## ON SYNTACTIC AND PROSODIC DOMAINS OF CLITIC PLACEMENT IN SLOVENE<sup>1</sup>

### Sean C. O'Rourke

#### 1. Introduction

Slovene (or Slovenian) is a South Slavic language closely related to Bulgarian, Macedonian, and the continuum of language varieties now commonly referred to as Bosnian/Croatian/(possibly)Montenegrin/Serbian but which were once known uniformly as Serbo-Croatian.<sup>2</sup> The rich inflectional system characteristic of Slovene includes an array of "special" sentential clitics (in the sense of Anderson [1992]; cf. Zwicky [1977]) similar to those found in Serbo-Croatian. Clitics in Slovene, whether alone or in a cluster of two or more, are generally characterized in traditional grammars as appearing in second position (2P) after the first syntactic constituent of a sentence. In (1),<sup>3</sup> for example, the clitic

L = left edge masc = masculine grammatical gender

This work was supported in part by grant BCS-9876456, Clitics and Grammatical Theory, from the U.S. National Science Foundation to Yale University (Principal Investigator: Stephen R. Anderson). I owe a great deal of thanks to Steve Anderson for thoroughly introducing me to the wonders of clitics during his seminars at Yale University in 2001 and 2003 entitled Topics in Morphology: Clitics. I would also like to acknowledge Marija Golden of the Univ. of Ljubljana and Franc (Lanko) Marušič of SUNY-Stony Brook for their help in clarifying several of the examples presented throughout this work. Needless to say, I am solely responsible for any errors of fact or interpretation.

Unless noted otherwise, we continue to use the term "Serbo-Croatian" throughout this work, in particular when citing examples labeled as such by other authors.

The use of special diacritics in examples (or lack thereof) is continued from the sources cited. The clitic(s) in each example which are relevant to the discussion at hand appear in bold. Due to space limitations, only the most relevant output candidates appear in each Optimality Theoretic tableau. Unless noted otherwise, only the constraint violation(s) incurred by the leftmost clitic in a clitic cluster are marked. More highly ranked constraints appear to the left in each tableau. The following abbreviations and conventions have been utilized:

<sup>=</sup> winning candidate per tableau

<sup>→ =</sup> suboptimal candidate, but expected to win

sequence in bold immediately follows a noun phrase which happens to consist of only one prosodic word, while (2) shows a single clitic after a more complex constituent.

- (1) Janez **mu ga je** še dal.

  Janez him.DAT it.ACC aux.3sg still give.PRT

  'Janez still gave it to him'. (Franks and King 2000, 34)
- (2) Vse to **sem** še navsezgodaj spoznal. all that aux. Isg already early in the morning know. PRT 'I got to know all that very early on (in the morning)'.

(Bennett 1986, 6)

'I knew all that early in the morning'. (Franks and King 2000, 32)

In (3) the clitic *sem* associated with the main clause follows the first syntactic constituent of the sentence, the subordinate *wh*-clause in CP, although it actually appears initially within the main clause.

 $\checkmark$  = constraint satisfaction (used for emphasis) NEG = negation marker \* (in tableaux) = constraint violation neut = neuter grammatical \*! = fatal constraint violation gender NOM = nominative case# = intonational phrase boundary [] = syntactic phrase boundaries NP = noun phrase1sg, 2pl, etc. =  $1^{st}$  person singular, etc. OT = Optimality Theory/ 2P = second positionTheoretic ACC = accusative casepl = pluralAMM = A-Morphous MorphologyPRES = present tense PRT = participle AUX/aux = past or future tense auxiliaryC = complementizerQ-part = interrogative CL = cliticparticle R = right edgeCOLL = collective numeral or noun COND = conditional mood marker REFL/refl = reflexiveSC = Serbo-CroatianCP = complementizer phraseDAT = dative casesg = singularfem = feminine grammatical gender Sln = Slovene/Slovenian GEN = genitive caset = trace of syntacticIMPV = imperativemovement INF = infinitiveTOPP = topic phraseV2 = verb-secondINST = instrumental case IP = inflectional phrase

(3) Ko sem se vzdramila, sem ležala na postelji. when aux. Isg refl awake. PRT aux. Isg lie. PRT on bed 'When I awoke, I was lying in bed'. (Bennett 1986, 7)

Examples (1)–(3) contrast with Serbo-Croatian, in which clitics can follow 1) the first syntactic phrasal constituent or 2) the first prosodic word, depending on the precise variety of Serbo-Croatian (e.g. Croatian vs. Serbian). Language varieties with the second type of 2P clitic placement can be said to contain true "Wackernagel clitics" (after Wackernagel's [1892] description of the phenomenon), clitics which strictly follow the first (stressed) word—although the term "Wackernagel clitics" is commonly used to refer to either of the two types. Slovene differs from such a situation because 1) 2P clitics follow the first syntactic phrasal constituent (consisting of one or more grammatical words)—2P clitics in Slovene generally follow a single prosodic word only if that word, for example, corresponds to a full syntactic phrase (which may have been independently targeted by movement in the syntax) or is a discourse particle—and 2) 2P clitics are allowed "initially" under certain circumstances. "Initially" here refers to prosodic placement, but it will be shown that such clitics are still in 2P from a syntactic viewpoint. In examples like (3) with complex initial syntactic constituents such as a subordinate clause, a speaker of Serbo-Croatian would prefer to place the SC counterpart of sem further inside the second clause, after the first prosodic word or a (relatively simple) syntactic constituent.

In examples (1)—(3) we find the two major types of elements included in the 2P clitic system of Slovene, namely verbal auxiliaries, which are used in the formation of compound tenses and the conditional mood, and pronominals. Past and future forms of the verb *biti* 'to be', as given in table 1 below, combine with *l*-participles to form the past, future, and pluperfect tenses. These auxiliary clitics agree in person and number with the nominative subject of the main verb. Note the existence of a dual distinction, which in Slavic is common only to Slovene and Sorbian.

		Past			Future	
	Singular	Dual	Plural	Singular	Dual	Plural
1	sem	sva	smo	bom	bova	bomo
2	si	sta	ste	boš	bosta	boste
3	je	sta	SO	bo	bosta	bodo/bojo

Table 1: Slovene 2P Past and Future Auxiliary Clitics<sup>4</sup>

In addition to the auxiliary clitics above, the clitic *bi* exists as a component in the construction for the conditional mood, as in (4). Franks and King (2000) note that as in colloquial Croatian, *bi* does not conjugate for person or number.

(4) Dal **bi jo** bil v kakšno šolo... give.PRT COND her.ACC be.PRT in some kind school 'He would have put her in some kind of school...' (Toporišič 1976) (Franks and King 2000, 38)

The second major group of 2P clitics in Slovene consists of dative, accusative, and genitive personal and reflexive pronominal elements as shown in table 2. Finally, when more than one 2P clitic occurs in the same clause, the resulting cluster follows the left-to-right ordering in table 3.

While literature concerning the placement of clitics in Serbo-Croatian is in large abundance, formal treatments of Slovene clitics are relatively rare. In addition, analyses of a specific phenomenon dealt with below—that of clitic placement in sentences with intonational breaks—are even scarcer, regardless of the language involved. Because Slovene clitics have remained largely unexamined in recent literature, the focus of this paper will therefore be to investigate the mechanism(s) of clitic placement in Slovene by examining the sites in which clitics appear in various types of sentences. In this paper we argue that Slovene 2P clitics are phrasal affixes (see, inter alia, Anderson 1992, 1993, 1995, 1997, 2000) whose placement is determined on the basis of interacting constraints which refer not only to syntactic or prosodic domains, but to

The past and future auxiliary clitics also appear as present and future copular clitics, respectively. The 3pl future auxiliary *bojo* is the colloquial variant of *bodo* according to Franks and King (2000, 32).

both. It is only through the interaction of both constraint types, with some clarifications on the syntactic and prosodic structures at hand, that all of the data presented here can be duly accounted for. Optimality Theoretic (OT) tableaux will serve throughout to illustrate various interactions of constraints in the evaluation of competing sentence forms which vary with regard to clitic placement, phrasal boundaries, and the presence or absence of other elements.

3sg 2sg 2dual lsg 1dual 3dual 2pl 3pl masc/ 1pl fem neut DAT ji ti jima mi mu nama jim vama nam vam S1 ACC jih/ju te me vaju jo naju jih ga nas vas se **GEN** jih/ju te je naju me vaju jih ga nas vas se

Table 2: Slovene 2P Personal and Reflexive Pronominal Clitics

Table 3: Order of Slovene 2P Clitics in Clusters<sup>5</sup>

past AUX (except <i>je</i> ); conditional AUX	REFL	DAT	ACC	GEN	future AUX; past AUX (only <i>je</i> )
sem, si, sva, smo, etc.; bi	se, si	mi, ti, mu, ji, etc.	me, te, ga, jo, etc.	me, te, ga, je, etc.	bom, boš, bo, etc.; je

### 2. Overview of Previous Analyses and Preliminary Proposals

Various proposals have been put forth in recent, theoretical literature to account for clitic placement in various languages. More traditional accounts consider special clitics such as those in Slovene to be syntactic terminals which appear in their surface position because they are generated there or because syntactic movement or movement based on some type of prosodic repair mechanism has placed them there. Several more recent accounts, notably those of Anderson (1992, 1993, 1995, 1996, 1997, 2000, 2002) and Legendre (1998a, 2000a, 2000b, 2000c, 2001), consider special clitics to be the overt realization of morphosyntactic features which get placed by way of a morphological

Adapted from Toporišič (1976, 535), via Bennett (1986, 5).

process of phrasal affixation. The types of domain made available for the placement of special clitics (i.e. syntactic, prosodic, or both) play a further role in distinguishing previous accounts of such placement. Based on the distinctions described above, table 4 briefly classifies the work presented in this paper as well as some of the more recent and prominent analyses of special clitic placement.

