'
- b. Včera **jsem se mu** omluvil.
  yesterday PST.1SG REFL.ACC him.DAT apologized

  'Yesterday I apologized to him.' (cf. Fried, 1994, 170)
- The examples in (1) show members of the clitic cluster in their canonical order: first
- 6 come auxiliaries like jsem, followed by the accusative se and dative si reflexive cli-
- <sup>7</sup> tics, then pronominal clitics, with dative clitics like *mu* preceding accusative and, more
- 8 rarely, genitive clitics.
- Clitics can sometimes follow two elements, like a complementizer and a contrastive
- or non-contrastive topic (Lenertová, 2004; Sturgeon, 2008; Kaspar, 2016). I assume that
- clitics are always in the same place, and other things can vary around them.

# 2.2 Clitics are in the specifier of CliticP

- Following earlier accounts (e.g. Toman, 1999; Lenertová, 2004), I assume that clitics
- occupy a set position in the lower left periphery. In main clauses, clitics usually end
- up in second position because of an EPP feature that attracts an element to a pre-clitic
- projection—which I, in line with these previous accounts, identify as Fin, also the site
- of auxiliary clitics. The EPP feature is satisfied by movement of a phrase (like *včera* in
- (1-b)) or, if no phrase is available, by head movement of the inflected verb to Fin, as in
- (1-a) (Alexiadou & Anagnostopoulou, 1998; Lenertová, 2004; Sturgeon, 2008).
- I assume Theory A of Toman (1999): clitics are base-generated and move to specifiers
- of a clitic projection. Unlike Dotlačil (2007), I assume that clitics are DPs that have some
- syntactic deficiency. This deficiency is *not* the ability to receive case: as I show in
- Section 3, clitic movement is not case assignment (contra Rezac, 2005). While Toman
- $_{24}$  (1999) assumes a series of projections—RefIP for reflexive clitics,  $K_{dat}P$  for dative clitics,
- etc. (see also Ciucivara, 2009)—I place all clitics in successive specifiers of a single
- <sub>26</sub> projection, CliticP.

#### 2.3 Clitics can climb out of TP, but not CP

- 28 Certain embedded clauses allow arguments originating within them to "climb" out of
- them, cliticizing in second position of the matrix clause. Clitics cannot climb out of finite
- embedded clauses or wh-infinitives (Lenertová, 2004; Rezac, 2005; Dotlačil, 2007). For
- example, when the verb chtít 'want' (first singular chci) acts as a subject control verb

<sup>&</sup>lt;sup>1</sup>Lenertová (2004, fn. 22) discusses an apparent counterexample of clitics climbing out of a certain type of wh-infinitive with modal meaning. Šimík (2011) argues that this construction is smaller than a CP in Czech.

- embedding an infinitive (cf. Rezac, 2005), the reflexive clitic associated with the verb
- soustředit se 'focus' can climb ((2-a)). However, when it embeds a conditional headed by
- a conditional complementizer and an inflected verb ((2-b)), the clitic cannot climb.
- 4 (2) a. Ted' **se** chci [soustředit hlavně na hokej]. now REFL.ACC want.1SG focus.INF mainly on hockey
- <sup>5</sup> 'Now I want to focus mainly on hockey.' (SYNv11)<sup>2</sup>
- b. Ted' {\*se} chci, [aby {se} soustředil hlavně na now refl.acc want.1sg that.cond.3sg refl.acc focus mainly on hokej].

  hockey
- Now I want him to focus mainly on hockey.'
- Dotlačil (2004) shows, contra Lenertová (2004) and Rezac (2005), that clitics can climb
- out of infinitives with syntactic subjects (that is, PRO). One of his diagnostics for PRO
- is partial control (Landau, 1999), where the subject of the embedded verb includes, but
- is larger than, the matrix subject. In (3), the matrix subject *Pavel* cannot be the subject
- of the infinitive *líbat se* 'kiss', where the reflexive clitic se has a reciprocal meaning. This
- reading requires a subject coindexed with Pavel and some other individual(s), hence
- the index i+ (otherwise the reading is reflexive: 'Pavel kissed himself'). This PRO does
- not block climbing of the reflexive clitic se to the matrix clause.
- Pavel<sub>i</sub> se ne-chtěl [líbat  $PRO_{i+}$  v knihovně]. Pavel refl.acc neg-wanted kiss.inf  $PRO_{i+}$  in library
- 'Pavel did not want to kiss [someone else] in the library.' (Dotlačil, 2004, 92)
- I thus assume that clitic climbing is blocked by a CP boundary, and that embedded
- 20 infinitives with PRO can be TPs out of which clitics may climb.

#### 21 2.4 Summary

- 22 I assume that Czech pronominal clitics are merged like other DPs and cluster together
- 25 in multiple specifiers of a single dedicated CliticP projection. Their "second position"
- derives from being in CliticP just below Fin, an EPP head that attracts an element to its
- 25 specifier (or, sometimes, its head). Clitics originating in embedded clauses can climb
- 26 into matrix clauses, but climbing is blocked by a CP boundary.

# 27 3 Clitic movement is free in monoclausal constructions

- 28 The next two sections discuss mismatches between the relative order of clitics in their
- merged position and their surface position. In this section, I show that, within a

<sup>&</sup>lt;sup>2</sup>This note marks examples taken from the Czech National Corpus's SYNv11 corpus (Křen et al., 2022).

- TP, the only restriction on pronominal clitics is their surface order (reflexive—dative—genitive/accusative). Otherwise, cliticization is quite unrestricted: two pronouns may reverse their merged order (that is, one may cross over another) when needed to satisfy this order, and pronouns may cliticize no matter the source of their case—arguments with non-structural case can be clitics, as can pronouns that are merged within an argument DP and are thus not arguments. In Section 4, I show that this relative free-dom contrasts with a restriction on clitic climbing in object control sentences: pronouns merged in a lower TP usually cannot climb into the matrix clause across a matrix DP.

  Rezac (2005) attributes the limitations discussed in Section 4 to the fact that clitic movement is intimately tied to case assignment. However, his account predicts that clitic movement within a TP should also be more limited: first, clitic movement should respect the merged order of clitics, and second, arguments with non-structural case should not cliticize. This section shows that neither prediction is correct, raising the need for a different explanation of the data in Section 4. My account of these restrictions,
- 3.1 ACC-ACC ditransitives: non-structural accusative can cliticize
- There are a handful of verbs, chiefly *učit* 'teach', that take two accusatives. Rezac (2005) shows that the first accusative (the person being taught) is structural, while the second accusative (the object of study) is non-structural. This non-structural argument can

cliticize, both with ditransitive učit 'teach' and its reflexivized form, učit se 'learn':

in which clitic movement is separate from case assignment, is presented in Section 5.

- 21 (4) Učím se ho celý život, učím ho studenty.
  teach.1SG REFL.ACC it.ACC whole life teach.1SG it.ACC students.ACC

  22 'I've been learning it my whole life, I teach it to students.' (SYNv11)
- Rezac (2005) judges a sentence similar to (4), in which the second accusative cliticizes but the first does not, to be ungrammatical; he uses this to argue that arguments with non-structural case *cannot* cliticize. However, Hana (2007) considers it grammatical for both arguments to cliticize (preferring for the structural accusative to come first). I take this latter judgement, and sentences like (4), as evidence that Rezac (2005) is mistaken and that (for many speakers, at least) non-structural accusatives can cliticize.

