Chapter 8

Clitic climbing without restructuring in Czech and Polish

Irenäus Kulik

Friedrich Schiller University Jena

Clitic climbing, i.e. the realization of one or more clitics in a syntactic constituent hierarchically higher than the clitics' licensing predicate, has been accounted for in terms of a restructuring approach. The embedded infinitive the clitics are extracted from has been assumed to be structurally deficient – that is, a bare VP. Due to the lack of projections above the lexical V-head, clitics escape the infinitival domain to get their morphosyntactic features licensed in the matrix clause. However, the predictions of the restructuring approach do not withstand a corpus linguistic examination and are falsified by empirical data of Czech and Polish. Clitic climbing cannot be adequately accounted for by syntax proper and alternative accounts have to be taken into consideration seriously. It will be proposed to exploit information structure as a feasible explanatory account of clitic climbing.

Keywords: clitic climbing, restructuring, syntax, information structure, Czech, Polish

1 Introduction

CLITIC CLIMBING (CC) is the realization of a pronominal or reflexive clitic in a syntactic constituent hierarchically higher than the licensing predicate. Junghanns (2002a: 66) schematizes CC as in (1a), whereby a constituent α embeds a constituent β. CC is analyzed as movement of the CLITIC (CL) from β to α. (1b) paraphrases the scheme in a theory-neutral way.[1] The gap e co-indexed with CL

---

[1] I will attempt to phrase my arguments in a theory-neutral way, in order not to impose a specific approach on the reader. For instance, I will not opt for a particular analysis of long-distance dependencies in terms of e.g. movement or copy-and-delete.

captures the fact that CL is linearized in α, but subcategorized for by the verbal predicate in β. In principle, an arbitrary number n of phrase boundaries may intervene between α and β (with $\{\mathbb{N}_0\}$ denoting the set of natural numbers including zero).

(1) a. $[_\alpha \ldots \text{CL} \ldots [_\beta \ldots t_{\text{CL}} \ldots]]$
     b. $[_\alpha \text{CL}_j [_n [_\beta e_j]]], n \in \{\mathbb{N}_0\}$

There is an extensive body of research literature on CC in Romance, which significantly inspired research on Slavic. In the Italian example (2a), the direct object clitic *lo* 'him.ACC' follows the embedded infinitive *legger(e)* 'read' it is argument of.[2] This is the local or in situ realization of the clitic. CC is found in (2b) with the object clitic being realized before the finite verb of the matrix phrase, which will be also referred to as non-local placement.

(2) a. Martina   vuole$_1$ legger$_2$=*lo*$_2$.   (in situ/local)
         Martina.NOM want.PRS.3SG read.INF=him.ACC
         'Martina wants to read it.'

     b. Martina   *lo*$_2$ vuole$_1$ leggere$_2$.   (CC/non-local)
         Martina.NOM him.ACC want.PRS.3SG read.INF
         'Martina wants to read it.'   (Italian; Spencer & Luís 2012: 163–164)

The remainder of the paper is organized as follows: §2 briefly comments on the syntactic status of clitic pronouns in West Slavic. §3 provides a concise overview of basic clitic climbing properties in West Slavic. §4 is the core of the paper and tests the correlates of restructuring empirically, focusing on accusative case licensing §4.1, the absence of an underlying subject in the infinitive phrase §4.2, the dependence of the infinitive's temporal reference upon the matrix verb's tense information §4.3, and the all-or-nothing quality of clitic climbing §4.4. §5 addresses the role of information structure for clitic climbing. Concluding remarks are given in §6.

2 The status of West Slavic clitics

It is common to distinguish Polish and Czech clitics along the lines of Zwicky's (1977) simple/special-clitic dichotomy. The second position clitics in Czech are

---

[2]Clitics will be highlighted in italics for ease of reference. I adopt the integer-index-convention from Hana (2007), Rosen (2014), and Kolaković et al. (2022) to indicate the structural hierarchy between the verbal heads as well as the subcategorization relations between a verbal predicate and its dependents.

considered special clitics, whereas Polish clitics being distributed rather freely are simple clitics. Given this distinction, cliticization in these two closely-related languages is an ideal test field for theorizing about clitic phenomena and the micro-typology of Slavic cliticization. However, the often-made statement that Polish clitics are typologically peculiar in comparison to clitics in other West and South Slavic languages turns out to be controversial on closer inspection. On the one hand, Rappaport (1988), Dziwirek (1998), Kupść (2000), Borsley & Rivero (1994), Franks (2009, 2010), and Franks & King (2000) treat Polish as a language without second position clitics – hence, not possessing special clitics. On the other hand, Rothstein (1993: 725), Urbańczyk (1976: 62), Veselovská (1995: §4.8 Footnote 23), and Dimitrova-Vulchanova (1999: 85) consider Polish to be a second position clitic language essentially. Spencer (1991: 390) regards Polish as a special clitic language. From a different angle, Czech exhibits positional deviations from second position cliticization with third, fourth, and fifth position placement being attested (see Hana 2007: 103–112, Junghanns 2021: 177–178). Therefore, Czech and Polish clitics will be treated alike throughout the paper. I restrict myself to the set of short pronominals, adopting a traditional terminology from Slavic studies here.[3] The respective sets for Czech and Polish are provided in Table 1 (see Fried 1994, Avgustinova & Oliva 1997, Rosen 2001, Junghanns 2002b, Petkevič 2009 for Czech, Kupść 2000 for Polish).[4] I follow the spirit of Dotlačil (2007) and – most recently – Adam (2019) in refraining from hypothesizing about the exact syntactic status of the short pronouns, e.g. whether they are syntactic phrases or heads, or whether they are weak rather than clitic pronouns.[5]

---

[3]The notion rests upon the formal distinction of "short" (e.g. Cz. *mu*, *ho*) vs. "long" pronouns (e.g. Cz. *jemu*, *jeho*). Note that terminology differs between authors. The short pronouns are referred to as *konstantní příklonky* 'constant clitics' in Czech linguistics (see Trávníček 1959, Rosen 2001, Hana 2007), Avgustinova & Oliva (1997) propose the term *pure clitics*, and Junghanns (2002b) coins *lexikalische Klitika* 'lexical clitics'.

[4]Short dative reflexive *se* occurs in colloquial Polish, but remains unconsidered in most analyses (e.g. Spencer 1991, Kupść 2000). Rubadeau (1996: 137) claims that "Polish […] does not have a clitic form of the dative reflexive." On the other hand, Urbańczyk (1976: 58) discusses *se* in his outline of Polish dialects. Franks & King (2000: 150) list *se* among the Polish clitics, but note that it "is used only in the spoken language" (cf. also Rothstein 1993: 702). Aguado & Dogil (1989) explicitly take *se* into consideration.