The analysis to follow will utilize the nonderivational mechanisms of standard Optimality Theory (OT) (Prince and Smolensky 2004) and the notion set forth in A-Morphous Morphology (Anderson 1992) that special clitics—those usually described as having irregular syntax—are the phonological realization of morphosyntactic features which are placed by a morphological process of phrasal affixation. Anderson (1995, 1996, 1997, 2000) proposes using domain-specific constraint families such as those given below in order to account for the distribution of clitics.

Non-Initial (CL, S)

Clitics do not occupy initial position in a sentence.

EDGEMOST (CL, L, S)

Clitics appear at the leftmost edge of a sentence.

INTEGRITY (XP)

Phonological material is only introduced at the edges of syntactic constituents.

Such constraints are violable in OT; output "candidates" are simultaneously evaluated according to a language-specific, hierarchical ranking of universal constraints and an optimal form results from the competition to satisfy more highly ranked constraints. Although Anderson gives the relevant domain as "S," we assume that he takes the domain of clitic placement to be the clause, be it CP or IP, rather than the "sentence." We can see this system at work in tableau (A), which gives us the sentence in (2) and repeated in (5).

(5) Vse to **sem** še navsezgodaj spoznal. all that aux. Isg already early in the morning know. PRT 'I got to know all that very early on (in the morning)'.

(Bennett, 6)

'I knew all that early in the morning'. (Franks and King 2000, 32)

Table 4: Classification of Some More Recent Analyses of Clitic Placement<sup>6</sup>

Domain(s) of clitic placement	Approaches based on a fixed syntactic position for clitics or on movement of clitics to their surface positions (in the syntax or at PF (Phonetic Form)	Approaches based on clitics as phrasal affixes
	Franks (1999, 2000), Franks and King (2000), Franks and Progovac (1994), Golden and Sheppard (2000), Halpern (1995), King (1996), Progovac (1996, 2000), Rivero (1997), Schütze (1994), Tomič (1996, 1997, 2000), and Wilder and Ćavar (1994a, 1994b)	Anderson (1992, 1993, 1995, 1996, 1997, 2000), <sup>7</sup> Harrison (1997), Kaiser (1997), Richardson (1997), and VanLoon (1997)
the intonational phrase (and phonological phrase)	Bošković (1995, 1997, 2000b, 2001) and Radanović-Kocić (1988, 1996)	O'Connor (2002)
syntactic <i>and</i> (/ <i>or</i> ) prosodic phrases		Legendre (1998a, 2000a, 2000b, 2000c, 2001), and O'Rourke (this work)

In (A), Anderson's proposed ranking of constraints for placement after the first syntactic constituent in Serbo-Croatian is maintained, with the exception that Non-Initial (CL, S) and Integ (XP) are equally ranked here (represented by the broken line). This is done because it is not apparent in (A) or in subsequent tableaux which of these two constraints dominates the other, if indeed they are ranked with respect to one another at all.

Adapted from an earlier version of O'Connor (2002).

Although we place Anderson here within a theory in which the domains of clitic placement are (always) syntactic in nature, it must be noted that in his early work on the topic he never sets strict limitations on the types of domain which may be referred to; they may very well be prosodically (and syntactically) oriented in his theory. See, for example, his recent work on Tagalog (2002).

 $(A)^8$ 

		Non-Initial	INTEG	EDGEM
		(CL, S)	(XP)	$(CL, L, S)^9$
-(a)	#sem vse to že navsezgodaj spoznal#	*!		
(b)	#vse sem to že navsezgodaj spoznal#		*!	*
(c) @	→ #vse to sem že navsezgodaj spoznal#			**

Can we be sure that the clause is the sole domain of clitic placement in Slovene? Bošković (1995, 1997, 2000b, 2001) and Radanović-Kocić (1988, 1996) have suggested that the domain of placement in Serbo-Croatian, for example, is the intonational phrase. Proponents of this view often employ approaches in which clitics move to their surface positions. O'Connor (2002) is the latest to suggest that the domain of placement is the intonational phrase, but his analysis is distinctive in that it falls under Anderson's account of clitics as phrasal affixes.

O'Connor assumes the following constraints in his account of the various positions for clitics in Serbo-Croatian:

Non-Initial (CL, IntP)

Clitics do not occupy initial position in an intonational phrase.

ALIGN (CL, L; INTP, L)

For any clitic, its left edge aligns with the left edge of some intonational phrase.

ALIGN<sub>CL/VP</sub> (covering both ALIGN (CL, L; VP, L) and ALIGN (CL, R; VP, R))

For any clitic, one of its edges aligns with the corresponding edge of some verb phrase.

EXHAUSTIVIITY<sub>PRWD</sub>

(cf. Selkirk 1995)

A prosodic word immediately dominates a foot.

<sup>&</sup>lt;sup>8</sup> Cells in tableaux are shaded gray where no longer vital to determining the optimal form.

EDGEMOST (CL, L, S) in (A) is violated on the basis of gradience, as is ALIGN (CL, L; INTP, L) in (B) immediately below, hence the second violation of the relevant constraint incurred by the (c) candidate in each of those tableaux. See footnote 11 and the paragraph beginning after example 12 for a more thorough explanation of gradience violations.

EXHAUSTIVITY<sub>PHONP</sub>

(cf. Selkirk 1995)

A phonological phrase immediately dominates a prosodic word.

If we rank these constraints in Slovene as O'Connor (2002) does to account for clitic placement after the first phonological phrase in Serbo-Croatian, we end up with the expected output form of example (5).

(B)

	NON- INITIAL (CL, INTP)	EXH <sub>PRWD</sub>	EXH <sub>PHONP</sub>	ALIGN (CL, L; INTP, L)	ALIGN <sub>CL/MP</sub> 10
(a) #sem vse to še navsezgodaj spoznal#	*!		*		*
(b) #vse sem to še navsezgodaj spoznal#		*!		*	*
(c) #vse to sem še navsezgodaj spoznal#			*	*!*	*

So far it appears that utilizing constraints referring to the clause or to the intonational phrase as domains of clitic placement will give the same result in Slovene. In order to find any differences, it will be necessary to look at different example sentences involving one or more clauses and intonational phrases. As O'Connor (2002, 9) points out for Serbo-Croatian, "appositives, parentheticals, and non-restrictive relative clauses obligatorily form INTPs while heavy subjects, other heavy initial constituents, and fronted or focused constituents do so optionally. This optionality lessens with length of constituent, but increases with speech rate." The examples below from Radanović-Kocić (1996, 439–40, via O'Connor (2002, 9) show that we can identify intonational phrases in Serbo-Croatian since degemination and regressive assimilation occur

The definition that O'Connor (2002) provides for his constraint ALIGN<sub>CL/VP</sub> and the way in which violations of that constraint are determined are not fully clear. For this work, if either edge of a given clitic is properly aligned with the corresponding edge of the root VP, the constraint is satisfied. In cases where violation of ALIGN<sub>CL/VP</sub> can be considered on the basis of gradience (e.g. NOT in (B)), we determine any violations by counting the number of intervening *grammatical words* between the left edges of the leftmost clitic (assuming there is a cluster) and VP.

حشه

within, but not across, intonational phrase boundaries as in (6) and (7), respectively.

(6) a. #Za Prvi maj# #ja putujem# → [maj ja]
 on first May I travel. Isg (=phonetic
 'On May Day I am traveling.' realization)
 b. #Za Prvi maj ja putujem# → [maja]

(7) a. #Ovaj njihov pas# #čuva kuću# → [pas čuva]

this their dog guard.3sg house

'That dog of theirs is guarding the house'.

b. #Ovaj njihov <u>pas čuva</u> kuću# → [paš čuva]

In Slovene we also find degemination and assimilation across certain boundaries in examples (8a)–(8d) below from Herrity (2000, 23–24). We maintain that as in Serbo-Croatian, these phenomena do not occur across intonational phrase boundaries in Slovene.

sam misli [samisli] (8) a. 'he himself thinks' [sestro] b. s sestro 'with the sister' [ščipko] s čipko c. 'with lace' brez sina [bresina] d. 'without the son'

The appositives, parentheticals, and subordinate clauses which, according to O'Connor, occur in Serbo-Croatian with pausal breaks and therefore mark intonational phrase boundaries are exemplified in Slovene and Serbo-Croatian by Bennett (1986, 7–12; 1987, 271–72) and given below as (9)–(11), respectively. Bennett notes that in Slovene, clitics often follow pauses and are proclitic to following material rather than enclitic to material before or after a pause (as in Serbo-Croatian). He does not, however, connect this in any fashion to the notion of intonational phrase boundaries.

(9) [Sln] Moj prijatelj Peter Košenina **je** velik junak.

my friend Peter Košenina be.3sg big hero

'My friend Peter Košenina is a big hero'.