# 3.2 ACC-DAT ditransitives: non-structural dative can cliticize and cross over structural accusative

Dvořák (2010) shows that Czech has two types of ditransitive: first, standard dative—accusative verbs including benefactives, which she analyzes with an accusative merged

- in VP and a dative merged in a higher applicative projection; and second, accusative—
- dative verbs, where the dative is the object of a null preposition below the accusative.
- The dative argument of accusative–dative verbs like svěřit 'entrust' is thus non-
- 4 structural, but it can still cliticize, as shown in (5). Moreover, when both arguments
- 5 cliticize as in (5), the dative must cross over the accusative, since the latter is merged at
- 6 a higher position.
- 5 Soud mu ho svěřil loni 25. května. court him.dat him.acc entrusted last year 25th May
- <sup>8</sup> 'The court entrusted him [the child] to him last year on May 25.' (SYNv11)
- 9 The dative argument in accusative–dative verbs like podřídiť 'subordinate' can be reflex-
- ivized, as shown in (6). Reflexive clitics precede accusatives, so reflexive datives in these
- verbs must cross over accusatives to cliticize, under the assumption (which I adopt) that
- reflexive clitics originate in the same position as non-reflexive internal arguments.3
- 'And what's more, I'm taking the route of befriending my dog rather ...'
- než **si ho** za každou cenu podřídit. than REFL.DAT him.ACC for any price subordinate.INF
- 'than subordinating him to myself at any cost.' (SYNv11)
- 16 The ability of the non-structural dative to cliticize contrasts with the behavior of an
- analogous class of accusative-dative ditransitives in Icelandic, which do not undergo
- certain types of A-movement like Object Shift (Holmberg & Platzack, 1995)—again,
- suggesting that clitic movement is less restricted than case assignment in the A-system.

# 20 3.3 DAT-ACC ditransitives: reflexive accusative can cliticize and cross over dative

- If reflexive clitics originate in the same position as internal arguments, as assumed
- in Section 3.2, the dative-accusative ditransitives discussed in Dvořák (2010) provide
- 24 another example of clitic order reversing merged order. In these verbs, the accusative
- <sub>25</sub> argument is merged below the dative argument, so a reflexive accusative would have
- to cross over the dative to occupy its position in the cluster preceding the dative. This
- 27 is shown in (7) for věnovat se 'devote oneself, pay attention (to)', the reflexive form of
- 28 the dative-accusative verb věnovat 'devote'.

<sup>&</sup>lt;sup>3</sup>See Medová (2009, c. 3–5) for an overview of theories of reflexive clitics, focusing on Romance and Slavic. In her account, adapted from Kayne (1986) and Alboiu et al. (2004), reflexive clitics in true reflexive constructions are associated with the merged position of internal arguments, so the examples presented in this section still constitute reversal of merged order. By contrast, in the account of Kayne (1986), the merged order of reflexive clitics always precedes that of verbal arguments and the examples presented here do not constitute reversals of merged order.

- 1 (7) Justýna **se mu** však ne-věnovala tak, jak by rád Justýna refl.ACC him.dat however neg-devoted thus like cond.3sg happy.m.sg
- <sup>2</sup> 'Justýna, however, was not paying attention to him as he would have liked'
- (SYNv11)
- This class of ditransitives thus provides further evidence that clitics can be reordered
- 5 from their merged position.

# 3.4 Numerals: non-argument genitives can cliticize, datives and re flexives can cross over them to cliticize

- 8 Genitive clitics, which are somewhat marginal, are positioned after datives. These can
- 9 arise from a few verbs that take genitive arguments or, more commonly, as complements
- to certain quantifiers, mostly numerals five or greater (Rezac, 2005):
- 11 (8) Včera jsem **jich** šel [koupit pět].
  22 yesterday I went to buy five of them.' (Rezac, 2005, 130)
- The genitive clitic in (8) is not a verbal argument. This is unexpected if cliticization is
- limited to arguments with structural case, as acknowledged by Rezac (2005).
- Pronominal objects of numeral constructions may cliticize when they are associated
- with the *subject* (which triggers neuter singular agreement), as in (9). Here genitive *jich*
- slots below dative *mi*, even though the latter originates below it.
- 18 (9) Když jsem jim podával ruku, tak **mi jich** několik řeklo ... when PST.1SG them.DAT gave hand then me.DAT them.GEN several said.N.SG

  'When I shook hands with them, a few of them said to me ...' (SYNv11)
- 20 Reflexive clitics likewise cliticize above genitive clitics from subject numerals, as shown
- in (10) for the reflexive verb *přihlásit se* 'enroll' and the numeral *několik* 'several'.
- 22 (10) Již nyní **se jich** několik přihlásilo. already now REFL.ACC them.GEN several enroll.N.SG

  23 'Several of them have already enrolled.' (SYNv11)
- 24 The genitives above do not c-command internal arguments when merged inside a nom-
- inal phrase; however, if they must extract to the clausal spine to cliticize, their landing
- site would c-command those arguments, making (9) and (10) a reversal of hierarchy.

#### 27 3.5 Summary

- In this section, I showed that pronouns are able to cliticize within a single TP, no matter
- their initial position or the source of their case—so long as they end up in the order

reflexive-dative-genitive/accusative.

# 2 4 Clitics cannot reorder in biclausal structures

- 3 The freedom of clitic order in clauses with a single verb contrasts with clitic climbing
- 4 of embedded objects into matrix object control clauses, which obeys several restrictions
- 5 (Rosen, 2001; Lenertová, 2004; Rezac, 2005; Hana, 2007). In this section, I show that
- embedded objects usually cannot climb into the matrix clause if they would need to
- 7 cross over the object controller to do so, regardless of whether the controller is a clitic
- 8 or a full DP. There is one exception: accusative and genitive embedded clitics can climb
- into dative object control sentences, even if this involves crossing over a full DP dative
- 10 controller.

#### 4.1 Reflexive clitics cannot climb over object controllers

- Hana (2007) notes that reflexive clitics cannot climb in object control sentences. We see
- this in (11): the reflexive clitic from the embedded infinitive pojistit se 'insure oneself'
- cannot climb, but must stay in the lower clause. This is true regardless of whether the
- controller is a clitic or a full DP.
- 16 (11) Vláda {\*se} { jim / občanům } doporučila [{se} government REFL.ACC them.DAT / citizens.DAT recommended REFL.ACC pojistit].

  17 pojistit].

  18 insure.INF
- The government recommended the citizens to get insurance.

(cf. Hana, 2007, 130)

- The only available site for clitics in the matrix clause is the second position, after vláda
- <sup>21</sup> 'government'. Thus, in order for the reflexive clitic to climb to this position, it would
- have to cross over the dative controller (jim or občanům in (11)), which is not permit-
- ted. This contrasts with the pattern shown in Section 3.3: within a TP, when reflexive
- 24 accusative clitics are merged below datives, the reflexive can cross over the dative to
- 25 cliticize in reflexive-dative order.