[5]An anonymous reviewer pointed out that Czech short pronouns are true second position clitics, whereas Polish short pronouns are weak pronouns. This point of view is reminiscent of Cardinaletti & Starke's (1999) tripartite typology of pronouns. Since there is no general consensus on this matter, it appears that the typology of clitics in Slavic still needs further investigation. For an alternative view, see Jung & Migdalski (2022), who propose an extension of Cardinaletti & Starke's (1999) approach to a four-way classification.

Table 1: Unambiguous short pronominals in Czech and Polish

English	Czech	Polish
you_ACC/GEN	*tě*	*cię*
him_ACC	*ho*	*go*
me_DAT	*mi*	*mi*
you_DAT	*ti*	*ci*
him_DAT	*mu*	*mu*
refl_ACC(/GEN)	*se*	*się*
refl_DAT	*si*	*se*

3 Clitic climbing in West Slavic

As in the Italian example (2), CC occurs from embedded infinitives in Czech and Polish.[6] Several scholars point out that infinitive-hood is a necessary, but not a sufficient condition for CC (cf. Junghanns 2002a: 69 on Czech, Kupść 2000: 58 on Polish, Golden 2003: 221–222 on Slovene). The infinitival domain must not be introduced by a SUBORDINATOR.[7] Note that the clitic, which is subject to climbing, is not necessarily an argument, e.g. REFL of a reflexive tantum or in impersonal constructions. Therefore, I adopt the term DEPENDENT from dependency grammar as a general notion for clitics licensed by a verbal head. CC occurs in a variety of syntactic constructions, i.e. raising, subject and object control, and the ACCUSATIVE WITH INFINITIVE (ACI, from Latin *accusativus cum infinitivo*) (see Junghanns 2002a, Golden 2008, Kupść 2000).[8] Note that clitic climbing is ungrammatical in object control constructions in Romance, but not in Slavic (cf. Golden 2008: 315). Note also that standard Polish and its vernacular do not possess the ACI construction (see Przepiórkowski & Rosen 2005: 33, Kupść 2000: 96). The lack of ACI is a general property of Polish syntax, but it is not a particular feature of the Polish clitic system. The ACI is attested in several diatopic

---

[6]An anonymous reviewer pointed out that CC is possible from a subset of morphologically finite *da*-clauses in Serbian, i.e. from subjunctive-like *da*-clauses (see Progovac 1993, 1996 for the relevant distinction of indicative and subjunctive *da*-clauses). It is not necessary to rely on the indicative-subjunctive distinction to account for CC in West Slavic, which is best captured by the conditions of the embedded verb's infinitive-hood and the absence of a subordinator.

[7]The term SUBORDINATOR is meant to broadly cover elements introducing subordinate clauses of different kinds, i.e. (i) complementizers introducing argument clauses, (ii) subordinate conjunctions introducing adjunct clauses, and (iii) relative pronouns and adverbs introducing relative clauses.

[8]The accusative with infinitive is known as exceptional case marking in generative grammar.

varieties of Polish (see Urbańczyk 1976: 56). It has been observed that CC is not obligatory and clitics may be realized in situ as in Italian (2a). In the same way, both a- and b-examples are grammatical in Czech (3) and Polish (4). The question arises then, why CC does come into being and what are the conditions for the local vs. non-local realization of the clitics.

(3)   a.   Asi   *ho₂*   chtěla₁   usušit₂ pomalu.
            perhaps him.ACC want.PST.SG.F dry.INF slowly
            'Perhaps she wanted to dry it slowly.'

     b.   Asi   chtěla₁   usušit₂ *ho₂*   pomalu.
            perhaps want.PST.SG.F dry.INF him.ACC slowly
            'Perhaps she wanted to dry it slowly.' (Czech; Junghanns 2002a: 82)

(4)   a.   Jan   *go₂*   chciał₁   obudzić₂   o szóstej.
            Jan.NOM him.ACC want.PST.SG.M wake-up.INF at six
            'Jan wanted to wake him up at six o'clock.'

     b.   Jan   chciał₁   obudzić₂   *go₂*   o szóstej.
            Jan.NOM want.PST.SG.M wake-up.INF him.ACC at six
            'Jan wanted to wake him up at six o'clock.' (Polish; Kupść 2000: 60)

It has been proposed to account for CC in Slavic in terms of a restructuring approach by Rezac (2005) for Czech and Aljović (2004) for Bosnian-Croatian-Montenegrin-Serbian (BCMS) (cf. Rizzi 1982 on restructuring in Italian and Wurmbrand 2001 for a general analysis of restructuring properties on the basis of German and Japanese). According to such an approach the optionality of CC is only an alleged one. While clitics must remain in situ in true bi-clausal structures, they are forced to climb under restructuring, which is underlyingly mono-clausal due to the structural deficiency of the embedded so-called RESTRUCTURING IN-FINITIVE (RI). Being bare VPs, RIs lack the *v*P- and TP-shell.[9] Several correlates have been put forward to support the restructuring analysis: (a) RIs are unable to license accusative case, (b) RIs do not have an underlying subject (= PRO), (c) RIs do not constitute a binding domain for principle B, (d) either all clitics climb as a consequence of the infinitive's structural deficiency or none, (e) RIs are temporally dependent upon the matrix verb's tense. Criteria (a)–(d) are taken from Rezac (2005), criterion (e) is taken from Todorović (2012).

In what follows I will test the hypothesis that CC is dependent upon restructuring by assessing the above-mentioned correlates empirically towards corpus

---

[9]Note that Wurmbrand (2001 and subsequent work) proposes a multi-way distinction of restructuring, which is not limited to binary parametrization. I cannot take these proposals into consideration here due to space limitations and must leave them for future discussion.

data from the *Český národní korpus* 'Czech national corpus' (ČNK) and the *Narodowy Korpus Języka Polskiego* 'National corpus of Polish' (NKJP) respectively. In particular, the Czech data are drawn from the subcorpus SYN version 8 (see Křen et al. 2019, Hnátková et al. 2014).[10] For Polish, I searched the full NKJP corpus through the Poliqarp search engine (see Przepiórkowski et al. 2012).[11]

4 Clitic climbing and correlates of restructuring

4.1 Case licensing

Due to the lack of vP/TP, RIs are unable to license accusative case. Clitics climb in order to receive case in the matrix phrase then.[12] Lenertová (2004) and Dotlačil (2004) recognize independently for Czech that CC into passivized matrix domains contradicts this argument. It is generally known from Burzio's generalization that passivized verbs are unable to license accusative case (cf. Burzio 1986). Data like (5) and (6) contradict the case-based argument, as the case of the clitic *ho* 'him.ACC' cannot be licensed by the passivized matrix verb, but only by the embedded infinitive. Lenertová's (2004) and Dotlačil's (2004) arguments are corroborated by examples (7) and (8) for Czech and Polish respectively.