[SC] Moj prijatelj Peter Košenina veliki je junak.

- (10) [Sln] Ampak mi, veste, smo narodnjaški list!

  but we know.2pl be.1pl nationalistic (news)paper

  'But, you know, we are a nationalistic paper'!
  - [SC] Ali mi smo, znate, narodnjaški list!
- (11) [Sln] Ko sem se vzdramila, sem ležala na postelji. when aux. Isg refl awake. PRT aux. Isg lie. PRT on bed 'When I awoke, I was lying in bed'.
  - [SC] Kad sam se probudila, ležala sam u krevetu.

Examples of non-restrictive relative clauses—sometimes referred to as "appositive relatives"—are not provided by Bennett, but these too form independent intonational phrases, as in (12) from Herrity (2000, 106–107).

(12) Knjiga, ki je na mizi, **je** darilo. book which be.3sg on table be.3sg present 'The book, which is on the table, is a present'.

In this non-restrictive interpretation, the relative clause acts as a kind of parenthetical comment about the book, indicating its location on the table, whereas the restrictive interpretion would delimit the specific subset of books to which the speaker is referring (i.e. not the book on the desk but rather the book on the table). As in English, it is only non-restrictive relative clauses which carry special intonation in Slovene.

Of particular interest to us from among the various constructions exemplified above are those with parentheticals as in (10) and those with non-restrictive relative clauses as in (12). If we first examine how Anderson's clause-based constraints account for clitic placement in non-restrictive relative clauses, we observe in (C) that the optimal form is not the expected Slovene form in (12) (where  $\mathscr P$  indicates the winner and  $\to$  the expected winner). It is important to note that in (C), EDGEMOST (CL, L, S) is a gradient constraint whose violations are based on the number of intervening grammatical words.<sup>11</sup>

We determine violations of gradient constraints which refer to *prosodic* domains (ALIGN (CL, L; INTP, L) being the sole possibility in this work) by counting the number of intervening prosodic words, while violations of gradient constraints which refer to syntactic domains (EDGEMOST (CL, L, S), ALIGN<sub>CL/VP</sub>, and ALIGN (CL, L; IP, L) being the relevant possibilities throughout) are determined by counting the number of intervening

If we then employ the same constraints on clitic placement after the first phonological phrase within an intonational phrase as O'Connor does for Serbo-Croatian, we see that these too give us the wrong result in (D). ALIGN<sub>CL/VP</sub> is a gradient constraint in (D) since clitic placement is being considered with respect to the same verb phrase. ALIGN (CL, L; INTP, L) is not a gradient constraint as it was in (B), however, since clitic placement is being considered across different intonational phrases. Leaving out O'Connor's EXHAUSTIVITY constraints, if we reverse the ranking of ALIGN (CL, L; INTP, L) and NON-INITIAL (CL, INTP) from (D), we finally obtain the expected form in (E).

While sentences with only one intonational phrase as in (5) could be explained with constraints referring to syntactic or prosodic domains of placement in tableaux (A) and (B), respectively, sentences with three intonational phrases do present some issues. In particular, it is unreasonable to make use of one set of constraints referring solely to prosodic domains in order to explain one instance of clitic placement and another set of similar constraints referring solely to syntactic domains to explain placement elsewhere, even though the clitics in each case are of the same type, namely 2P clitics. It is much more reasonable, however, to suggest that both types of constraint coexist in the same hierarchy. Given that (F) (our simplest example so far, with only one intonational phrase) and (G) (the most complex example we have seen, with three intonational phrases) can account for both types of sentence, it seems rather appropriate to propose a system in which morphological constraints referring to syntactic and prosodic domains of clitic placement—one type of domain per constraint, of course—freely interact with one another in a single hierarchy.

grammatical words. Differentiating between prosodic and grammatical words in this way will become necessary later on when evaluating candidates like examples (R1c)-(R1e) and (R3a)-(R3c) and in general any examples containing pro. Non-Initial and Non-Final constraints, while never gradient, are satisfied, along a related line of thinking, if one or more prosodic or grammatical words—here again determined by the type of domain to which the relevant constraints refer—intervene between clitic and domain edges. See, for example, (P) and (R2a)-(R2c).

 $(\mathbf{C})^{12}$ 

	Non-Initial	INTEG	EDGEM
	(CL, S)	(XP)	(CL, L, S)
(ā) → #knjiga# #ki je na mizi# #je darilo#			**!***
(b) #knjiga# #ki je na mizi# #darilo je#			**!***
(c) #je knjiga# #ki je na mizi# #darilo#	*!		
(d) ##knjiga je# #ki je na mizi# #darilo#			*

(D)

	Non- Initial (Cl, IntP)	EXH <sub>PRWD</sub>	EXH <sub>PHONP</sub>	ALIGN (CL, L; INTP, L)	ALIGN <sub>CL/VP</sub>
(a) →#knjiga# #ki je na mizi# #je darilo#	*!	* <b>←</b> O	R→ *		
(b) #knjiga# #ki je na mizi# #darilo je#		* <b>←</b> 0	R→ *	*	
(c) #je knjiga# #ki je na mizi# #darilo#	*!	* <b>←</b> 0	R→ *		****
(d) #knjiga je# #ki je na mizi# #darilo#		* <b>←</b> O	R→ *	*	*!***

(E)

	ALIGN (CL, L;	Non- Initial	ALIGN <sub>CL/VP</sub>
	INTP, L)	(CL, INTP)	CL/ VI
(a) 🖝 #knjiga# #ki je na mizi# #je darilo#		*	
(b) #knjiga# #ki je na mizi# #darilo je#	*!		
(c) #je knjiga# #ki je na mizi# #darilo#		*	*!***
(d) #knjiga je# #ki je na mizi# #darilo#	*!		****

In (C) and subsequent tableaux, we provide neither candidates in which material associated with a clause (viz. a clitic) is placed outside the bounds of that clause (in the case of a subordinate contained within a larger structure), nor candidates in which material associated with a main clause is placed within the bounds of another (subordinate or main) clause.

(F)

	Non- Initial (Cl, S)	INTEG (XP)	ALIGN (CL, L; INTP, L)	Non- Initial (Cl, IntP)	ALIGN CL/VP	EDGEM (CL, L, S)
(a) #sem vse to še navsezgodaj spoznal#	*!			*	*	
(b) #vse sem to še navsezgodaj spoznal#		*!	*		*	*
(c) #vse to sem še navsezgodaj spoznal#	 		**		*	**

(G)

	Non- Initial (Cl, S)	INTEG (XP)	ALIGN (CL, L; INTP, L)	Non- Initial (Cl, IntP)	ALIGN <sub>CL/VP</sub>	EDGEM (CL, L, S)
(a) #knjiga# #ki je na mizi# #je darilo#				*		****
(b) #knjiga# #ki je na mizi# #darilo je#			*!			*****
(c) #je knjiga# #ki je na mizi# #darilo#	*!.			*	****	
(d) #knjiga je# #ki je na mizi# #darilo#			*!		****	*

In section 3 we thoroughly explore the viability of this basic proposal. In doing so, the format and domain makeup of some of the constraints already set forth is amended, new constraints are proposed, and the overall ranking of our system of constraints is finely tuned based on some more puzzling examples of clitic placement from Slovene.

### 3. The Interaction of Syntactic and Prosodic Domains in Slovene 2P Placement

Now that we have seen that the interaction of constraints referring to both syntactic and prosodic domains of clitic placement is a tenable solution for sentences containing a single intonational phrase and for those containing more than two intonational phrases, it remains to be

seen whether sentences such as (11), repeated below as (13), which contain strictly two intonational phrases (e.g. sentences with an initial subordinate clause or quotation), can be explained in such a way. Such examples appear with proclitics at the beginning of the intonational phrase containing material from the main clause, just as in example (12) above with the non-restrictive relative clause.

(13) Ko sem se vzdramila, sem ležala na postelji. when aux. Isg refl awake. PRT aux. Isg lie. PRT on bed 'When I awoke, I was lying in bed'.

In tableau (H) we see that the combined ranking of constraints in (F) and (G) does in fact give us the correct output, but only if we separate Anderson's NON-INITIAL (CL, S) constraint into two, allowing for CP and IP domains as Richardson (1997) does in his analysis of clitic phenomena in Czech. The new constraints are adjacent and still at the top of the hierarchy with the ranking NON-INITIAL (CL, CP) >> NON-INITIAL (CL, IP). ALIGN<sub>CL/VP</sub> and EDGEMOST (CL, L, S) are omitted in (H), without consequence, although the latter will emerge in a later section under a different guise (namely ALIGN (CL, L; IP, L)).

Non-Initial (Cl, CP)

Clitics do not occupy initial position in a CP.

Non-Initial (Cl, IP)

Clitics do not occupy initial position in an IP.

(H)

	Non- Initial (Cl, CP)	Non- Initial (Cl, IP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	Non-Initial (Cl, IntP)
(a) F <sub>CP</sub> #ko sem se vzdramila#					*
#sem [IP ležala na postelji#]]		1			
(b) [ <sub>CP</sub> #ko sem se vzdramila#		*			*
[IP #sem ležala na postelji#]]		. !			•
(c) [ <sub>CP</sub> #ko sem se vzdramila#		1		*1	
[IP #ležala sem na postelji#]]		i		•	
(d) [ <sub>CP</sub> #ko sem se vzdramila#			*1	*	
[IP #ležala na sem postelji#]]			•		•
(e) [ <sub>CP</sub> #ko sem se vzdramila#		1	•	*1	
[IP #ležala na postelji sem#]]				•	

(F) and (G) are repeated in modified form as (I) and (J), which show that we obtain the expected forms with the division of Non-Initial (CL, S) to distinguish for CP and IP domains.