#### 26 4.2 Dative clitics cannot climb over accusative controllers

- 27 Embedded dative clitics cannot climb into sentences with accusative object controllers,
- as shown in (12). Here, the dative clitic ji, which is the oblique object of the embedded
- infinitive pomoct 'help', cannot climb over the accusative controller merged in the matrix
- oclause. As in (11), the object clitic must remain in the embedded clause. This is true
- whether the controller is a clitic or a full DP.

- Matka {\*mu} { ho / Petra } přinutila [{mu} pomoct].
  mother him.dat him.acc / Petr.acc forced him.dat help.inf

  'Mother forced him/Petr to help him.' (cf. Lenertová, 2004, 162)
- This restriction, too, contrasts with its monoclausal analogue in Section 3.2: within a
- 4 TP, dative clitics precede accusative clitics even when the dative is merged below the
- 5 accusative and must cross over it.

#### 6 4.3 Clitics of the same case respect order of embedding

- Rosen (2001) notes that an embedded dative clitic can climb into a clause with a dative
- controller, so long as the controller comes first. Hana (2007) tentatively expands this
- 9 to accusatives as well. For example, (13) is better when the dative controller of zakázat
- 'forbid' precedes the indirect object of the embedded infinitive kupovat than vice versa;
- similarly, (14) is better when the accusative controller of *učit* 'teach' precedes the direct
- object of the embedded infinitive *napsat* 'write', but the reverse order is questionable.
- Martin **mu jí** včera zakázal [kupovat takové dárky].

  Martin him.dat her.dat yesterday forbade buy.inf such presents

  'Martin forbade him from buying her such presents yesterday.'
- 2'Martin forbade her from buying him such presents yesterday.'
- 6 (14) Martin **ji ho** učil [napsat]. Martin her.ACC him.ACC taught write.INF
- 'Martin taught her to write it [a masculine noun like článek 'article'].'
- ?'Martin taught him to write it [a feminine noun like povídka 'story'].'
- 9 (Hana, 2007, 147–8)<sup>4</sup>
- These examples are problematic: the judgements are weak, and other authors (e.g.
- <sup>21</sup> Veselovská, 1995) consider climbing ungrammatical in both interpretations. In addi-
- tion, jí can function as either a clitic or a full pronoun, so (13) allows an alternative
- 23 analysis where the second dative is not a clitic.<sup>5</sup> For greater insight, I look at attested
- examples of clitics climbing into sentences with a controller of the same case. I look
- at cases where the climbing object is unambiguously a clitic (the second-person sin-
- gular and third-person masculine singular clitics) and it has unambiguously climbed,
- meaning that there is matrix clause material located between the clitic cluster and the
- embedded infinitive. I found 4 examples satisfying these criteria of dative clitics climb-
- 29 ing into matrix clauses with dative object controllers and 56 such examples with two

<sup>&</sup>lt;sup>4</sup>Hana (2007) writes the feminine accusative clitic as *jí*, with a long vowel, although the standard orthographic form has a short vowel. He notes that the accusative clitic can be pronounced either way, so I bring the example in line with the orthography.

<sup>&</sup>lt;sup>5</sup>I thank a reviewer for raising this point.

<sup>&</sup>lt;sup>6</sup>Object control verbs were selected from Lopatková et al. (2022), a database of Czech argument structure.

- accusatives. One example with two accusatives, similar to (14), is shown below. In
- most of the examples, the object controller is first- or second-person; (15) is one of two
- tokens with two third-person clitics. Crucially, in all 60 examples across both dative
- and accusative, the embedded clitic appears after the controller clitic of the same case.
- 5 (15) A prý **ji ho** baví i [uklízet]! and supposedly her.ACC it.ACC amuses even clean.INF
- 'And she says she even enjoys cleaning it [her house]!' (SYNv11)
- The corpus results bolster the judgements in (13) and (14): at least some speakers allow
- 8 clitics to climb into matrix clauses with clitic controllers of the same case. However, em-
- bedded clitics consistently slot in after the controller clitics. This fits the generalization
- that embedded clitics can climb, so long as they do not climb over an object controller.

### 4.4 Accusative and genitive clitics can climb over dative controllers

- 12 In this section, I show that embedded accusative and genitive clitics can climb into
- sentences with dative object controllers (Lenertová, 2004; Rezac, 2005). When both
- objects cliticize, the order is dative-genitive/accusative: the merged order matches the
- usual clitic order. When the dative object controller is a full DP, embedded accusative
- and genitive clitics can still climb into the matrix clause, even though it has to cross
- over the object controller to do so. In the examples in (16), the accusative object ji of
- the infinitive *navštívit* climbs when the dative controller is the clitic *mu* or the full DP
- 19 Petrovi. 7
- 20 (16) a. Matka **mu ji** ne-dovolila [navštívit].

  mother him.dat her.acc neg-allowed visit.inf
- 'Mother didn't allow him to visit her.'
- b. Matka **ji** Petrovi ne-dovolila [navštívit]. mother her.ACC Petr.DAT NEG-allowed visit.INF
- 'Mother didn't allow Petr to visit her.'
- (Lenertová, 2004, 162)
- Attested equivalents to (16) for genitive clitics are shown in (17). In these sentences,
- <sub>25</sub> genitive pronouns originating inside a numeral in the embedded clause climb to the
- matrix clause, slotting in after a dative clitic controller as in (17-a), or before a full DP
- 27 dative controller, as in (17-b). In both cases, the clitics slot in after the reflexive clitic
- from the impersonal matrix verb podařit se 'succeed'.
- 29 (17) a. Za pár desítek minut **se mu jich** podařilo during few tens.ACC minutes.ACC REFL.ACC him.DAT them.GEN succeeded

<sup>&</sup>lt;sup>7</sup>Dotlačil (2004, 81) notes that only third-person accusative clitics can climb across a dative controller (see also Nováková, 2012). This is plausibly due to the Person Case Constraint, which restricts the order of clitics by person (e.g. Béjar & Rezac, 2003, 2009; Nevins, 2007; Deal, 2024).

- [koupit pět] buy.ɪNF five
- 'Over the course of half an hour or so, he managed to buy five of them.'
  - (SYNv11)
- b. Pokud se jich účastníkům hry podaří [nasbírat if REFL.ACC them.GEN participants.DAT game.GEN succeed collect.INF
   pět], mají na šestou památku vstup zdarma. five have.3PL to sixth sight entry free
- 'If participants of the game manage to collect five of them, they get entry to a sixth attraction for free.' (SYNv11)
- 8 These examples show that full DP dative controllers do not block genitive or accusative
- 9 clitics from climbing, even though accusative controllers block dative clitics from climb-
- ing (see Section 4.2). This is the one configuration in which embedded clitics are able
- to cross over object controllers.

# 12 4.5 Summary

- In the preceding sections, I have surveyed the empirical landscape of clitic movement,
- making the following generalizations:
  - 1. Within a TP, elements may cross over one another to cliticize.
- 2. Clitics originating in an embedded TP usually cannot cross over object controllers
   to cliticize in a matrix clause. One exception is that embedded accusative and
   genitive clitics can climb across full DP dative controllers.