(5) '(Přivezl   puk za   švýcarskou branku,) ale tam ho_3
      bring.PST.SG.M puck behind Swiss   goal   but there him.ACC
      byl_1 $donucen_2$ $předat_3$ Lubinovi.
      be.PST.SG.M forced.PASS.SG.M give.INF Lubin.DAT
      '(He brought the puck behind the Swiss goal,) but there he was forced to give it to Lubina.'   (Czech; Lenertová 2004: 159)

(6) Pavel ho_3 byl_1 $nucen_2$ $zničit_3$.
      Pavel.NOM him.ACC be.PST.SG.M force.PASS.SG.M destroy.INF
      'Pavel was forced to destroy it.'   (Czech; Dotlačil 2004: 88)

(7) a.   […], kdo by ho_3 byl_1 $oprávněn_2$ $zbavit_3$
            who COND him.ACC be.PST.SG.M entitle.PASS.SG.M relieve.INF
            zodpovědnosti   za osud Ruska.
            responsibility.GEN.SG for fate Russia.GEN.SG
            '…, who would have been entitled to relieve him of his responsibility for the fate of Russia.'

---

[10]https://www.korpus.cz/

[11]http://www.nkjp.pl/

[12]It is irrelevant for the purpose of the present study how case licensing is technically implemented.

    b.   [...], kteří *ho*$_3$ byli$_1$ připraveni$_2$ zatknout$_3$.
        who him.ACC be.PST.PL.MAN prepare.PASS.PL.MAN arrest.INF
        '..., who were prepared to arrest him.'   (Czech; ČNK)

(8)   a.   [...] że już   nigdy nie będę$_1$ *cię*$_3$ zmuszona$_2$
        that already never NEG be.FUT.1SG you.ACC force.PASS.SG.F
        oglądać$_3$.
        look.INF
        '... that I will never be forced to look at you, again.'

    b.   bo   z   powodu drżenia twoich rąk   będę$_1$ *cię*$_3$
        because from reason tremor your   hands be.FUT.1SG you.ACC
        zmuszony$_2$ wrzucić$_3$ do KF
        force.PASS.SG.M throw.INF to KF
        'because of your hands' tremor I will be forced to throw you to the
        KF [= kill file]'   (Polish; NKJP)

4.2 Missing subjects

The lack of *v*P yields RIs without having an underlying subject (PRO). Rezac (2005: 114) states that RIs "will not constitute a binding domain of their own, and coreference between a pronominal argument of the infinitive and any argument of the upstairs verb should be blocked." He provides the minimal pair in (9a)–(9b).[13] In (9a) the embedded clitic *ji* 'her.ACC' is co-referential with either the matrix subject *Anna* (index *a*) or a distinct discourse referent beyond the sentence-level (index *b*). In (9b) the clitic has climbed due to restructuring. As a consequence, there is no clause boundary between the matrix and subordinate domain, thus co-reference between *Anna* and *ji* is excluded. Rezac (2005) accounts for (9b) by a violation of binding principle B, according to which "[a] pronominal is free [i.e. unbound] in its governing category [i.e. clause]" (Chomsky 1981: 188). However, principle B is inconclusive. It determines semantic co-reference by syntactic non-co-membership, which does not reveal anything about clause boundaries here. Co-reference between *Anna* and *ji* is still excluded by principle B in presence of a clause boundary, for both the subject and the clitic are members of the matrix domain, cf. (9c). Note, furthermore, that the matrix object *mu* 'him.DAT' still co-refers with the kisser of the embedded kissing-event despite CC of *ji*.

---

[13]An anonymous reviewer pointed out that *políbit ji nashledanou* is an unusual calque on the basis of English 'to kiss someone goodbye'. This does not have an impact on CC, however.

(9) a. [Anna$_a$ *mu*$_c$ dovolila   [PRO$_c$ políbit   *ji*$_{a/b}$
          Anna.NOM him.DAT allow.PST.SG.F   kiss.INF her.ACC
          nashledanou]].
          good-bye
          'Ana permitted him to kiss her good-bye.'

     b. [Anna$_a$ *mu*   *ji*$_{*a/b}$ dovolila   políbit nashledanou].
          Anna.NOM him.DAT her.ACC allow.PST.SG.F kiss.INF good-bye
          'Ana permitted him to kiss her good-bye.'

     c. [Anna$_a$ *mu*$_c$ *ji*$_{*a/b}$ dovolila   [(PRO$_c$) políbit
          Anna.NOM him.DAT her.ACC allow.PST.SG.F   kiss.INF
          nashledanou]].
          good-bye
          'Ana permitted him to kiss her good-bye.'   (Czech; Rezac 2005: 114)

Rezac (2005: 114–115) further states that neither matrix argument binds subject-oriented anaphora *svým* 'one's.POSS.PL.DAT' in (10b) in contrast to (10a). As the clitic *je* 'them.ACC' has climbed, restructuring must have occurred and PRO is missing thence. However, co-reference between the matrix subject and the anaphorical possessive pronoun should be still expected in a restructuring context. In fact, Dotlačil (2007) and Skoumalová (2005) judge (10b) grammatical with both interpretations, such that embedded *svým* is bound by either matrix argument (*Pavel, Janovi*) despite CC. These judgements are corroborated by the corpus data in (11) and (12). First, the matrix subject *stavitel* 'constructor' binds the possessive anaphor *své* 'one.POSS' after CC in (11) as expected. Second, and even more intriguing, example (12) shows that the matrix object clitic *mu* 'him.DAT' binds the embedded possessive anaphor *své* in spite of the climbed embedded clitic *ho* 'him.ACC'. While the binding relations in (11) are expected under standard assumptions in any mono-clausal domain, the binding facts in (12) are best analyzed by assuming an underlying subject in the embedded infinitive (i.e. PRO under standard generative assumptions).[14]

(10) a. Pavel$_a$ přikázal$_1$ Janovi$_b$ dát$_2$ *je*$_2$ svým$_{a/b}$
          Pavel.NOM order.PST.SG.M Jan.DAT give.INF them POSS
          přátelům.
          friends.DAT
          'Pavel$_a$ ordered Jan$_b$ to give them to his$_{a/b}$ friends.'

---

[14] I do not adopt Hornstein's (1999) proposal in abandoning the raising-control distinction, which has originally been the main motivation for the assumption of PRO (cf. Przepiórkowski & Rosen 2005 for a similar account in HPSG and Culicover & Jackendoff 2001, Landau 2003 for a critique).

b. * Pavel_a je_2 Janovi_b přikázal_1 dát_2 svým_{a/b}
   Pavel.NOM them Jan.DAT order.PST.SG.M give.INF POSS
   přátelům.
   friends.DAT
   Intended: 'Pavel_a ordered Jan_b to give them to his_{a/b} friends.'