- (I)

		Non- Initial (Cl, CP)	Non- Initial (Cl, IP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	Non- INITIAL (CL, INTP)
(a) [ <sub>CP</sub> #se spozna	m [vse to] [ <sub>IP</sub> že navsezgodaj al#]]	*!				*
(b)	se to] sem [ <sub>IP</sub> že navsezgodaj al#]]				**	
(c) [ <sub>CP</sub> #[v spozn	/se to] [ <sub>IP</sub> sem že navsezgodaj al#]]		*!		**	

**(J**)

		Non- Initial (Cl, CP)	Non- Initial (Cl, IP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	Non- Initial (Cl, IntP)
(a) $ = [CP]_{IP} # knjiga# # ki je na misdarilo#]]$	zi# #je		1			*
(b) [ <sub>CP</sub> [ <sub>IP</sub> #knjiga# #ki je na mi #darilo je#]]	zi#				*!	4
(c) [ <sub>CP</sub> #je [ <sub>IP</sub> knjiga# #ki je na #darilo#]]	mizi#	*!				*
(d) [ <sub>CP</sub> [ <sub>IP</sub> #je knjiga# #ki je na #darilo#]]	mizi#	*!	*			*
(e) [ <sub>CP</sub> [ <sub>IP</sub> #knjiga je# #ki je na : #darilo#]]	mizi#				*!	

Although Slovene "2P" clitics do not occur in initial position (in either the syntactic or prosodic sense) in the majority of cases, we sometimes come across a clitic—which could be and usually is described as initial—in some discourse situations where an initial element is deleted from the lone (main) clause of a sentence, such as in (14) and (15) from Franks and King (2000, 40–41). Toporišič (1976, 539–40) claims that the presence of the clitic in such a position is due to the omission of the

stressed word to which it might have attached. In these examples the understood interrogative particle *ali* has been "omitted" from initial position. In other words, *ali* goes unpronounced at PF (Phonetic Form) due to a process of discourse-related ellipsis at some level and as such is not part of any intonational phrase. We propose that this takes place crucially *only* at PF.

- (14) **Se je** Rajko res poročil? refl aux.3sg Rajko really marry.PRT 'Did Rajko really get married'?
- (15) Si ga videl?

  aux. 2sg him. ACC see. PRT

  'Have you seen him'?

The interaction of constraints that we have proposed so far accounts for such examples, as given in (K) and (L).

(K)

	Non- Initial (Cl, CP)	Non- Initial (Cl, IP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	Non- INITIAL (CL, INTP)
(a) F [CP ali #se je [IP Rajko res poročil#]]					*
(b) [CP ali [IP #se je Rajko res poročil#]]		*!			*
(c) [CP ali [IP #Rajko se je res poročil#]]		1		*!	
(d) [ <sub>CP</sub> ali [ <sub>IP</sub> #Rajko res poročil se je#]]				*!**	

(L)

	Non- Initial (Cl, CP)	Non- Initial (Cl, IP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	Non- INITIAL (CL, INTP)
(a) [ <sub>CP</sub> ali [ <sub>IP</sub> #videl si ga#]]				*!	
(b) 🕝 [CP ali #si ga [IP videl#]]					*
(c) [ <sub>CP</sub> ali [ <sub>IP</sub> #si ga videl#]]		*!			*

The question then arises of how to explain the variation between (16) and (17), both from Bennett (1986, 9).

(16) Vidél sem ga.

see. PRT aux. 1sg him. ACC

'I saw him'.

As Bennett points out, *Videl sem ga* is the more typical sentence, but *Sem ga videl* (also found in Franks and King 2000, 42) is possible as well.

(17) Sem ga videl.

aux. 1sg him.ACC see. PRT

'I saw him'.

Bennett indicates a small difference in the interpretation of (16) and (17). He claims that (17) has a reading like '(because) I saw him', as if answering a question, while (16) is an unprovoked statement offered by a speaker. Bennett suggests that the conjunction *ker*, 'because' has been omitted from (17), similar to the case of *ali* in (14)/(K) and (15)/(L). (16) does not involve the discourse-related, optional "deletion" or "omission" as seen in (14), (15), and (17) and is by far the more common construction. Example (16) is represented in (M).

(M)

	Non- Initial (Cl, CP)	Non- Initial (Cl, IP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	Non- Initial (Cl, IntP)
(a) F [CP [IP#videl sem ga#]]				*	
(b) [ <sub>CP</sub> #sem ga [ <sub>IP</sub> videl#]]	*!				*
(c) [ <sub>CP</sub> [ <sub>IP</sub> #sem ga videl#]]	*!	*			*

For the sake of completeness we have given tableau (N) for example (18) from Bennett (1987, 280), in which *ali* is pronounced.

(18) Ali **je** Tomaž pozabil drobiž? *Q-part aux.3sg Thomas forget.PRT change* 'Has Thomas forgotten his change'? (N)

	Non-	Non-	 	ALIGN	Non-
	INITIAL	INITIAL	INTEG	(CL, L;	Initial
	(CL,	(CL,	(XP)	INTP,	(CL,
	CP)	IP)	i 1	L)	INTP)
(a) [ <sub>CP</sub> #je ali [ <sub>IP</sub> Tomaž pozabil drobiž#]]	*!			1,20, 1	*
(b) F [CP #ali je [IP Tomaž pozabil drobiž#]]		T T		*	
(c) [ <sub>CP</sub> #ali [ <sub>IP</sub> je Tomaž pozabil drobiž#]]		*!		*	1 1 1
(d) [ <sub>CP</sub> #ali [ <sub>IP</sub> Tomaž je pozabil drobiž#]]			 	**!	
(e) [ <sub>CP</sub> #ali [ <sub>IP</sub> Tomaž pozabil je drobiž#]]				**!*	
(f) [ <sub>CP</sub> #ali [ <sub>IP</sub> Tomaž pozabil drobiž je#]]				**!**	

Our next example in (19) involves a coordinated structure and the conjunction *in*, 'and'. With *in* occupying a position in CONJP outside the coordinated level of structure which follows (whichever level that may be), it appears that we are again dealing with a situation in which the clitic (cluster) is in an intial position of some sort.

(Bennett 1986, 8)

We represent (19) in (O). (Bear in mind for now that only *overt* elements are given for each candidate here.)

Our latest constraint ranking in (O) does not result in the expected output (Oa). We might rectify this issue by resorting to one (or more) of three possible solutions. Firstly, we could take into consideration the level of coordination in the structures above. We propose that with clitics as functional features of the clause, IP is always present in coordinated structures which include Slovene 2P clitics. What about CP? Is CP always present or only in given contexts (e.g. when topicalization or wh-movement occurs)? If the coordinated candidate structures in (O) lacked a CP—with clitic placement outside of IP as in (Ob) then becoming irrelevant, (Oc) would still be more optimal than the expected (Oa) due to the high ranking of NON-INITIAL (CL, IP). This first option aside, the second possibility is that we have missed some generalization(s) with regard to the ranking of our current constraints, or we have yet to take notice of one or more additional constraints which

have relevance here. The third option is to consider that we have not fully considered every element within the sentence for the purposes of determining 2P for clitic placement. The empty category *pro*, for instance, is notably absent from the candidate structures in (O). An element like *pro*, while phonologically null, may still play an important role in determining 2P at the syntactic level, much like the optionally "deleted" elements we saw in examples above where a clitic appeared in initial position at PF but followed an element still present on some syntactic level.

 $(O)^{13}$ 

		Non-	Non-		ALIGN	Non-
		INITIAL	INITIAL	INTEG	(CL, L;	Initial
		(CL,	(CL,	(XP)	INTP,	(CL,
:		CP)	IP)		L)	INTP)
(a) →	#in [CP [IP se mu zasmejem#]]	*!	*		*	
(b)	#in [CP se mu [IP zasmejem#]]	*!			*	
(c) @	#in [CP [IP zasmejem se mu#]]	4 ( )			**	

The first option above is fairly straightforward. The level of coordination after *in* could very well be CP or IP. In either case, however, candidate (Oc) would emerge as the winner since the two most highly ranked constraints militate against clitics appearing initially in CP and IP.<sup>14</sup> We therefore turn to one or both of the latter two options mentioned above for an explanation: either our current hierarchy of constraints is incorrect or incomplete, or some element is missing from our candidate structures in (O) (such as *pro*).

It is tempting to account for problematic (Oc) by amending our constraint hierarchy in some fashion, but it is not immediately clear

There may or may not be material preceding the conjunction in the intonational phrase. We have counted violations of ALIGN (CL, L; INTP, L) only insofar as there is overt material between the left edge of the clitic cluster and that of the conjunction. This goes for tableau (P) as well.

Suggestions for determining the validity of CP and/or IP in the coordinated structures in (O) are not directly discussed here. We merely wish to put forth various possibilities for explaining the sub-optimal status of (Oa) in tableau (O), or rather for explaining why (Oc) does not emerge as the actual, attested form.

which constraint, under which ranking, would give (Oa) as the winning form. Non-Final (Cl, IntP) may be one of the more relevant constraints given the relatively short candidate sentences in (O).