# 5 A case containment analysis of clitic movement

- 20 I will now present an analysis that captures the two generalizations described in Sec-
- 21 tion 4.5. The main mechanism is a probe on the Clitic head that allows clitics to move
- 22 into specifiers of CliticP, so long as they are reached in an appropriate order. Examples
- of successful and unsuccessful clitic movement with the probe are found in Section 5.4.

# 24 5.1 The probe on the Clitic head

- An extensive literature on clitics (e.g. Béjar & Rezac, 2003; Coon & Keine, 2021, and
- <sup>26</sup> many others) casts clitic movement as the product of a need for the clitic to be licensed
- in some way—the exact way in which clitics are defective relative to other DPs is unclear,
- though in Czech, it is not for the purposes of case assignment (contra Rezac, 2005), cf.
- Section 3. As case is relevant for my proposed probe, I tentatively suggest that clitics
- can receive case but lack a K layer to license this case (e.g. Nevins, 2011).

I place a probe on the Clitic head that searches the tree below it for potential DPs to agree with. This probe has no satisfaction requirements; its purpose is to interact with DPs to allow clitics to move and be licensed. If the probe matches with a clitic, the clitic can choose to move, although it does not have to. If a clitic has not cliticized to a possible landing site at the end of the derivation, the derivation crashes. The probe interacts with all DPs in its c-command domain, clitic or not, similar in spirit to Multiple Agree (Hiraiwa, 2001, 2005; Nevins, 2007, 2011) or other probes that allow for multiple interactions (Deal, 2015, 2024). If a given probe attracts multiple clitics, they occupy multiple specifiers in the order in which they move, each "tucking in" beneath the last, as Richards III (1997, 100–101) also suggests for clitic movement in Serbo-Croatian. The probe, like other Agree relations, is blocked by a CP boundary due to the Phase Impenetrability Condition (Chomsky, 2000, 2001; Keine, 2018). However, it can search into control infinitives, which are at most weak, penetrable phases (Landau, 2008).

## 5.2 The probe's feature geometry

- While interactions with DPs leave no visible trace except for potential clitic movement,
- they can prevent DPs lower down from matching the probe. I propose that the probe
- has the feature geometry in (18), with a reflexive feature dominating a dative feature,
- 8 followed by genitive and accusative features.
- 9 (18) Full clitic probe in its initial state can match REFL, DAT, GEN, or ACC
  [REFL [DAT [GEN [ACC]]]]
- The REFL feature may be a shorthand for some structure or feature that matches reflexive
- clitics; the rest of the hierarchy has been independently proposed as the containment
- hierarchy for Czech cases to explain phenomena like case syncretism (Caha, 2009).
- When the probe encounters a DP, it attempts to match its case (or reflexive feature).
- 25 If the top layer of the probe does not match that of the DP (i.e., if the DP is not a reflexive
- clitic), it discards layers one by one until it finds a match. For example, if a probe with
- 27 the features in (18) encounters a genitive DP, it discards the REFL and DAT features so

<sup>&</sup>lt;sup>8</sup>That is, the presence of CliticP in a lower clause does not block clitic climbing. This optionality in clitic landing sites predicts that clitics should be able to climb partway to intermediate projections, which Hana (2007, 127) allows. It similarly predicts that in a cluster with multiple clitics, some may climb while others stay low. Rezac (2005, 111) says that this is not possible. The grammaticality judgements of these two authors are likely mutually exclusive, as they are elsewhere, for example in Section 3.1.

<sup>&</sup>lt;sup>9</sup>Alternatively, Krapova & Cinque (2005) propose that multiple specifier movement must preserve the hierarchy of the moving phrases because reversing their order would violate a form of Relativized Minimality (Rizzi, 2001). That is, the chain comprising a phrase and its copies cannot be contained entirely within the chain of another phrase "of the same structural type":  $*XP_1 \dots XP_2 \dots XP_2 \dots XP_1 > \dots X$ 

- that the required GEN feature is exposed. The probe then continues its search, now with a diminished feature set:
- Full clitic probe after matching a genitive can match GEN or ACC but not REFL or DAT

  [GEN [ACC]] (discarded: REFL, DAT)
- From here, the probe can match any additional number of genitive DPs, or it can shed
- 6 its GEN layer and match accusative clitics. This process accounts for the order of the
- cluster: a given probe must first attract reflexives, then datives, then genitives, then
- accusatives, because once a layer has been discarded, it is gone for the remainder of the
- probe's search. However, multiple clitics of the same case can be attracted in succession,
- for as long as the probe has a given case exposed.

In certain case configurations, DPs can act as interveners preventing lower clitics from matching and moving. This occurs, for example, if the probe encounters a dative clitic after an accusative. In this case, the probe discards its DAT feature in the process of matching the accusative, so when it subsequently reaches the dative, it has no DAT feature to match it and the dative cannot cliticize. This is what happens in object control sentences: in most cases, clitics from an embedded clause cannot climb across matrix object controllers (the second generalization in Section 4.5). This is because arguments in a matrix clause (object controllers) interact with the probe before those in an embedded clause. Thus, if both the controller and the embedded object cliticize, the controller must come first. If the controller is a full DP, the intervention effect depends on case: if the controller is accusative, a dative embedded object clitic is unable to match the probe and cannot climb. However, if the controller is dative, an accusative embedded object *can* climb, since the clitic probe can match the dative (which does not move), followed by the accusative (which does). This is the pattern we see in Section 4.4.

# 5.3 Scrambling to accommodate the case hierarchy

The probe described in Section 5.2 requires clitics to be matched in a particular order and cannot rearrange them. However, in Section 3, I showed that clitics can cross over one another, with no intervention effects, within a single TP. This can only be true if clitics are able to obviate intervention effects by rearranging themselves *prior to* clitic movement—but only within the bounds of a TP. I propose that they do so through what Kučerová (2007) calls g-movement and Šimík et al. (2014), Šimík & Wierzba (2015), and many others call scrambling: movement of given elements to the middlefield. Clitics are necessarily given elements, and Biskup (2006) and Sturgeon (2008) show that phrases can scramble (to specifiers of *v*P, in their analysis) in any order (contra Veselovská, 1995).

- Thus, clitics should be able to rearrange themselves as needed to match the probe's case
- hierarchy by scrambling before clitic movement.<sup>10</sup>
- Kučerová (2007, 34–35) shows that Czech scrambling, unlike wh-movement and con-
- 4 trastive focus movement, cannot escape infinitival TPs. 11 Thus, embedded clitics cannot
- scramble outside of their TP to the matrix vP to place themselves above the object con-
- troller prior to clitic movement. In this case, as described in Section 5.2, embedded cli-
- tics can only climb into matrix clauses if the matrix clitic probe can successfully match
- 8 the object controller before the embedded object—that is, if the merged hierarchy (ma-
- <sub>9</sub> trix object controller > embedded object) matches the probe's containment hierarchy
- (reflexive > dative > genitive > accusative). By proposing that clitics, like other given el-
- ements, can scramble, I thus derive the attested contrast between clitic climbing, which
- shows intervention effects, and clitic movement within a TP, which does not.