   (Czech; Rezac 2005: 114–115)

(11) Stavitel_a mu_2 nechtěl_1 vnucovat_2 své_a mínění.
    constructor.NOM him.DAT NEG.want.PST.SG.M impose.INF POSS opinion
    […]
    'The constructor didn't want to impose his opinion on him …'

    (Czech; ČNK)

(12) (A právě [_NP "ten myš"]_a se sourozenci_b zalíbil
    and exactly this.SG.M mouse REFL sibling.SG.DAT please.PST.SG.M
    natolik, že mě požádal,) abych mu_{1/b} ho_{2/a}
    so.much that me.ACC ask.PST.SG.M so-that him.DAT him.ACC
    dovolil_1 použít_2 v jedné své_b písničce.
    allow.PST.SG.M use.INF in one POSS song
    '(And [my] sibling liked exactly "this he-mouse" so much that he asked
    me,) if I would allow him to use it in one of his songs.'   (Czech; ČNK)

Another argument that challenges the predicted binding correlations of restructuring has been put forth by Golden (2008: 316) for Slovene. She observed that certain object control constructions are semantically ambiguous, although the embedded clitic has climbed (13). That is, an object may be interpreted as either being subcategorized for by the matrix verb, whereby the object controls the embedded PRO-subject, or by the embedded infinitive and no control occurs. The ambiguity remains in case of CC, although PRO should be absent due to restructuring, such that the control reading should not be available. Correspondingly, the ambiguity of Czech (14) and Polish (15) calls for an analogue of a PRO-analysis for the infinitive.[15]

(13) a. Janez ji_{1/2} jih_2 je dovolil_1 kupiti_2.
    Janez.NOM her.DAT them.ACC AUX.3SG allow.PST.SG.M buy.INF
    (i) 'Janez allowed her to buy them.'
    (ii) 'Janez allowed (someone) to buy them/it for her/them.'

    (Slovene; Golden 2008: 316)

---

[15]An anonymous reviewer pointed out that a PRO-less analysis is available following work by Gennaro Chierchia (see Chierchia 1984). As the consequences of this approach are not clear to me at this moment, I will leave it for future research.

b. Jaz *sem* *ji$_{1/2}$* *ga$_2$* dovolil$_1$ poslati$_2$ po pošti.
   I.NOM AUX.1SG her.DAT him.ACC allow.PST.SG.M send.INF by mail
   (i) 'I allowed her to send it by mail.'
   (ii) 'I allowed (somebody) to send it to her by mail.'

<div align="right">(Slovene; Golden 2008: 312)</div>

(14) [...], strýc *mu$_{1/2}$* *ho$_2$* nedovolí$_1$ přečíst$_2$.
     uncle him.DAT him.ACC NEG.allow.PRS.3SG read.INF
     (i) 'The uncle doesn't allow him to read it.'
     (ii) 'The uncle doesn't allow (someone) to read it to him.'   (Czech; ČNK)

(15) [...] każą$_1$ *mu$_{1/2}$* *go$_2$* rozebrać$_2$.
     order.PRS.3PL him.DAT him.ACC deconstruct.INF
     (i) '... they order him to deconstruct it.'
     (ii) '... they order (someone) to deconstruct it for him.'   (Polish; NKJP)

4.3 Temporal reference

It has been argued that the RI's temporal reference is dependent upon the one presupposed by the matrix verb. RIs are ungrammatical with a temporal adverb which refers to a time frame deviating from the matrix verb's one. Wurmbrand's (2001) German example (16a) provides a grammatical utterance without restructuring. The main verb encodes the past tense (morphosyntactically encoded by the analytical perfect form), but the embedded infinitive refers to the future by the time adverb *morgen* 'tomorrow'. On the other hand, the presence of the time adverb is ungrammatical in a restructuring context like (16b). Example (17) from Aljović (2004) suggests that the same holds for Slavic. The presence of the time adverb *sutra* 'tomorrow' in the embedded clause is grammatical in the BCMS example (17a), as long as the pronominal clitic *ga* 'him.ACC' is in situ. When restructuring occurs and the clitic climbs, then the realization of the time adverb yields the utterance ungrammatical (17b).

(16) a. Hans hat beschlossen (morgen) zu verreisen.
        Hans have.PRS.3SG decide.PTCP tomorrow to travel.INF
        'John decided to go on a trip (tomorrow).'
     b. Hans hat versucht (*morgen) zu verreisen.
        Hans have.PRS.3SG try.PTCP tomorrow to travel.INF
        'John tried to go on a trip.'   (German; Wurmbrand 2001: 73)

(17) a. On želi₁   da *ga₂* (sutra) Jovanu
       he want.PRS.3SG that him.ACC tomorrow Jovan.DAT
       predstavi₂.
       introduce.PRS.3SG
       'He wants to introduce him to John tomorrow.'

    b. *On *ga₂*   želi₁   da (sutra) Jovanu
       he him.ACC want.PRS.3SG that tomorrow Jovan.DAT
       predstavi₂.
       introduce.PRS.3SG
       Intended: 'He wants to introduce him to John tomorrow.'

                                              (BCMS; Aljović 2004: 193)

Lenertová (2004) notes that the aforementioned argument does not hold for Czech, where CC co-occurs with the embedded infinitive's independent temporal reference. The clitic *ho* 'him.ACC' in (18) has climbed to the matrix domain headed by the past tense verb *rozhodl* 'decide.PST.SG.M'. However, the realization of the temporal adverb *příště* 'next time' or adverbial PP *na moment* 'for a moment' within the infinitive's domain is grammatical. Lenertová's observation is corroborated for Czech (19) and Polish (20) by corpus data. Note that climbing is grammatical irrespective of whether the time adverb(ial)s (ADV) intervene between matrix verb and embedded infinitive or not. This fits Junghanns's (2002a: 66) observation that the cascade of verbs, which constitutes an environment for CC, does not form a verb cluster (Germ. *Verb[al]komplex*) in Czech, i.e. they do not need to be contiguous (cf. also Golden 2008: 313).

(18) Místo   toho *se₁* *ho₂*   rozhodl₁   [_ADV na moment] /
      instead-of this REFL him.ACC decide.PST.SG.M   on moment
      [_ADV příště]   ignorovat₂.
           next-time ignore.INF
      'Instead, he decided to ignore him for a moment/next time.'
                                        (Czech; Lenertová 2004: 157)

(19) a. Přitom   *ho₂*   chtěla₁   odstartovat₂ [_ADV příští sobotu]
       but-in-fact him.ACC want.PST.SG.F launch.INF   next Saturday
       při příležitosti oslav   700 let   od   udělení   městských
       at occasion   celebration 700 years from awarding city
       práv   Sokolovu.
       rights Sokolov
       'But in fact, [the town's administration] wanted to launch it on the occasion of the 700th anniversary of Sokolov receiving its town charter.'

    b. Lidé,   kteří *se₂* chtěli₁   [ADV zítra   večer]
        people who REFL want.PST.PL.MAN   tomorrow evening
        bavit₂   při filmu Borat mají   smůlu.
        entertain.INF at film Borat have.PRS.3PL bad-luck
        'Those people, who wanted to enjoy the Borat movie tomorrow
        evening, have bad luck.'   (Czech; ČNK)

(20) a. Ja   *się₂* postanowił-em   nie podrapać₂ [ADV jutro   o
        I.NOM REFL decide.PST.SG.M-M.1SG NEG scratch.INF   tomorrow at
        12.15] […].
        12.15
        'I decided not to scratch myself tomorrow at 12:15....'