Non-Final (CL, IntP)

Clitics do not occupy final position in an intonational phrase.

However, that constraint would need to be ranked higher than even Non-Initial (CL, CP) for there to be any chance of (Oa) winning—with mu in (Oc) incurring a violation. Such a ranking would also have adverse effects elsewhere, as in (M) where candidate (Ma) would be rendered sub-optimal. From this point forward we will place Non-Final (CL, IntP) at the very bottom of our hierarchy, for it will only be seen to have any effect at all when we later analyze the issue of clitic clusters split across intonational breaks.

In order to correctly determine which constraints are at work and under which rankings they interact, it is essential that we consider all relevant aspects of a given structure on which constraint evaluation will be based. We therefore concentrate our attention on the third and final option listed above in order to account for the sub-optimal status of (Oa). The non-overt element *pro*, which was not included in any of the candidates in (O), is an added factor that distinguishes the candidates in (P). (Pb) is the optimal form, as expected.

(P)

	Non- Initial (Cl, CP)	Non- Initial (Cl, IP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	Non- Initial (Cl, IntP)	Non- Final (Cl, IntP)
(a) #in [ <sub>CP</sub> [ <sub>IP</sub> pro zasmejem se mu#]]				**!		1 1 1 1 1
(b) #in [CP [IP pro se mu zasmejem#]]			1 1 1 1 1	*		 
(c) #in [ <sub>CP</sub> [ <sub>IP</sub> se mu pro zasmejem#]]	*!	*	 	*		
(d) #in [ <sub>CP</sub> se mu [ <sub>IP</sub> pro zasmejem#]]	*!		t t t t	*		1 ! ! ! !

While the covert nature of *pro* may understandably betray its role as an initial syntactic host for a 2P clitic, we assert that it plays exactly that role

in (Pb)—and back in (17), for which, in addition, a deleted/unpronounced conjunction (ker, 'because') has been suggested. Examples (20) and (21), with the conjunctions ter, 'and' and saj, 'but,' respectively, illustrate similar effects with pro.

(20) Sezídali so híšo ter **so jo** pokríli s skódlami. build.PRT aux.3pl house and aux.3pl it.ACC cover.PRT with shingles 'They built a house and covered it with shingles'.

(Herrity 2000, 304)

(21) Daj mu kozárec vína. Saj **je** žé píl. give. 2sg. IMPV him. DAT glass. ACC wine. GEN but aux. 3sg already drink. PRT 'Give him a glass of wine. But he has already had a drink'.

(Herrity 2000, 325)

Under our analysis with *pro* in initial position within a coordinated CP after a conjunction, we are led to conclude that in the absence of *pro* (or an element elided at PF through a discourse-related mechanism, as with *ali* above), 2P clitics in coordinated CP structures must immediately follow an overt subject (assuming there is nothing to follow in a higher projection) as in (22) or, even if *pro* is present, an element which has risen into a projection higher than IP due, for example, to independent wh-movement as in (24) or topicalization. Confirmation of this is provided by the ungrammaticality of (23).

- (22) ... in moje srce je bilo veselo.

  and my heart aux.3sg be.PRT happy (Bennett, 1986: 11)

  '...and my heart was happy'. (Franks and King, 2000, 39 [45a])
- (23) \*...in je moje srce bilo veselo. (Franks and King 2000, 43 [52a])
- In kako je s tabo?

  and how be.3sg with you.sg.INST (Davis 1989, 147)

  'And how are things with you?'/'And how are you'?

  (Herrity 2000, 325)

Clitics can therefore be said to directly follow a conjunction *only in prosodic terms* when *pro* is present. Franks and King (2000, 43) appear to have missed our conclusions involving the role of *pro*. (See our [19], [22], and [23], which correspond to their [51], [45a], and [52a], respectively.)

We thus take examples with in + clitics to be a variant of clitic initial, rather than as an indication that conjunctions are instrumental in determining second position in Sln. The conclusion that in is irrelevant in (51), with discourse topics mi 'we' and jaz 'I' syntactically hosting the clitics but deleted instead, is supported by (45a), in which in clearly does not count, because the clitic je must follow the subject noun phrase. Interestingly, this implies that (45a) cannot really appear as (52a), as there is nothing that could be missing from first position...

Although seemingly content with the descriptions provided by "sophisticated" grammarians of Slovene that some sentences with (overtly) initial clitics involve the deletion of some element (such as *ali*), Franks and King (2000, 42) do observe that in other examples "it is sometimes difficult to see what could have been omitted." We suggest that it is exactly in these latter examples noted by Franks and King that nothing has been deleted, but rather that *pro* will be found preceding any 2P clitics. Apart from examples such as those with a deleted *ali*, for instance, it is clear that in the absence of an overt subject or an element which has independently risen in the syntax, both of which might otherwise serve as an initial syntactic host for Slovene 2P clitics, some other type of element must intervene between the left edge of CP and the left edge of a clitic (cluster). In (P) we saw that this element happened to be *pro*.

Now, our foregoing argument for the effects of *pro* in some coordinated structures begs the following question: If covert *pro* can serve as an initial syntactic host for a clitic after a conjunction when a CP (or IP for that matter) has been coordinated, is it also the case that covert *pro* can serve the same function in a simple, uncoordinated sentence? Such a situation would give rise to a clitic in initial position in prosodic terms. We have already touched upon sentences (14), (15), and (17) in which a clitic occupies prosodic first position, but we maintain that these particular cases can be attributed to prosodic deletion of the interrogative particle *ali* or an element which can be understood in discourse. This is not to say that sentences with prosodically intial clitics such as (25) and (26) can never be explained by the presence of *pro*. In fact, that is seemingly the only other way they can be accounted for.

(25) Je' tudi pametna.

be.3sg also sensible.fem

'She's sensible as well'. (Davis 1989, 147)

(26) Sem dolgo upal in se bal.

aux. 1sg long hope. PRT and refl fear. PRT

'For long I hoped and feared'. (Davis 1989, 145)

On a par with the coordinated structures in (22) and (24), a clitic in uncoordinated structures without *pro* must normally immediately follow, for example, an overt subject as in (27) or, again, even with *pro* present, an element which has risen into a projection higher than IP as in (28), if either of those ends up in first position in the syntax.

- (27) <u>Jaz</u> **sem ga** bil pohvalil. *I aux. 1sg him.ACC be.PRT praise.PRT*'I had praised him'. (Franks and King 2000, 33)
- (28) <u>Kakó</u> **ste** nášli nášo híšo?

  how aux. 2pl find. PRT our. pl house

  'How did you find our house'? (Herrity 2000, 244)

This is not the case in (29), where we have an overt subject *Rajko*, but the clitics need not follow it since there is a phonetically uninterpreted *ali* in CP to follow instead.

(29) Se je Rajko res poročil?

refl aux. 3sg Rajko really marry. PRT

'Did Rajko really get married'? (Franks and King 2000, 40)

Finally, just as not all sentences with prosodically initial clitics arise from the presence of *pro* in syntactically defined first position, the mere presence of *pro* in a clause does not dictate that it serve necessarily as the syntactically initial host for 2P clitics, as alluded to earlier for examples (24) and (28). Consider as well (30) and (31):

- (30) Mislil sem si, da...

  think.PRT aux. Isg refl C

  'I thought that...'

  (Franks and King 2000, 37)
- (31) Predstavil sem se mu.

  introduce. PRT aux. 1sg refl him. DAT

  'I introduced myself to him'. (Franks and King 2000, 46)

On the first assumption that the participle in each example is in its base position in VP, this entails that *pro* is in a position higher than the participle. We would therefore expect the clitic cluster in (30) and (31) to appear between *pro* and the participle, with *pro* serving as the necessary material intervening between the left edges of CP and the clitic (cluster). Since the clitics instead follow the participles in (30) and (31), we propose for such examples the structure in (32) (based on (31)) in which the VP containing the participle moves higher than *pro*, outside of IP for reasons independent of a requirement to satisfy constraints on clitic placement (viz. topicalization).

### 

We propose the same type of movement-based structure in (32) (but with movement of a VP containing a tensed lexical verb instead of a participle) for examples (33)–(36). In each of the examples below, the clitic in bold follows a verb in the present tense.

- (33) Vózimo se že trí úre...

  drive. 1pl refl already three hours

  'We have been driving for three hours...' (Herrity 2000, 234)
- vêde se, kàkor da bi me ne poznál.

  behave.3sg refl as C COND me.ACC NEG know.PRT

  'He behaves as if he didn't know me'. (Herrity 2000, 343)
- (35) Obnáša se, kot bi nas ne poznál. behave. 3sg refl as COND us.pl.ACC NEG know. PRT 'He behaves as if he didn't know us'. (Herrity 2000, 342)
- (36) Reče **mu**, da je bila na mizi knjiga. say.3sg him.DAT C aux.3sg be.PRT on table book 'He/she tells him that there was a book on the table'.