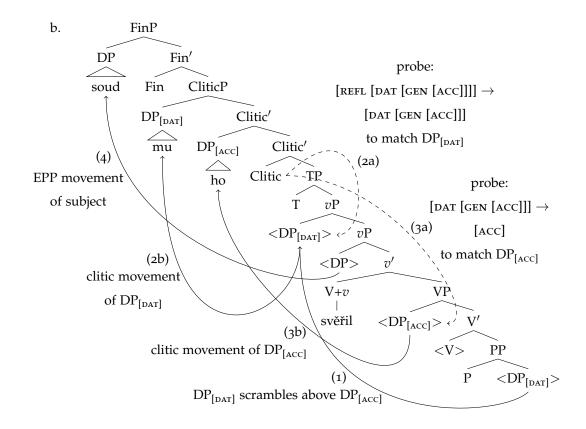
# 5.4 Examples

- I now present two examples showing attempted movement of accusative and dative
- 15 clitics where the merged position of the accusative c-commands that of the dative.
- First, (20) features the accusative–dative ditransitive *svěrit* 'entrust' (see Section 3.2).
- The accusative clitic *ho* originates in the VP, while the dative *ji* is merged in a PP be-
- low it (Dvořák, 2010). For the probe to attract both clitics, the dative must be above
- the accusative, so (1) the former scrambles to the vP edge above the latter. Now the
- probe can work: (2a) the probe first encounters the scrambled dative clitic, so it sheds
- its REFL layer to expose DAT and match the dative clitic, which (2b) moves to the spec-
- 22 ifier of CliticP The probe then continues (ignoring the subject) until (3a) it reaches the
- accusative clitic—which I show in situ, although it may also scramble below the dative.
- 24 The probe casts off its DAT and GEN layers to match the accusative and attract it to
- <sup>25</sup> CliticP, where (3b) the clitic tucks into a specifier beneath the previously moved dative.
- Finally, (4) the subject moves to the specifier of FinP to satisfy the EPP feature on Fin.
- (20) a. Soud **jí ho** svěřil.
  court her.DAT him.ACC entrusted
  'The court entrusted him to her.'

(see (5))

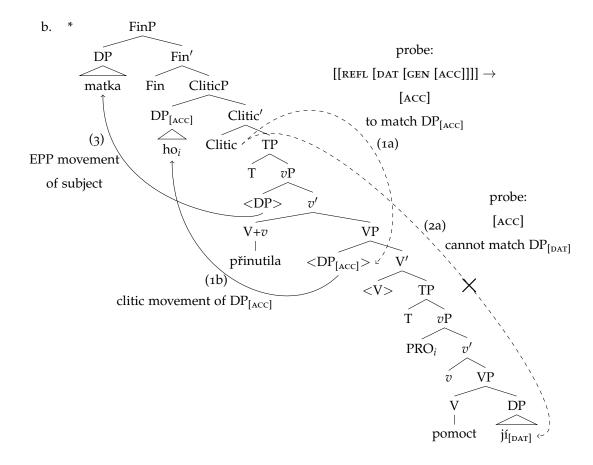
<sup>&</sup>lt;sup>10</sup>Diesing (2003) likewise argues that certain intervention effects in Yiddish wh-movement can be cancelled by scrambling (cf. Richards III, 1997, 90–95) prior to wh-movement, given that scrambling itself in Yiddish is not subject to superiority effects (Diesing, 1997).

<sup>&</sup>lt;sup>11</sup>I follow Kučerová (2007) and Kosta (2006) in assuming that the scrambling operation in question is A movement and has different properties than the long-distance scrambling out of embedded clauses in languages like Hindi and Japanese (see e.g. Mahajan, 1990; Miyagawa, 1997). Kosta (2006) assumes that in Czech, as in German (cf. Wurmbrand, 2001), phrases can only scramble out of infinitives smaller than TP, which themselves can only be embedded under lexically specified "restructuring" predicates. Since object control verbs are not restructuring predicates, they can only embed infinitives out of which objects cannot scramble.



- <sup>2</sup> We can contrast this with the failed derivation in (21), with an accusative controller
- <sub>3</sub> ho in the matrix clause and a dative object ji merging in the embedded clause, as the
- 4 object of pomoct (whether this argument is a simple VP complement, as I have it, or
- 5 introduced in a different structure does not matter for these purposes). This dative
- 6 cannot scramble outside of its TP, so it is stuck below the accusative. Thus, (1a) the
- 7 clitic probe first encounters the accusative DP and sheds its first three layers, leaving
- 8 only [ACC]. After being matched, (1b) the accusative moves to the specifier of CliticP.
- Next, (2) the probe finds the embedded dative. By this point, the probe has no DAT
- feature, and cannot match the dative object. Thus, the dative clitic is stranded in a non-
- clitic position, so after (3) regular EPP movement of the subject to FinP, the derivation
- crashes. The grammatical alternative (not depicted here) is for the dative to be attracted
- to a lower CliticP projected in the embedded clause, where the accusative controller
- cannot intervene—that is, the clitic does not climb.
- 15 (21) a. \*Matka jí ho přinutila [pomoct].
  mother her.DAT him.ACC forced help.INF

  'Mother forced him to help her.' (see (12))



# 2 5.5 Predictions and outstanding issues

- This section discusses my account's predictions. Table 1 shows combinations of clitics
- 4 merged in the same TP. The predicted orders are listed in with the section in which
- evidence, sometimes incidental, is provided. Canonical cases in which the template and the merged order align and for which I have no example are labelled [C].

		merged lower						
		REFL	DAT	GEN	ACC			
merged higher	REFL	REFL REFL	REFL DAT [C]	refl gen [C]	REFL ACC 3.1			
	DAT	REFL DAT 3.3	DAT DAT	dat gen [C]	dat acc [C]			
	GEN	REFL GEN 3.4	DAT GEN 3.4	GEN GEN	GEN ACC			
	ACC	REFL ACC 3.2	DAT ACC 3.2	GEN ACC	ACC ACC			

Table 1: Predicted clitic orders for single clauses, with sources of evidence

Table 2 shows predicted combinations of matrix and embedded clitics—certain com-

- binations should be impossible (that is, certain embedded clitics should not climb),
- $_9$  while the others should be possible in a fixed order, with the matrix clitic (m) preceding
- the climbing embedded clitic (e). When a section is listed in brackets, the relevant cases
- are not discussed directly but follow the pattern shown in that section.

		embedded clitic							
		REFL		DAT		GEN		ACC	
matrix clitic	REFL	REFL <sub>m</sub> REFL	e	REFL <sub>m</sub> DAT	e [4.4]	REFL <sub>m</sub> GEN <sub>e</sub>	1.4	$REFL_m$ $ACC_e$	[4.4]
	DAT	*	4.1	$DAT_m$ $DAT$	e 4.3	$DAT_m GEN_e$	<b>1</b> ·4	$DAT_m \ ACC_\ell$	4.4
	GEN	*	[4.1]	*	[4.2]	$GEN_m GEN_e$ [4	<b>1</b> .3]	$GEN_m$ $ACC_e$	
	ACC	*	[4.1]	*	4.2	*		$ACC_m ACC_e$	4.3

Table 2: Predicted clitic combinations and orders for embedded infinitives, with sources of evidence