    b. ja   *mu₂*   zdecydował-em₁   *się₁* odpowiadać₂ [o
        I.NOM him.DAT decide.PST.SG.M-M.1SG REFL reply.INF   [at
        ile   na jakieś posty będzie   warto] [ADV po 24
        how.much on some posts be.FUT.3SG worth]   after 24
        godzinach]
        hours.
        'I decided to respond to him [as far as some posts will be worth it]
        after 24 hours.'   (Polish; NKJP)

4.4 All or nothing

CC has been deemed an "all-or-nothing phenomenon" (Rezac 2005: 111), whereby either all embedded clitics climb or none (see Aljović 2004: 194 for a similar position regarding BCMS). Due to the RI's structural deficiency, the clitics escape the infinitival domain to satisfy their formal requirements in the matrix phrase, where they are placed in the respective clitic cluster. DIACLISIS of co-dependents poses a problem for such an approach then.[16] In the empirically attested Serbian example (21), both the pronominal clitic *mi* 'me.DAT' and the reflexive clitic *se* 'REFL' are subcategorized for by the embedded verb *vrti* 'spin.PRS.3SG' of the *da*-clause.[17] However, it is only the pronominal clitic that climbs, and the reflexive remains in situ (see Kolaković et al. 2022: 307). As restructuring is supposed to affect all embedded clitics equally, the approach is unable to predict differences in

---

[16]I adopt the term DIACLISIS for split-clitic-constructions from Kolaković et al. (2022: 34), who took the notion from Janse's (1998) discussion of clitics in Cappadocian Greek.

[17]An anonymous reviewer pointed out that the availability of diaclisis in BCMS was already recognized by Sandra Stjepanović (see Stjepanović 1998, 1999, 2004). The data remained controversial, as the positive judgement of diaclisis has not been generally accepted (cf. Aljović 2004: 192 Footnote 3, Franks & King 2000: 335).

the distribution of co-dependent clitics. This is also true for diaclisis in Czech (22) and Polish (23).[18] Again, both reflexive and pronominal clitics are co-dependents of the embedded infinitives. Only the reflexive clitic occupies the clausal second position, whereas the pronominal clitic appears further to the right and does not build a cluster with the reflexive. Uwe Junghanns (p.c.) pointed out that it is impossible to determine a priori whether the pronominal clitics in (22)–(23) have in fact climbed or whether they are still positioned within the infinitival phrase (see also Junghanns 2002a: 67–68).[19] While this behavior would appear unsurprising for Polish given the rather peculiar status its clitic system is assigned, the occurrence of the same pattern in Czech is unexpected. The Czech data are problematic for Bošković's (2001) PF-filtering approach to clitic clustering, according to which clitics in a second position clitic language are placed according to two parameters: first, initial positioning in an intonation phrase (ɩP), second, being suffixed to a prop. Bošković accounts for diaclisis in Polish by assuming that Polish clitics do not possess the second position requirement of being ɩP-initial.[20] Note that the diaclitic distribution is independent of the argument status of the clitics. The reflexives in the a-examples are true arguments of the embedded infinitives, whereas they are not in the b-examples. Both Cz. *smát(i) se* 'laugh' and Pol. *bać się* 'be afraid' are reflexiva tantum, i.e. the appearance of the reflexive is lexically

---

[18]An anonymous reviewer suggested that an all-or-nothing analysis might be available for Czech, if one assumes a verb-adjacent placement pattern with both pronouns leaning on the matrix verb. Such an approach is debatable. It remains unclear why Czech special clitics do not build a cluster (cf. also Footnote 20). Bulgarian and Macedonian clitics are verb-adjacent and obey clitic clustering (but do not have clitic climbing, cf. Franks & King 2000: 241). In the scenario suggested, the reflexive needs to procliticize, while the pronominal encliticizes on the same host. Thus, the prosodic orientation appears to be rather arbitrary, contra Toman (1996), who argues that, while short pronouns encliticize by default in Czech, procliticization is a function of the phonological environment, i.e. the lack of a prop due to a prosodic break (see also Junghanns 2021: 178–179).

[19]The contrast is schematised in (i) and (ii).

    (i) $[_\alpha\ V_\alpha\ CL_\beta\ [_\beta\ V_\beta]]$ (CC/non-local)

    (ii) $[_\alpha\ V_\alpha\ [_\beta\ CL_\beta\ V_\beta]]$ (in situ/local)

Proclisis to the following infinitive would be indicative of clitic in situ placement. Proclisis is available in Czech (see Toman 1996) and Polish (see Kraska-Szlenk 1995: 62–64) for the set of clitics relevant here.

[20]The Czech facts cannot be captured, since the approach predicts that split clitics are placed in distinct ɩPs. However, there is only one ɩP for the relevant clause in Czech (22), cf. (i)–(ii). I thank Martina Berrocal (p.c.) for the judgement (# marks a pause).

    (i) $[_{ɩP}$ Lehce *si* (*#) uměla *ho* představit]

    (ii) $[_{ɩP}$ kdekdo *se* (*#) začal *mi* smáti]

specified. This finding supplements Lenertová's (2004: 138–139) observation that Czech clitics do not need to cluster together, as she found that conditional and reflexive/pronominal clitics may occur non-contiguously.

(21) […] i počelo$_1$ *mi$_2$* *je*   [da *se$_2$* vrti$_2$ u glavi].
      and start.PST.SG.N me.DAT AUX.3SG that REFL spin.PRS.3SG in head
      '… and I started to feel dizzy.'   (Serbian; Kolaković et al. 2022: 307)

(22) a. Lehce *si$_2$* uměla$_1$ *ho$_2$*   představit$_2$, […]
          easily REFL be-able.PST.SG.F him.ACC imagine.INF
          'She could easily imagine him, …'

      b. […] kdekdo   *se$_2$* začal$_1$ *mi$_2$* smáti$_2$.
          almost-everybody REFL start.PST.SG.M me.DAT laugh.INF
          '… almost everybody started to laugh at me.'   (Czech; ČNK)

(23) a. My   *się$_2$* musimy$_1$ *go$_2$*   nauczyć$_2$.
          we.NOM REFL must.PRS.1SG him.ACC teach.INF
          'We have to learn it.'

      b. Już *się$_2$* zaczęli$_1$ *go$_2$*   bać$_2$, […]
          already REFL start.PST.PL.MAP him.ACC fear.INF
          'They already started to be afraid of him, …'   (Polish; NKJP)

5 Clitic climbing and information structure

The previous sections showed that a purely syntactic account in terms of restructuring cannot cope with CC in Czech and Polish. The corpus data provided in §4 contradict the predictions of the approach. Therefore, I agree with Dotlačil (2004: 87) in that CC does not occur because of restructuring and that both should be regarded as independent phenomena.