Constructions such as this with tensed verb+clitic(s)—or participle +clitic(s) as in (30) and (31)—do not appear to be particularly common; they seem to occur only under special circumstances. We suspect the "special circumstance" in (33)—(36) to involve syntactic movement—topicalization in these cases. It is not difficult to imagine a topicalized VP in (33), with the equivalent of 'for three hours' remaining as comment material. Notice in particular (34)—(36). In these three sentences it is quite reasonable to suggest that the VP of the main clause has undergone topicalization. The matrix clause in each serves as an introductory

structure in which the topicalized VP provides background information for the "new" comment material in the subordinate clause to follow. 15

On this note, we can now provide a more thorough explanation for clitic placement back in example (16), Videl sem ga, which was represented in tableau (M)—without pro in candidate structures—before our discussion of the role of pro began. Had we included pro in candidates in (M), it is clear that a form with the (overt) linear ordering videl+sem+ga such as (Ma) would not have won over a form with the linear ordering sem+ga+videl. This is due to the fact that pro is able serve as the necessary intervening material between the left edges of CP and the clitic (cluster) while also enabling the clitic (cluster) itself to better satisfy ALIGN (CL, L; INTP, L).

So, why then is a form with the overt shape sem+ga+videl not attested for this example? We claim that the answer rests in the topicalization of the VP in (16). The VP targeted for independently motivated topicalization in (16) ends up in a position higher than IP and thereby provides clause-initial material after the left edge of CP. The clitic (cluster) follows the topicalized material rather than pro, which it would have followed had topicalization not occurred. We may conclude then that example (16) is similar to (30)–(36) with regard to the influence of topicalization. (16) is particularly interesting, however, in that other than the topicalized element, no other overt syntactic material is present in the sentence. The remaining overt material lies solely in the form of morphologically based clitics.

With the findings of this section in mind, we wish to provide a tableau for each type of example given in order to thoroughly illustrate the constraint interactions at work. However, we reserve these tableaux for the appendix at the end of this work. Two changes must be noted: 1) Non-Initial (CL, Intp) has been removed from each tableau. This constraint has no bearing on any outcome in (H)–(P) above and therefore does not warrant our attention. Note, however, that this is a very important constraint for clitic placement in Serbo-Croatian. See, for example, Bošković (2001) for a non-OT-based characterization of clitic

We suspect that the complement clause in (30) or (36), for instance, does not undergo topicalization along with the rest of VP in any strict sense. See Vries (1999) and relevant sources therein for an account in which the complement clause in such examples can be well explained as extraposed material.

placement in Serbo-Croatian which would correspond to a high-ranking of NoN-INITIAL (CL, INTP). 2) In comparison with (H)–(P), we have also demoted NoN-INITIAL (CL, IP) to a position lower than ALIGN (CL, L; INTP, L) since the relatively high ranking of the former is unsubstantiated. NoN-INITIAL (CL, IP) is therefore no longer represented in the tableaux provided. Other tableaux which appear subsequently throughout the body of this paper include these modifications as well.

### 4. Further Support for an Approach Involving Syntactic and Prosodic Domains

In this section we examine in depth some more finely grained questions which arise from the interaction of constraints referring to syntactic and prosodic domains. Let us consider (Q1), which contains the following additional constraint that we briefly mentioned near the beginning of section 3:

ALIGN (CL, L; IP, L)

For any clitic, its left edge aligns with the left edge of some inflectional phrase.

### (Q1) (corresponds to (12))

		Non- Initial (Cl, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final (CL, INTP)
(a)  (CP [IP #k darilo#]]	njiga# #ki je na mizi# #je				****	
(b) [ <sub>CP</sub> [ <sub>IP</sub> #k #darilo j	njiga# #ki je na mizi# e#]]		 	*!	*****	*   *
(c) [ <sub>CP</sub> #je [ <sub>II</sub> #darilo#	knjiga# #ki je na mizi# ]]	*!			*	
(d) [ <sub>CP</sub> [ <sub>IP</sub> #je #darilo#	knjiga# #ki je na mizi# ]]	*!				
(e) [ <sub>CP</sub> [ <sub>IP</sub> #k] #darilo#]	njiga je# #ki je na mizi# ]			*!	*	*
(f) [ <sub>CP</sub> [ <sub>IP</sub> #kr #darilo#]	jiga# #je [ki je na mizi]# ]				*?	

While (Q1a) emerges as the optimal candidate from among (Q1a)-(Q1e), we must also consider a candidate such as (Q1f). Why

should (Q'l'a) emerge victorious over (Q1f)? (Q1f) clearly has fewer violations of what would be the deciding constraint—ALIGN (CL, L; IP, L)—when we compare it with (Q1a). Or does it? Perhaps we should reconsider the way in which violations of ALIGN (CL, L; IP, L) were determined. In (Q1) we simply counted the number of grammatical words intervening between the left edge of a clitic and the left edge of the relevant IP (as expected perhaps), regardless of any intonational and other phrasal boundaries which exist due to the nature of the intervening material. If we consider non-restrictive relative clauses such as the one in (Q1)/(12) to be a type of parenthetical insertion more or less, similar to more typical parentheticals that do not share the same kind of anaphoric relationship that exists between ki and knjiga (such as [..., as I told you, ...] or [..., you know, ...]), we might wish to conclude that the relative in (Q1a)-(Q1f) is in some sense extraneous to the evaluation of how far the clitic je is from the left edge of the matrix IP. Given this, (Q1a) and (Q1f) would really be no different with regard to the distance between je and the matrix IP in each; they would both incur one violation of ALIGN (CL, L; IP, L) if the relative were somehow "invisible" for the purposes of satisfying this particular constraint. This situation is laid out in (Q2), with material in superscript signaling its irrelevance when determining violations of ALIGN (CL, L; IP, L). Notice that under this analysis, neither (Q2a) nor (Q2f) emerges as more optimal than the other.

(Q2)

	Non- Initial (Cl, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final (Cl, IntP)
(a) [ <sub>CP</sub> [ <sub>IP</sub> #knjiga# # <sup>[ki je na mizi]</sup> # #je darilo#]]				*	
(f) [ <sub>CP</sub> [ <sub>IP</sub> #knjiga# #je <sup>[ki je na mizi]</sup> # #darilo#]]				*	

Perhaps a more palpable method of accounting for the fact that (Q2a) should win over (Q2f) is to compare the degree of isomorphism of the relevant prosodic and syntactic boundaries between these two examples. Truckenbrodt (1999), for example, highlights issues surrounding the ways in which various syntactic and prosodic boundaries often

coincide. It is clear in (Q2a) that the left and right edges of the medial intonational phrase perfectly coincide with the corresponding edges of the CP of the non-restrictive relative. In (Q2f), on the other hand, the left edge of that CP does not align perfectly with the left edge of the medial intonational phrase because of the intervening clitic *je* from the matrix clause. In addition, syntactic phrasal components (i.e. words and boundaries) beyond those inherent to the relative clause are spread across the three intonational phrases in (Q2f), whereas in (Q2a) they are contained in only the two peripheral intonational phrases.

To some extent, the clitic *je* in (Q2f), which is placed with reference to the matrix IP, oversteps the medial intonational boundaries naturally set off by the relative clause. We propose that evaluations are made in cases such as these on the basis of interactions between alignment mechanisms in the constraint hierarchy. Although such mechanisms undoubtedly involve a varied set of domain-specific constraints, we formulate only a single, ad hoc constraint below.

PPB=SPB

Prosodic Phrase Boundary = Syntactic Phrase Boundary

Of course, this constraint may not always be fully satisfied if more highly ranked constraints necessitate violations lower in the hierarchy. In tableau (Q3) we continue our modified method of counting ALIGN (CL, L; IP, L) violations and rank PPB=SPB conservatively at the lower end of the current hierarchy.

(Q3)

	Non- Initial (Cl, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	PPB= SPB	ALIGN (CL, L; IP, L)	Non- Final (Cl, INTP)
(a) F [CP [IP #knjiga# #[ki je na mizi]# #je darilo#]]		1 			*	
(f) [ <sub>CP</sub> [ <sub>IP</sub> #knjiga# #je <sup>[ki je na</sup> mizi]# #darilo#]]				*!	*	

This type of example leads to an important question about the existence (or non-existence) of certain syntactic boundaries at the

intersection of medial intonational phrases. Consider the following structures:

- (37)  $\#[_{CP1}[_{IP1} \#[_{CP2}[_{IP2}]] \#]] \#$
- (38)  $\#[_{CP1a}[_{IP1a}(]]) \#[_{CP2}[_{IP2}]] \#([_{CP1b}[_{IP1b})]] \#$

The structure in (37) assumes that CP1 and IP1 each have a single left edge and a single right edge overall within the sentence and that the medial intonational phrase does not split CP1 and IP1 into two parts each. In (38), however, CP1 and IP1 are each split into two parts (one preceding the medial intonational phrase and one following) by the boundaries appearing between parentheses, with each "half" having a left and right boundary. It is highly questionable from the outset whether CP1b would ever be possible as in (38). While one might reach the logical conclusion that this second half of CP1 could exist—at least on the assumption that IP1b also existed, it is unlikely that processes such as topicalization or wh-movement could ever target landing sites (in a nonexistent left periphery) in that lower half. That is to say, although there may be, in some sense, a left boundary marking the resumption of CP1 after the second intonation break (rather than what we might call a "new beginning," with all the structure that might entail), left periphery components of CP1 as a whole would only exist in the first half.