Some issues remain involving two arguments of the same case or type. Table 1

- predicts that clitics of the same case from the same TP should appear in any order.
- <sup>3</sup> However, for *učit* 'teach', which takes two accusatives, only one order is attested, and
- 4 Hana (2007) prefers this order as well (see Section 3.1). The reverse order may be ruled
- out by economy (dispreferring movements unnecessary to obtain a grammatical result)
- or a preference for animate clitics to precede inanimate clitics.
- Reflexive clitics are predicted to be able to climb into clauses with other reflexive
- 8 clitics, but as Rosen (2014) discusses, they cannot. However, one solution is the deletion
- of one of the reflexives (haplology). This restriction and solution are unique to reflexive
- clitics, so I assume that these clitics are subject to some additional restriction.
- Another issue involves clitics climbing into clauses with full DP controllers of the same case. Matrix controllers serve as interveners whether they are clitics or full DPs (see Section 4.2 and Section 4.4) and clitics can climb into clauses with clitics of the same case (see Section 4.3), so they should be able to climb over full DP controllers of
- the same case as well. However, I have not been able to find any examples of them doing
- so: sentences like (22), adapted from (15), should be grammatical but are unattested.
- 17 (22) %A prý **ho** její náctileté děti baví i [uklízet]! and supposedly it.ACC her teenage children.ACC amuses even clean.INF
- 'And she says her teenage children even enjoy cleaning it [their house]!
- These examples may be unattested because they are confusing, featuring inversion of
- merged order for arguments of the same case. Sentences somewhat similar to (22) are
- marked \* by Dotlačil (2004, 80) but ?? by Dotlačil (2017)—so it is unclear whether such
- 22 sentences are wholly ungrammatical or merely degraded. I leave rigorous testing of
- 23 this prediction to future research.
- My account predicts that genitive clitics should precede accusative clitics. Geni-
- 25 tive and accusative clitics rarely appear in the same cluster and exhibit widespread
  - syncretism—they are only consistently distinguished in the third personal plural, which
- has genitive jich and accusative je. The literature is divided about their ordering.
- <sup>28</sup> Veselovská (1995) and Toman (1999) place genitive clitics before accusative clitics. How-

```
ever, Franks & King (2000, 108) report mixed judgements for (23), which has a genitive clitic extracted from a subject numeral (see Section 3.4) and an accusative object clitic:
```

- of three speakers asked, one preferred each clitic order and the third rejected both.
- 4 (23) %Pět mu { jich ho / ho jich } nikdy nedalo.
  five him.dat them.gen it.acc / it.acc them.gen never neg-gave

  'Five of them never gave it to him.' (Franks & King, 2000, 108)
- 6 There is also one common ditransitive verb, zbavit 'rid', which takes a genitive and an
- accusative argument: 'to rid X [accusative] of Y [genitive]'. Franks & King (2000) found
- 8 that when both arguments cliticize in this verb, as in (24-b), speakers preferred the
- order accusative-genitive, although judgements were quite uncertain. Lenertová (2004,
- 154) also claims that arguments of *zbavit* usually cliticize in accusative–genitive order.
- 11 (24) a. Zbavili Alenu občanství. rid Alena.ACC citizenship.GEN 12 'They stripped Alena of her citizenship.'
- b. Zbavili { %**ji ho** / \***ho ji** }.
  rid her.ACC it.GEN / it.GEN her.ACC

  'They stripped her of it'. (Franks & King, 2000, 108)

A corpus search suggests that sentences like (23), with a genitive clitic extracted from
the subject and an accusative object clitic, overwhelmingly show genitive–accusative
order (as predicted in Table 1), while sentences with *zbavit*, like (24), show a rather
more ambiguous preference for accusative–genitive order. For reasons of space, I leave
further empirical study of the order of genitive and accusative clitics for future work.

For object control sentences, my account similarly predicts that accusative clitics originating in embedded infinitives should be able to climb into matrix clauses with clitic or full DP genitive controllers; if both are clitics, the order should be genitive—accusative. There are no verbs that assign genitive case to controllers, so these genitives must be extracted from numeral accusative object controllers (as shown in (25)) or numeral subject controllers. Examples (25) and (26) below are shown with their *predicted* judgements.

The teacher would be devastated if none of his students tried his goulash,  $\dots$ 

```
tak bychom { jich ho /*ho jich / ho kluků } so COND.1PL them.GEN him.ACC / him.ACC them.GEN / him.ACC boys.GEN měli přinutit ochutnat alespoň pár. should force.INF taste.INF at least few
```

'so we should force at least a few of them / the boys to taste it.'

<sup>&</sup>lt;sup>12</sup>I thank a reviewer for suggesting this point and the basic format of these examples.

- In contrast, embedded genitive clitics should not be able to climb into matrix clauses
- with accusative controllers—thus, sentences like (26) should always be ungrammatical.
- <sup>3</sup> (26) 'You can't expect that Pepa will learn to cook every classic Czech dish, but ...'
- \*příšti týden bych { jich ho / ho jich / jich next week cond.1sg them.gen him.acc / him.acc them.gen / him.acc
- kluka } mohl naučit vařit šest. boy.gen could teach cook six
- 'next week I could teach him / the boy to cook at least six of them.'
- <sub>7</sub> My proposal's predictions are clear but hard to test. I have not found attested examples
- 8 like (25) and (26), and speakers have unclear judgements or reject all such examples—in
- part because they are confusing, requiring multiple extractions and stacked verbs. Here,
- too, I leave thorough testing of my account's predictions to future work.

### 11 5.6 Summary

- I have proposed that clitic movement is driven by a probe with a hierarchy of reflexive
- and case features that it uncovers one at a time to match DPs in its c-command domain.
- When DPs are ordered in accordance with the probe's hierarchy, we get the canonical
- 15 clitic order of reflexive-dative-genitive-accusative. When they are not, clitics fail to
- cliticize. Scrambling allows clitics to reorder themselves as needed, so long as they are
- in the same TP. This probe thus accounts for the generalizations about clitic climbing
- discussed in the previous sections. Some predictions of my account, particularly those
- involving genitive and accusative clitics, require further testing.

## 6 Conclusion

- In this work, I have refined previous empirical generalizations about Czech clitic climb-
- ing (e.g. Dotlačil, 2004; Lenertová, 2004; Rezac, 2005; Hana, 2007) and proposed a novel
- 23 probe that handles intervention effects through a hierarchical feature geometry that
- removes layers to match successive DPs depending on their case. While this general ap-
- <sub>25</sub> proach neatly unifies the various possibilities and limitations of Czech clitic movement
- <sub>26</sub> presented here and makes generally correct predictions, some further issues remain.
- One issue is technical: what is the feature I call REFL? We cannot say that reflexives
- 28 somehow bear nominative case alongside dative or accusative: nominative is at the
- bottom of the case hierarchy (Caha, 2009), predicting that reflexives should come last.
- Another open question is the interaction of case and person. Some Czech speakers

- allow inversion of the usual clitic order to satisfy the Person Case Constraint, which
- requires first- and second-person clitics to precede third-person clitics (Medová, 2009;
- Sturgeon et al., 2011)—that is, first-person accusative clitics may precede third-person
- 4 dative clitics. Future work should aim to reconcile the Person Case Constraint and the
- case-based template. One potential route is to require two steps of clitic movement, first
- 6 for case and then for person, as proposed by Ciucivara (2009) for Romanian.
- Another avenue for further exploration is scrambling. Kosta (2006) and Kučerová
- 8 (2007) assume that elements cannot scramble out of TPs, but Lenertová (2004, 162n24)
- shows an example with a full DP scrambling out of an embedded infinitive into a matrix
- clause beneath (but not across) an object controller. Future work should explore when,
- exactly, elements can scramble out of embedded infinitives.
- Overall, the empirical theoretical work presented in this study should provide ample
- ground for further exploration of Czech clitic movement and embedded infinitives.