If restructuring is not responsible for CC, then the question arises, what is. Which alternatives are available, if one refrains from accounting for CC by syntax proper? Proposals in terms of phonology, morphology, and syntax-prosody interaction have been put forward, but were also criticized. For instance, Franks & King (2000: 287–291, 293–305) critically review purely phonological and purely syntactic accounts of cliticization (incl. CC) and conclude that both types of approach face several problems in accounting for clitic phenomena (cf. also the discussion in Bošković 2001: 36–80). However, I do not pursue a mixed syntax-PF account like Franks & King's (2000: §11–12) and Franks's (2010) PF-filtering approach. Another mixed account is Halpern's (1995) Prosodic Inversion, which

is critically reviewed in detail by Bošković (2001: 11–36). On the other hand, Bošković's (2001) own intonational-phrase-based proposal has been criticized by Lenertová (2004: 150–151) and Golden (2008: passim) (see also Footnote 20). An explanatory account of CC has to shed light on the actuation or causation of CC vs. clitic in situ positioning.[21] I propose to take a candidate into consideration that repeatedly appears in the literature on clitics, but has been mostly neglected: information structure. Stjepanović (2004: 206) considers the possibility that CC is an instance of object shift, which has been reported to rely on information structural notions in Northern Germanic: only objects having background status are shifted.

Junghanns (2002a: 82–83) takes the farthest step towards information structure I am aware of and proposes that information structure is the actual reason for CC, whereas syntax merely restricts which domains clitics can escape. Consequently, a clitic climbs, if it belongs to the background of the whole sentence, else it remains in situ. The else-case covers utterances in which the clitic is part of a topicalized or focused constituent. The clitic itself does not bear topic or focus, but is an element of a domain specified as either [+Topic] or [+Focus].

Accounting for the ban of CC across CP, Dotlačil (2004: 93, 98, 2007: 89) suggests that clitics cannot escape CPs, because they cannot bear the discourse functions of topic or focus. He observes that topicalized or focused constituents are able to escape CPs in Czech. If clitics are hosted in such a topicalized or focused domain, they can cross a CP as a part of the respective constituent. However, no CC occurs, as the clitics remain in their licensing domain.

I adopt Junghanns's (2002a) proposal and paraphrase it tentatively with the notation in (24), which reads as follows: for every x, if x has property CL (= is a clitic) and x is element of the information structural background, then x is realized in domain α and co-indexed with a gap e in domain β. Implication (24b) specifies the else-case with the clitic in situ realization. Note that the asymmetry between α and β is purely syntactic and refers to dominance or hierarchic order, but does not tell us anything about linear order.

(24) a. $\forall x(\text{CL}(x) \wedge x \in [\textsc{Background}] \rightarrow [_\alpha x_j [_\beta e_j]])$
      b. $\forall x(\text{CL}(x) \wedge x \in \{[\textsc{Topic}], [\textsc{Focus}]\} \rightarrow [_\alpha ... [_\beta x]])$

---

[21]I refer to the traditional notion of explanation based on causality, not to Chomsky's (1965: 25–26) concept of explanatory adequacy. Instead, I allude to the actuation problem coined by Weinreich et al. (1968) towards the background of historical linguistics and adopt it for the field of synchronic grammar research.

6 Conclusion

The paper empirically tested the hypothesis that clitic climbing in Czech and Polish is contingent upon a mono-clausal restructuring environment. In particular, I reviewed the predicted correlates of the proposal that clitics escape defective infinitival complements, which are bare VPs. Utilizing data from both the Czech National Corpus and the National Corpus of Polish, it has been shown that (i) accusative clitics climb to passivized domains incapable of accusative case licensing, (ii) binding phenomena and ambiguities in climbing constructions call for an underlying subject (PRO) analysis of the infinitival domain, (iii) embedded infinitives possess temporal reference independent of the finite matrix verb, and (iv) co-dependent clitics do not behave uniformly with respect to climbing and end up non-contiguously. In sum, the respective predictions of the restructuring approach have been falsified. Clitic climbing thus cannot be regarded as being restricted to mono-clausal structures, but occurs in what is considered an underlyingly bi-clausal structure. This state of affairs yields the approach ineligible for clitic climbing in Czech and Polish. More generally, as syntax proper does not provide us with an explanatory account for the very existence of clitic climbing, alternatives have to be taken into consideration seriously. Following Junghanns (2002a), I referred to information structure, whereby clitics climb, if they are elements of the background of the entire sentence, but remain in situ, if they are elements of a topicalized or focused constituent. Admittedly, the present study neither addresses how to account for diaclisis in terms of information structure nor how topic and focus domains are determined in order to capture clitic in situ positioning. This has to be dealt with in future research. What is more, the resemblance between Czech and Polish clitic distributions suggests that the typological peculiarity of Polish is not well-grounded. I propose to revisit and refine the micro-typology of Slavic cliticization on a sound empirical basis.

Abbreviations

1	first person	ČNK	Czech National Corpus
2	second person	DAT	dative
3	third person	F	feminine
ACC	accusative	FUT	future tense
ACI	accusative with infinitive	GEN	genitive
ADV	adverb(ial)	INF	infinitive
AUX	auxiliary	M	masculine
CC	clitic climbing	N	neuter

NEG	negation	POSS	possessive
NKJP	National Corpus of Polish	PRS	present tense
NOM	nominative	PST	past tense
PASS	passive	PTCP	participle
MAN	masculine-animate	REFL	reflexive
MAP	masculine-personal	RI	restructuring infinitive
PL	plural	SG	singular

Acknowledgments

References

Adam, Nina. 2019. Clitics at the interfaces of grammar: Defining the "first position" in Czech. *Typology of Morphosyntactic Parameters* 2(1). 11–27. https://tmp.sc/application/files/9816/6793/2318/Adam-2019-2-1.pdf.

Aguado, Miquel & Grzegorz Dogil. 1989. Clitics in lexical phonology: Alleged counterevidence? *Linguistische Berichte* 120. 99–116.

Aljović, Nadira. 2004. Cliticization domains: Clitic climbing in Romance and in Serbo-Croatian. In Olivier Crouzet, Hamida Demirdache & Sophie Wauquier-Gravelines (eds.), *Actes des / Proceedings of JEL'2004. [DOMAIN_{[E]}S]: Journées d'études linguistiques 2004, 5–6–7 Mai 2004, Nantes, France*, 191–197. Nantes: Université de Nantes.

Avgustinova, Tania & Karel Oliva. 1997. On the nature of the Wackernagel position in Czech. In Uwe Junghanns & Gerhild Zybatow (eds.), *Formale Slavistik*, 25–47. Frankfurt am Main: Vervuert.

Borsley, Robert D. & María Luisa Rivero. 1994. Clitic auxiliaries and incorporation in Polish. *Natural Language & Linguistic Theory* 12(3). 373–422. DOI: 10.1007/BF01118135.

Bošković, Željko. 2001. *On the nature of the syntax-phonology interface: Cliticization and related phenomena.* Amsterdam: Elsevier. DOI: 10.1163/9780585474250.