Because tableau (Q3) deals primarily with the isomorphism of the medial intonational phrase and the CP of the relative clause rather than the medial intonational phrase and the matrix CP or IP, for example, we need not further concern ourselves here with the question of whether (37) or (38) is more correct. We continue to use the first structure in the remainder of this work, but deeper investigations into which structure is more valid could prove to be significant for further work on clitic placement based on syntactic and prosodic domains. It is hoped that our discussion of the examples provided in this section and the issues they present will convey to the reader that the complex interactions of constraints referring to syntactic and prosodic domains demand a very finely detailed notion on our part of how exactly those domains are defined if, that is, we are to fully understand the workings of clitic placement in Slovene and other languages.

### 5.0 Resolutions for (Un)problematic Data

In this section we offer some examples of clitic placement phenomena in Slovene which are seemingly problematic at first glance. Once decomposed, however, the structures at hand pose no problems for our analysis. In fact, the two issues dealt with below are resolved quite well under our analysis and thereby strengthen it.

# 5.1 Variation in the Placement of Copular Clitics between Sentences with Only Topicalized Overt Material in the Syntax and Those with Only Corresponding Non-topicalized Material

The first issue to be dealt with stems from forms such as those which appear below, both from Golden and Sheppard (2000, 200–201). Apart from the clitic in each of (39) and (40), the only other overt elements appear in the respective adjective and prepositional phrases (AP/PP).

- (39) a. Sposoben direktor **je**.

  capable manager be.3sg

  'He is a capable manager'.

  (cf. Bošković 2001, 157, 'Capable manager, he is'.)
  - b. Je sposoben direktor.
- (40) a. V drugi sobi sem.

  in other room be. 1sg

  'I am in the other room'.
  - b. **Sem** v drugi sobi.

Notice the difference in the translations given by Bošković and Golden and Sheppard for (39a). Because Golden and Sheppard's example was clearly *not* relevant to a discussion of topicalization in their article (hence the de-emphasis of topicalization in the translation they provide), and since Bošković's translation clearly *does* indicate topicalization, we will assume that the translation given by Bošković is more telling of the presence of topicalization. Golden and Sheppard cite no differentiation in meaning for the sentences in (39a) and (39b), but Golden (personal communication [p.c.]) explains that both are "truth-functionally equivalent" and suggests that there is a discourse level difference in information structuring between the two sentences. Franc Marušič (p.c.) indicates that while (39b) may have a sense which coincides with that given in (39a) (Golden and Sheppard's translation)—that is, with a fairly neutral reading, (39b) may also have a

different declarative meaning from (39a), in particular an emphatic sense like 'He (or she) really IS a capable manager' [emphasis on 'is' by Marušič]. This second declarative meaning for (39b) involves emphasis on the copular clitic in the way of prosodic stress and meaning.

If we attempt to make sense of the meanings conveyed by these two deceivingly simple variations on a sentence, we finally conclude that (39a) involves topicalization, while (39b) may either 1) have a fairly neutral meaning or 2) indicate some type of emphasis on the clitic (and involve topicalization as well, as we will explain later). According to Marušič (p.c.), both (39a) and (39b) could be interpreted as questions if given proper intonation. The interrogative sense is in fact most typical of a sentence with intial clitic placement as in (39b). We remind the reader of such examples discussed earlier (i.e. (14)/(29) and (15)) in which ali was not phonetically interpreted, leaving a clitic cluster initial in its intonational phrase. Marušič further explains that while (39a) can be a question, it can never have the declarative sense with emphasis on the auxiliary. (We take emphasis in this case to refer only to prosodic stress on the clitic.) For the purposes of the discussion to follow, we will only be concerned with the declarative meanings and the relevant structures posed by (39a) and (39b).

The neutral declarative version of (39b) can be explained on grounds similar to those used to explain the examples with prosodically initial clitics in which an element such as the interrogative particle *ali* (or *a*) has been deleted at some level—is unpronounced, at the very least, in its initial position after the left edge of CP. In those cases, the element in question can still be counted as the initial element intervening between the left edges of CP and a following 2P clitic. Similar in that regard are forms containing a deleted/unpronounced conjunction—as suggested for (17) with *ker*—in a CONJP higher than CP, in which case the clause-initial element after the left edge of CP may be, but does not necessarily have to be, covert *pro*. With the "deletion" of various elements and topicalization in mind as possibilities in accounting for sentences (39a) and (39b), and similarly for (40a) and (40b) as well, let us consider the following structures in (41) (where X=e.g. a deleted/unpronounced interrogative particle (e.g. *ali* and *a*) or conjunction):

- (41) a.  $\#[_{CP}[_{TOPP}[_{AP}] \text{ sposoben direktor}]_i [_{IP}] \text{ je pro}[_{VP}[t]_i]]] \#$ 
  - b.  $([_{CONJP} X) #[_{CP} [_{IP} pro je [_{VP} [_{AP} sposoben direktor]]]](])#$
  - c. [CP X #[IP je pro [VP [AP sposoben direktor]]]]#

- d.  $([_{CONJP} X) #[_{CP} [_{IP} pro jé [_{VP} [_{AP} sposoben direktor]]]](])#$
- e. [CP X #[IP jé pro [VP [AP sposoben direktor]]]]#
- f. [CP X #jé [TOPP [AP sposoben direktor], [IP pro [VP [t],]]]]#

In (41a) we see that topicalization of the predicate AP sposoben direktor has taken place. Since this AP is now higher than IP, it functions as the the first constituent after the left edge of CP and the clitic je follows in second position. (41a) corresponds to sentence (39a) and is consistent with Bošković's (2001, 157) translation signaling apparent topicalization. The next two structures are options for the neutral reading of sentence (39b) as noted by Marušič (p.c.). The structure in (41b) assumes that a conjunction which lies in a CONJP higher than CP has been "deleted." In any case, however, there is no syntactic material after the left edge of CP for the clitic to immediately follow. Because of this, the left edge of CP coincides with that of IP. This means that in order for the clitic to satisfy Non-Initial (CL, CP), it must appear in second position further down in IP after pro. (41c) is similar to (41b), but in the former it is assumed that an element lying inside the left edge of CP and higher than IP has been "deleted" is some manner (=is phonetically uninterpreted), similar to the examples seen before which involved an interrogative particle like ali. Still present syntactically, the element in question functions as clause-initial material and the clitic is able to immediately follow it.

In (41d)—(41f) we have attempted to provide possible structures to account for the emphatic meaning of (39b) noted by Marušič (p.c.) in which the copular clitic is stressed and corresponds to something like 'He (or she) really IS a capable manager' ['really' and emphasis on 'is' by Marušič]. Examples (41d) and (41e) correspond to the structures in (41b) and (41c), respectively, with the simple addition of prosodic stress on the clitic used to lend an emphatic meaning. (We do not intend for this to indicate that the addition of (emphatic) stress here gives  $j\acute{e}$  non-clitic status. Our work indicates that the clitic remains the target of morphological placement constraints.)

Remember that under our analysis of clitics as phrasal affixes, a clitic is not present in the syntax and therefore does not undergo syntactic movement. In a simple sentence such as (39b) involving only a copular clitic and predicate AP, there is no syntactic element of any sort that could be considered comment (i.e. "new" or otherwise prominent) material in a topic/comment (theme/rheme) construction if the AP were

to undergo topicalization. Focusing stress on the verbal clitic, a morphological element, is really the only option for signaling it as a comment (at least a "comment" insofar as meaning if not with regard to -structural position). Structures like (41d) and (41e) do place some emphasis on the verbal clitic in the way of stress, an option which could well be sufficient in a language which does not rely as heavily on topic/comment constructions as Slovene and Serbo-Croatian, for example. A structure such as (41f) involving movement, which is more in keeping with the topic/comment patterning of Slovene, is more desirable, however. In (41f) the predicate AP is topicalized as in (41a), but there is no opposing comment material available, at least in syntactic terms. The copular clitic—and the lexical properties contained therein—remains the only alternative for comment material. Above all, however, the clitic must comply with the ranking of morphological 2P placement constraints rather than fall under a general syntactic structural requirement that comment material necessarily follow any topicalized element.

Given the facts discussed immediately above, the linguistic system attempts to compensate for the shortcomings of the clitic in (41f), as far as syntactically appropriate topic/comment ordering relations are concerned, by placing emphatic stress on it. In this admittedly unusual case, the linear ordering of topic and comment material, if we do not limit ourselves to elements in the syntax, happens to be comment+topic (jé+sposoben direktor). If clitics are considered syntactically based elements, this is of course an undesired result. Under an analysis of clitics as phrasal affixes, on the other hand, this atypical ordering of comment+ topic can be readily explained by the interaction of elements based in the morphology with those based in the syntax. Furthermore, no special, unmotivated movement in the syntax is required in either (39a) or (39b) to account for clitic placement in 2P. In other words, syntactic elements undergo whatever movements they must (viz. topicalization) without regard to clitics, and the clitics themselves abide by separate morphological placement constraints. We would not want to propose, for instance, that the predicate AP raises in (39a) solely for the purpose of becoming the first element after the left edge CP for the clitic to follow in 2P. Why would it, when *pro* itself could serve, without even having to move out of IP, as the initial material required after the left edge of CP?