# 4 References

- Alboiu, Gabriela, Michael Barrie & Chiara Frigeni. 2004. SE and the Unaccusative-
- Unergative Paradox. In Martine Coene, Gretel De Cuyper & Yves d'Hulst (eds.),
- 17 Current studies in comparative Romance linguistics: proceedings of the International Con-
- ference held at the Antwerp University (19–21 September 2002) to honor Liliane Tasmowski
- (Antwerp Papers in Linguistics 107), 109–139. Antwerp: Universiteit Antwerpen.
- <sup>20</sup> Alexiadou, Artemis & Elena Anagnostopoulou. 1998. Parametrizing AGR: Word order,
- V-movement and EPP-checking. Natural Language and Linguistic Theory 16. 491–539.
- Béjar, Susana & Milan Rezac. 2003. Person Licensing and the Derivation of PCC Effects.
- In Ana Teresa Pérez-Leroux & Yves Roberge (eds.), Romance Linguistics: Theory and
- Acquisition: Selected papers from the 32nd Linguistic Symposium on Romance Linguistics
- <sup>25</sup> (LSRL, Toronto, April 2002 (Current Issues in Linguistic Theory 244), 49–62. Amster-
- dam/Philadelphia: John Benjamins. doi:10.1075/cilt.244.07bej.
- <sup>27</sup> Béjar, Susana & Milan Rezac. 2009. Cyclic Agree. *Linguistic Inquiry* 40(1). 35–73. doi:
- 28 10.1162/ling.2009.40.1.35.
- <sup>29</sup> Biskup, Petr. 2006. Scrambling in Czech: syntax, semantics, and information structure.
- In Seok Koon Chin & Atsushi Fujimori (eds.), Proceedings of NWLC 21 University
- of British Columbia Working Papers in Linguistics, 1–15. Vancouver: University of
- 32 British Columbia.
- <sup>33</sup> Caha, Pavel. 2009. *The nanosyntax of case*: University of Tromsø dissertation.

- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger Martin, David
- Michaels, Juan Uriagereka & Samuel Jay Keyser (eds.), Step by Step: Essays on Mini-
- malist Syntax in Honor of Howard Lasnik, 89–155. Cambridge: MIT Press.
- 4 Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), Ken Hale: A
- Life in Language, 1–52. Cambridge: MIT Press. doi:10.7551/mitpress/4056.003.0004.
- 6 Ciucivara, Oana. 2009. A Syntactic Analysis of Pronominal Clitic Clusters in Romance: The
- view from Romanian: New York University dissertation.
- 8 Coon, Jessica & Stefan Keine. 2021. Feature Gluttony. Linguistic Inquiry 52(4). 655–710.
- 9 doi:10.1162/ling\_a\_00386.
- Deal, Amy Rose. 2015. Interaction and satisfaction in  $\phi$ -agreement. In Thuy Bui &
- Deniz Özyıldız (eds.), NELS 45: Proceedings of the Forty-Fifth Annual Meeting of the
- North East Linguistic Society, 179–192. Amherst: University of Massachusetts Graduate
- Linguistics Student Association.
- Deal, Amy Rose. 2024. Interaction, satisfaction, and the PCC. Linguistic Inquiry 55(1).
- 15 39-94. doi:10.1162/ling\_a\_00455.
- Diesing, Molly. 1997. Yiddish VP Order and the Typology of Object Movement in
- Germanic. *Natural Language and Linguistic Theory* 15(2). 369–427.
- Diesing, Molly. 2003. Multiple multiple questions. In Andrew Carnie, Heidi Harley &
- MaryAnn Willie (eds.), Formal Approaches to Function in Grammar: In honor of Eloise
- Jelinek (Linguistik Aktuell/Linguistics Today 62), 135–153. Amsterdam/Philadelphia:
- <sup>21</sup> John Benjamins. doi:10.1075/la.62.11die.
- 22 Dotlačil, Jakub. 2004. The syntax of infinitives in Czech. University of Tromsø MA thesis.
- 23 Dotlačil, Jakub. 2007. Why clitics cannot climb out of CP: A discourse approach. In
- <sup>24</sup> Richard Compton, Magdalena Goledzinowska & Ulyana Savchenko (eds.), Formal Ap-
- proaches to Slavic Linguistics 15: The Toronto Meeting 2006, 76–93. Ann Arbor: Michigan
- Slavic Publications.
- <sub>27</sub> Dotlačil, Jakub. 2017. *ŠPLHÁNÍ KLITIK*. https://www.czechency.org/slovnik/
- 28 ŠPLHÁNÍ%20KLITIK.
- Dvořák, Věra. 2010. On the syntax of ditransitive verbs in Czech. In Wayles Browne
- ed.), Annual Workshop on Formal Approaches to Slavic Linguistics: The Second Cornell
- Meeting 2009 (Michigan Slavic Materials 55), Ann Arbor: Michigan Slavic Publica-
- 32 tions.

- Franks, Steven & Tracy Holloway King. 2000. A Handbook of Slavic Clitics Oxford Studies
- in Comparative Syntax. New York, Oxford: Oxford University Press. doi:10.1093/
- 3 oso/9780195135886.001.0001.
- <sup>4</sup> Fried, Mirjam. 1994. Second-position clitics in Czech: Syntactic or phonological? *Lingua*
- 94. 155–175. doi:10.1016/0024-3841(94)90024-8.
- 6 Hana, Jiri. 2007. Czech clitics in Higher Order Grammar: The Ohio State University disser-
- 7 tation.
- <sup>8</sup> Hiraiwa, Ken. 2001. Multiple Agree and the Defective Intervention Constraint in
- Japanese. In Ora Matushansky et al. (eds.), Proceedings of the 1st HUMIT Student Con-
- ference in Language Research (HUMIT 2000) (MIT Working Papers in Linguistics 40),
- 67–80. Cambridge: MITWPL.
- Hiraiwa, Ken. 2005. Dimensions of Symmetry in Syntax: Agreement and Clausal Architecture:
- Massachusetts Institute of Technology dissertation.
- <sup>14</sup> Holmberg, Anders & Christer Platzack. 1995. The Role of Inflection in Scandinavian Syntax
- Oxford Studies in Comparative Syntax. New York, Oxford: Oxford University Press.
- doi:10.1093/0s0/9780195067453.001.0001.
- Kaspar, Jiri. 2016. Czech left periphery: a preliminary analysis. Linguistica Brunensia
- 18 64(1). 71–88.
- 19 Kayne, Richard. 1986. Participles, Agreement, Auxiliaries, Se/Si and PRO. Talk pre-
- sented at the Workshop on Comparative Grammar, Princeton University.
- <sup>21</sup> Keine, Stefan. 2018. Case vs. positions in the locality of A-movement. Glossa: a journal
- of general linguistics 3(1). 138:1–34.
- Kosta, Peter. 2006. On Free Word Order Phenomena in Czech as Compared to German:
- <sup>24</sup> Is Clause Internal Scrambling A-Movement, A-Bar-Movement or Is It Base Generated?
- <sup>25</sup> Zeitschrift für Slawistik 51(3). 306–320. doi:10.1524/slaw.2006.51.3.306.
- 26 Krapova, Iliyana & Guglielmo Cinque. 2005. On the order of wh-phrases in Bulgarian
- multiple wh-fronting. University of Venice Working Papers in Linguistics 15. 171–198.
- <sup>28</sup> Křen, M., V. Cvrček, M. Hnátková, T. Jelínek, J. Kocek, D. Kováříková, J. Křivan,
- J. Milička, V. Petkevič, P. Procházka, H. Skoumalová, J. Šindlerová & M. Škrabal.
- 2022. Korpus SYN, verze 11 z 14.12.2022. www.korpus.cz.
- Kučerová, Ivona. 2007. The Syntax of Givenness. Cambridge: Massachusetts Institute of
- Technology dissertation.