Burzio, Luigi. 1986. *Italian syntax: A government-binding approach* (Studies in Natural Language and Linguistic Theory 1). Dordrecht: Reidel. DOI: 10.1007/978-94-009-4522-7.

Cardinaletti, Anna & Michal Starke. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In Henk van Riemsdijk (ed.), *Clitics in the languages of Europe* (Empirical Approaches to Language Typology 20), 145–233. Berlin/New York: Mouton de Gruyter. DOI: 10 . 1515 / 9783110804010.145.

Chierchia, Gennaro. 1984. *Topics in the syntax and semantics of infinitives and gerunds.* Amherst, MA: University of Massachusetts. (Doctoral dissertation).

Chomsky, Noam. 1965. *Aspects of the theory of syntax.* Cambridge, MA: MIT Press.

Chomsky, Noam. 1981. *Lectures on government and binding: The Pisa lectures.* Dordrecht: Foris.

Culicover, Peter W. & Ray Jackendoff. 2001. Control is not movement. *Linguistic Inquiry* 32(3). 493–512. DOI: 10.1162/002438901750372531.

Dimitrova-Vulchanova, Mila. 1999. Clitics in the Slavic languages. In Henk van Riemsdijk (ed.), *Clitics in the languages of Europe* (Empirical Approaches to Language Typology 20), 83–122. Berlin/New York, NY: Mouton de Gruyter. DOI: 10.1515/9783110804010.83.

Dotlačil, Jakub. 2004. *The syntax of infinitives in Czech.* Tromsø: University of Tromsø. (MA thesis).

Dotlačil, Jakub. 2007. Why clitics cannot climb out of CP: A discourse approach. In Ulyana Savchenko, Magdalena Goledzinowska & Richard Compton (eds.), *Formal approaches to Slavic linguistics: The Toronto meeting 2006*, 76–93. Ann Arbor, MI: Michigan Slavic Publications.

Dziwirek, Katarzyna. 1998. Reduced construction in universal grammar: Evidence from the Polish object control construction. *Natural Language & Linguistic Theory* 16(1). 53–99. DOI: 10.1023/A:1005952030641.

Franks, Steven. 2009. Clitics in Slavic. In Sebastian Kempgen, Peter Kosta, Tilman Berger & Karl Gutschmidt (eds.), *Die slavischen Sprachen: Ein internationales Handbuch zu ihrer Struktur, ihrer Geschichte und ihrer Erforschung* (Handbücher zur Sprach- und Kommunikationswissenschaft 32), 725–738. Berlin/New York, NY: Walter de Gruyter. DOI: 10.1515/9783110214475.1.9.725.

Franks, Steven. 2010. Clitics in Slavic. *Glossos* 10. 1–157. https://slaviccenters.duke.edu/sites/slaviccenters.duke.edu/files/media_items_files/10franks.original.pdf.

Franks, Steven & Tracy Holloway King. 2000. *A handbook of Slavic clitics*. Oxford: Oxford University Press.

Fried, Mirjam. 1994. Second-position clitics in Czech: Syntactic or phonological? *Lingua* 94(2). 155–175. DOI: 10.1016/0024-3841(94)90024-8.

Golden, Marija. 2003. Clitic placement and clitic climbing in Slovenian. *Sprachtypologie und Universalienforschung [STUF – Language Typology and Universals]* 56(3). 208–233. DOI: 10.1524/stuf.2003.56.3.208.

Golden, Marija. 2008. 2nd position clitic climbing and restructuring. In Gerhild Zybatow, Luka Szucsich, Uwe Junghanns & Roland Meyer (eds.), *Formal description of Slavic languages*, 308–317. Frankfurt am Main: Peter Lang.

Halpern, Aaron. 1995. *On the placement and morphology of clitics*. Stanford, CA: CSLI Publications.

Hana, Jiri. 2007. *Czech clitics in higher order grammar*. Columbus, OH: The Ohio State University. (Doctoral dissertation).

Hnátková, Milena, Michal Křen, Pavel Procházka & Hana Skoumalová. 2014. The SYN-series corpora of written Czech. In Nicoletta Calzolari, Khalid Choukri, Thierry Declerck, Hrafn Loftsson, Bente Maegaard, Joseph Mariani, Asuncion Moreno, Jan Odijk & Stelios Piperidis (eds.), *Proceedings of the Ninth International Conference on Language Resources and Evaluation (LREC'14)*, 160–164. Reykjavík, Iceland: European Language Resources Association (ELRA). http://www.lrec-conf.org/proceedings/lrec2014/pdf/294_Paper.pdf.

Hornstein, Norbert. 1999. Movement and control. *Linguistic Inquiry* 30(1). 69–96. DOI: 10.1162/002438999553968.

Janse, Mark. 1998. Cappadocian clitics and the syntax-morphology interface. In Geoffrey C. Horrocks Brian D. Joseph & Irene Philippaki-Warburton (eds.), *Themes in Greek linguistics II* (Amsterdam Studies in the Theory and History of Linguistic Science 159), 257–281. Amsterdam/Philadelphia, PA: John Benjamins. DOI: 10.1075/cilt.159.16jan.

Jung, Hakyung & Krzysztof Migdalski. 2022. Toward a four-way pronoun hierarchy: a view from Slavic. *Journal of Slavic Linguistics* 30(FASL 29 extra issue). 373–422. https://ojs.ung.si/index.php/JSL/article/view/202.

Junghanns, Uwe. 2002a. Clitic climbing im Tschechischen. In Uwe Junghanns (ed.), *Untersuchungen zur Syntax und Informationsstruktur slavischer Deklarativsätze* (Linguistische Arbeitsberichte 80), 57–90. Leipzig: Institut für Linguistik der Universität Leipzig.

Junghanns, Uwe. 2002b. Klitische Elemente im Tschechischen: Eine kritische Bestandsaufnahme. In Thomas Daiber (ed.), *Linguistische Beiträge zur Slavistik: IX. JungslavistInnen-Treffen, Halle a. d. Saale / Lutherstadt Wittenberg, 27. September – 1. Oktober 2000*, 117–150. Munich: Otto Sagner.

Junghanns, Uwe. 2021. Grammatische Regel oder Möglichkeit? In Bernhard Brehmer, Anja Gattner & Tatiana Perevozchikova (eds.), *Von A wie Aspekt bis Z wie zdvořilost: Ein Kaleidoskop der Slavistik für Tilman Berger zum 65. Geburtstag*, 171–184. Tübingen: Tübingen Library Publishing.

Kolaković, Zrinka, Edyta Jurkiewicz-Rohrbacher, Björn Hansen, Dušica Filipović Đurđević & Nataša Fritz. 2022. *Clitics in the wild: Empirical studies on the microvariation of the pronominal, reflexive and verbal clitics in Bosnian, Croatian and Serbian* (Open Slavic Linguistics 7). Berlin: Language Science Press. DOI: 10.5281/zenodo.5792972.

Kraska-Szlenk, Iwona. 1995. *The phonology of stress in Polish*. Urbana, IL: University of Illinois at Urbana-Champaign. (Doctoral dissertation).

Křen, Michal, Václav Cvrček, Tomáš Čapka, Anna Čermáková, Milena Hnátková, Lucie Chlumská, Tomáš Jelínek, Dominika Kováříková, Vladimír Petkevič, Pavel Procházka, Hana Skoumalová, Michal Škrabal, Petr Truneček, Pavel Vondřička & Adrian Zasina. 2019. Corpus SYN, version 8 from 12.12.2019, Prague: Ústav Českého národního korpusu FF UK. http://www.korpus.cz.

Kupść, Anna. 2000. *An HPSG grammar of Polish clitics*. Warsaw/Paris: Institute of Computer Science, Polish Academy of Sciences & Université Paris 7. (Doctoral dissertation).

Landau, Idan. 2003. Movement out of control. *Linguistic Inquiry* 34(3). 471–498. https://www.jstor.org/stable/4179243.

Lenertová, Denisa. 2004. Czech pronominal clitics. *Journal of Slavic Linguistics* 12(1–2). 135–171. http://www.jstor.org/stable/24599870.

Petkevič, Vladimír. 2009. Postavení příklonek v české klauzi v korpusech současné češtiny. In Dana Hlaváčková, Aleš Horák, Klára Osolsobě & Pavel Rychlý (eds.), *After half a century of Slavonic natural language processing*, 185–196. Brno: Tribun EU.

Progovac, Ljiljana. 1993. Locality and subjunctive-like complements in Serbo-Croatian. *Journal of Slavic Linguistics* 1(1). 116–144. https://www.jstor.org/stable/24599042.

Progovac, Ljiljana. 1996. Clitics in Serbian/Croatian: Comp as the second position. In Aaron L. Halpern & Arnold M. Zwicky (eds.), *Approaching second: Second position clitics and related phenomena*, 411–428. Stanford, CA: CSLI Publications.

Przepiórkowski, Adam, Mirosław Bańko, Rafał L. Górski & Barbara Lewandowska-Tomaszczyk (eds.). 2012. *Narodowy korpus języka polskiego*. Warsaw: Wydawnictwo Naukowe PWN.

Przepiórkowski, Adam & Alexandr Rosen. 2005. Czech and Polish raising/control with or without structure sharing. *Research in Language* 3. 33–66.

Rappaport, Gilbert. 1988. On the relationship between prosodic and syntactic properties of the pronouns in the Slavonic languages. In Alexander M. Schenker (ed.), *American contributions to the 10th international congress of Slavists*, 301–327. Columbus, OH: Slavica.

Rezac, Milan. 2005. The syntax of clitic climbing in Czech. In Lorie Heggie & Francisco Ordóñez (eds.), *Clitic and affix combinations: Theoretical perspectives* (Linguistik Aktuell/Linguistics Today 74), 103–140. Amsterdam: John Benjamins. DOI: 10.1075/la.74.06rez.

Rizzi, Luigi. 1982. A restructuring rule. In Luigi Rizzi (ed.), *Issues in Italian syntax*, 1–48. Dordrecht: Foris.

Rosen, Alexandr. 2001. *A constraint-based approach to dependency syntax applied to some issues of Czech word order*. Prague: Charles University. (Doctoral dissertation).

Rosen, Alexandr. 2014. Haplology of reflexive clitics in Czech. In Elżbieta Kaczmarska & Motoki Nomachi (eds.), *Slavic and German in contact: Studies from areal and contrastive linguistics* (Slavic Eurasian Studies 26), 97–116. Sapporo: Slavic-Eurasian Research Center. http://src-h.slav.hokudai.ac.jp/coe21/publish/no26_ses/26-05.pdf.

Rothstein, Robert A. 1993. Polish. In Bernard Comrie & Greville G. Corbett (eds.), *The Slavonic languages*, 686–758. London: Routledge.

Rubadeau, Patrice Marie. 1996. *A descriptive study of clitics in four Slavic languages: Serbo-Croatian, Bulgarian, Polish, and Czech*. Ann Arbor, MI: University of Michigan. (Doctoral dissertation).

Skoumalová, Hana. 2005. *Review of: Clitic and affix combinations: Theoretical perspectives*. In LINGUIST List 16.3131, Sat 29 Oct 2005. https://linguistlist.org/issues/16/16-3131.html.

Spencer, Andrew. 1991. *Morphological theory. An introduction to word structure in generative grammar*. Oxford/Cambridge, MA: Basil Blackwell.

Spencer, Andrew & Ana R. Luís. 2012. *Clitics: An introduction*. Cambridge: Cambridge University Press.

Stjepanović, Sandra. 1998. On the placement of Serbo-Croatian clitics: Evidence from clitic climbing and VP ellipsis. In Željko Bošković, Steven Franks & William Snyder (eds.), *Annual workshop on formal approaches to Slavic linguis-*

tics: The Connecticut meeting 1997, 267–286. Ann Arbor, MI: Michigan Slavic Publications.

Stjepanović, Sandra. 1999. *What do second position cliticization, scrambling and multiple wh-fronting have in common?* Storrs, CT: University of Connecticut. (Doctoral dissertation).

Stjepanović, Sandra. 2004. Clitic climbing and restructuring with "finite clause" and infinitive complements. *Journal of Slavic Linguistics* 12(1–2). 173–212. https://www.jstor.org/stable/24599871.

Todorović, Nataša. 2012. *The indicative and subjunctive da-complements in Serbian: A syntactic-semantic approach.* Chicago, IL: University of Illinois at Chicago. (PhD thesis).

Toman, Jindřich. 1996. A note on clitics and prosody. In Aaron L. Halpern & Arnold M. Zwicky (eds.), *Approaching second: Second position clitics and related phenomena*, 505–510. Stanford, CA: CSLI Publications.

Trávníček, František. 1959. K postavení stálých příklonek po přestávce uvnitř věty. *Naše Řeč* 42(3-4). 65–76. http://nase-rec.ujc.cas.cz/archiv.php?art=4673.

Urbańczyk, Stanisław. 1976. *Zarys dialektologii polskiej.* Warsaw: Państwowe Wydawnictwo Naukowe.

Veselovská, Ludmila. 1995. *Phrasal movement and X^0-morphology: Word order parallels in Czech and English nominal and verbal projections.* Olomouc: Univerzita Palackého. (PhD thesis).

Weinreich, Uriel, William Labov & Marvin I. Herzog. 1968. Empirical foundations for a theory of language change. In Winfred P. Lehman & Yakov Malkiel (eds.), *Directions for historical linguistics: A symposium*, 95–195. Austin, TX/London: University of Texas Press.

Wurmbrand, Susanne. 2001. *Infinitives: Restructuring and clause structure* (Studies in Generative Grammar 55). Berlin/New York, NY: Mouton de Gruyter. DOI: 10.1515/9783110908329.

Zwicky, Arnold M. 1977. *On clitics.* Bloomington, IN: Indiana University Linguistics Club.