- Landau, Idan. 1999. Elements of Control. Cambridge: Massachusetts Institute of Technol-
- 2 ogy dissertation.
- Landau, Idan. 2008. Two routes of control: evidence from case transmission in Russian.
- 4 Natural Language & Linguistic Theory 26. 877–924. doi:10.1007/s11049-008-9054-0.
- <sup>5</sup> Lenertová, Denisa. 2004. Czech Pronominal Clitics. *Journal of Slavic Linguistics* 12(1–2).
- 6 135-171.
- Lopatková, Markéta, Václava Kettnerová, Jiří Mírovský, Anna Vernerová, Eduard Bejček
- & Zdeněk Žabokrtský. 2022. VALLEX 4.5. http://hdl.handle.net/11234/1-4756.
- Mahajan, Anoop Kumar. 1990. The A/A-bar Distinction and Movement Theory: Mas-
- sachusetts Institute of Technology dissertation.
- Medová, Lucie. 2009. Reflexive Clitics in the Slavic and Romance Languages: A Comparative
- View from an Antipassive Perspective: Princeton University dissertation.
- Miyagawa, Shigeru. 1997. Against Optional Scrambling. Linguistic Inquiry 28(1). 1–25.
- 14 Nevins, Andrew. 2007. The Representation of third person and its consequences for
- person-case effects. Natural Language & Linguistic Theory 25. 273–313. doi:10.1007/
- 16 S11049-006-9017-2.
- Nevins, Andrew. 2011. Multiple agree with clitics: person complementarity vs. om-
- nivorous number. Natural Language & Linguistic Theory 29, 939–971. doi:10.1007/
- 19 \$11049-011-9150-4.
- 20 Nováková, Veronika. 2012. Vybrané aspekty slovosledu v současné češtině: Trojí teoretický
- přístup. Jihočeská univerzita v Českých Budějovicích MA thesis.
- Rezac, Milan. 2005. The syntax of clitic climbing in Czech. In Lorie Heggie & Francisco
- Ordóñez (eds.), Clitic and affix combinations: Theoretical perspectives, vol. 74 Linguistik
- Aktuell/Linguistics Today (LA), 103–140. Amsterdam/Philadelphia: John Benjamins.
- <sup>25</sup> doi:10.1075/la.74.06rez.
- Richards III, Norvin W. 1997. What Moves Where When in What Language? Cambridge:
- 27 Massachusetts Institute of Technology dissertation.
- Rizzi, Luigi. 2001. On the Position "Int(errogative)" in the Left Periphery of the Clause.
- In Guglielmo Cinque & Giampaolo Salvi (eds.), Current Studies in Italian Syntax:
- Essays Offered to Lorenzo Renzi (North-Holland Linguistic Series: Linguistic Varia-
- tions 59), chap. 14, 287–296. Amsterdam: Elsevier. doi:10.1163/9780585473949\_016.

- Rosen, Alexandr. 2001. A constraint-based approach to dependency syntax applied to some
- issues of Czech word order: Univerzita Karlova dissertation.
- 3 Rosen, Alexandr. 2014. Haplology of Reflexive Clitics in Czech. In Elżbieta Kaczmarska
- & Motoki Nomachi (eds.), Slavic and German in Contact: Studies from Areal and Con-
- trastive Linguistics, vol. 26 Slavic Eurasian Studies, 97–116. Sapporo: Slavic Research
- 6 Center, Hokkaido University.
- <sup>7</sup> Šimík, Radek. 2011. Modal existential wh-constructions: Rijksuniversiteit Groningen dis-
- 8 sertation.
- <sup>9</sup> Šimík, Radek & Marta Wierzba. 2015. The role of givenness, presupposition, and
- prosody in Czech word order: An experimental study. Semantics & Pragmatics 8.
- 3:1-103. doi:10.3765/sp.8.3.
- <sup>12</sup> Šimík, Radek, Marta Wierzba & Beste Kamali. 2014. Givenness and the position of
- the direct object in the Czech clause. In Cassandra Chapman, Olena Kit & Ivona
- Kučerová (eds.), Annual Workshop on Formal Approaches to Slavic Linguistics: The Mc-
- Master Meeting 2013 (Michigan Slavic Materials 60), 302–318. Ann Arbor: Michigan
- Slavic Publications.
- Sturgeon, Anne. 2008. The Left Periphery: The interaction of syntax, pragmatics and prosody
- in Czech (Linguistik Aktuell/Linguistics Today (LA) 129). Amsterdam/Philadelphia:
- John Benjamins. doi:10.1075/la.129.
- 20 Sturgeon, Anne, Boris Harizanov, Maria Polinsky, Ekaterina Kravtchenko, Car-
- los Gómez Gallo, Lucie Medová & Václav Koula. 2011. Revisiting the Person Case
- <sup>22</sup> Constraint in Czech. In John Frederick Bailyn, Ewan Dunbar, Yakov Kronrod & Chris
- LaTerza (eds.), Formal Approaches to Slavic Linguistics #19: The 2nd College Park Meeting
- 2010, 116–130. Ann Arbor: Michigan Slavic Publications.
- <sup>25</sup> Toman, Jindřich. 1999. On clitic <del>dis</del>placement. In Mila Dimitrova-Vulchanova & Lars
- Hellan (eds.), Topics in South Slavic Syntax and Semantics (Current Issues in Linguistic
- Theory 172), 205–228. Amsterdam/Philadelphia: John Benjamins.
- Veselovská, Ludmila. 1995. Phrasal Movement and X<sup>o</sup>-Morphology: Word Order Parallels
- in Czech and English Nominal and Verbal Projections. Olomouc: Univerzita Palackého
- 30 dissertation.
- Wurmbrand, Susanne. 2001. Infinitives: Restructuring and clause structure (Studies in
- Generative Grammar 55). Berlin, New York: Mouton de Gruyter. doi:10.1515/
- 9783110908329.