In conclusion then, we can explain (39a) and (39b) under our current analysis while establishing that syntactic movement is not

required in order to satisfy morphological constraints on 2P clitic placement. Tableaux (R1)—(R6) below, corresponding to examples (41a)—(41f), are provided to demonstrate that we can explain such sentences with a system of morphological constraints referring to syntactic and prosodic domains. Notice that in the appropriate tableaux, (R1) and (R6), only relevant output candidates showing independently motivated topicalization are provided.

$$(R1) (=(41a))$$

		Non- Initial (Cl, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final (CL, IntP)
(a)	$\#[_{CP} [_{TOPP} ]e [_{AP} ]e [_{AP} ]e [_{IP} ]e [_{I$	*!			***	
(b)	$\#[_{CP} [_{TOPP} [_{AP} \text{ sposoben je direktor}]_i $ $[_{IP} \text{ pro } [_{VP} [t]_i]]]]#$		*!	*	**	1 1 1 1
(c)	$\#[_{CP} [_{TOPP} [_{AP} \text{ sposoben direktor}]_i]$ je $[_{IP} \text{ pro } [_{VP} [t]_i]]]$			**	*!	*
(d)	# $[_{CP} [_{TOPP} [_{AP} \text{ sposoben direktor}]_i]$ $[_{IP} \text{ je pro } [_{VP} [t]_i]]]$ #			**		*
(e)	$\#[_{CP} [_{TOPP} [_{AP} \text{ sposoben direktor}]_i $ $[_{IP} \text{ pro je } [_{VP} [t]_i]]]]#$			. **	*!	*

### (R2) (=(41b))

	Non- Initial (Cl, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final (Cl, IntP)
(a) $([_{CONJP} X) #[_{CP} je [_{IP} pro [_{VP} [_{AP} sposoben direktor]]]](])#$	*!			*	  -  - 
(b) $([_{CONJP} X) #[_{CP} [_{IP} je pro [_{VP} [_{AP} sposoben direktor]]]]](])#$	*!				
(c) ([CONJP X) #[CP IP pro je VP AP sposoben direktor]]]](])#		 		*	
(d) $([_{CONJP} X) #[_{CP} [_{IP} pro [_{VP} [_{AP} sposoben je direktor]]]](])#$		*!	*	**	,
(e) $([_{CONJP} X) #[_{CP} [_{IP} pro [_{VP} [_{AP} sposoben direktor je]]]](])#$			*!*	***	*

(R3) (=41c))

	Non- INITIAL (CL, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final (Cl, IntP)
(a) [ <sub>CP</sub> X #je [ <sub>IP</sub> pro [ <sub>VP</sub> [ <sub>AP</sub> sposoben direktor]]]]#				*!	
(b) F [CP X #[IP je pro [VP [AP sposoben direktor]]]]#					
(c) [ <sub>CP</sub> X #[ <sub>IP</sub> pro je [ <sub>VP</sub> [ <sub>AP</sub> sposoben direktor]]]]#				*!	
(d) [ <sub>CP</sub> X #[ <sub>IP</sub> pro [ <sub>VP</sub> [ <sub>AP</sub> sposoben je direktor]]]]#		*!	*	**	
(e) $\left[ \sum_{CP} X \right]_{IP} \text{ pro } \left[ \sum_{AP} \text{ sposoben direktor } je \right] \right] $			*!*	***	*

(R4) (=(41d)) Same as (R2) except that the clitic is stressed.

(R5) (=(41e)) Same as (R3) except that the clitic is stressed.

(R6) (=(41f))

		Non-	!	ALIGN	ALIGN	Non-
		Initial	INTEG	(CL, L;	(CL,	FINAL
		(CL,	(XP)	INTP,	L; IP,	(CL,
		CP)	! ! !	L)	L)	INTP)
(a) 🐨	$[_{CP} X # jé [_{TOPP} [_{AP} sposoben direktor]_i $ $[_{IP} pro [_{VP} [t]_i]]]]#$		! ! ! !		***	
(b)	$[_{CP} X #[_{TOPP} [_{AP} sposoben jé direktor]_i $ $[_{IP} pro [_{VP} [t]_i]]]]#$		*!	*	**	
(c)	$[_{CP} X #[_{TOPP} [_{AP} sposoben direktor]_i$ jé $[_{IP} pro [_{VP} [t]_i]]]$ #			*!*	*	*
(d)	$[_{CP} X #[_{TOPP} [_{AP} sposoben direktor]_i $ $[_{IP} jé pro [_{VP} [t]_i]]]]#$			*!*		. *
(e)	$[_{CP} X #[_{TOPP} [_{AP} sposoben direktor]_i $ $[_{IP} pro jé [_{VP} [t]_i]]]]#$			*!*	*	*

### 5.2 Splitting of a Clitic Cluster across INTP Boundaries

We now come to our second instance of seemingly problematic clitic placement in Slovene. Bošković (2001: 153) provides the following example in which a clitic "cluster" from the main clause is split across an intervening intonational phrase. The first clitic of the cluster (so) appears finally in the first intonational phrase, whereas the second clitic (se) appears initially in the third intonational phrase.

?#Oni so,# #kot sem vam že rekla,#

#se predstavili Ivanu.#

they aux.3pl as aux.1sg you.pl.DAT already say.PRT

refl introduce.PRT Ivan.DAT

'They have, as I already told you, introduced themselves to Ivan'.

In the many Slovene sentences examined for this work, this is the only example we have come across with such splitting of a clitic cluster around an intervening intonational phrase. Marija Golden (p.c.) assigns (42) an "unhesitating '\*'." Based on the indications from Bošković that (42) is fully grammatical and from Golden that it is ungrammatical, we have marked (42) with a '?'. Golden (p.c.) reveals that her judgement of (42) as ungrammatical may be due to some irregular properties associated with the reflexive clitic se, but even without a reflexive clitic, she deems (43) to be "without hesitation, unacceptable."

\*#Janez ti,# #kot sem ti že povedala,#

#je obljubil svojo pomoč.#

Janez you.sg.DAT as aux. 1sg you.sg.DAT already tell.PRT

aux. 3sg promise.PRT his help

'Janez, as I already told you, promised you his assistance'.

Although the grammaticality judgement given by Bošković (2001, 153) for the form in (42) may have been influenced by the fact that he is a native speaker of a variety of Serbo-Croatian—in which this type of cluster splitting is more robust—rather than Slovene, we assume for the sake of argument that examples such as (42) are, in fact, grammatical in one or more varieties of Slovene. After all, Slovene is often noted for the striking degree of dialectal diversity it exudes, with, by some estimates, 50 or more distinct varieties represented in a native-speaker population of around two million. Golden herself does not explicity state that such examples never occur.

This type of sentence can be accounted for under our analysis, but we must make a minor modification in the way we go about things. In previous tableaux we have only counted violations incurred by the leftmost clitic in a cluster. It is understood, however, that each clitic in a cluster is evaluated on the basis of the same constraint ranking and therefore incurs its own violations of those constraints. In (S) (=(42)), it is necessary for us to make explicit for each candidate the number of violations incurred by each clitic within the cluster of two clitics. Checks are given here as well for constraint satisfaction so that the reader can more easily understand where violations do and do not occur. The asterisks and checks appearing before commas correspond to so, while those after commas relate to se.

**(S)** 

	Non- Inmal (Cl, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final(Cl, IntP)
(a) [ <sub>CP</sub> [ <sub>IP</sub> #oni so se# #kot sem vam že rekla# #predstavili Ivanu#]]		 	*, *!	* **	√, *
(b) ☞ [CP [IP #oni so# #kot sem vam že rekla# #se predstavili Ivanu#]]		t t l	*, ✓	* *****	*, ✓
(c) F [CP [IP #oni# #kot sem vam že rekla# #so se predstavili Ivanu#]]		1 1 1 1	<b>√</b> , *	***** , ****	✓, ✓

We see that down through ALIGN (CL, L; INTP, L), both (Sb) and (Sc) are equally well-formed. In most of the recent tableaux and those to follow in the appendix, we represent ALIGN (CL, L; IP, L) and NON-FINAL (CL, INTP) as mutually unranked. Ranking NON-FINAL (CL, INTP) immediately above ALIGN (CL, L; IP, L) does not appear to be of any consequence in our tableaux, and vice versa. We submit for now that it is at least possible for both constraints to be freely ranked, in which case either (Sb) or (Sc) emerges as the winner depending on which of the two rankings—which "co-morphology"—takes hold at any one time: 1) ALIGN (CL, L; IP, L) >> NON-FINAL (CL, INTP) gives (Sb) with cluster splitting and 2) NON-FINAL (CL, INTP) >> ALIGN (CL, L; IP, L) gives (Sc) with the relevant clitics contained in a single intonational phrase. If it is the case that the two constraints are crucially unranked with respect to one another, it is most likely that violation of a lower-ranked constraint determines whether (Sb) or (Sc) is the winner. It

is necessary, of course, to determine what that constraint might be if our analysis is to be fully comprehensive, able to account for all types of clitic placement in Slovene. We are confident that the current analysis is near this end and leave the matter of examples like (42) open for now.

#### 6. Conclusions

We have argued extensively for a treatment of Slovene 2P clitics as phrasal affixes which are placed at PF by morphologically oriented constraints referring to both syntactic and prosodic structural domains. Through this line of research, we have accomplished a number of things. By simply undertaking this project we hope to have made a significant contribution to the emerging field of Slovene theoretical linguistics, particularly to the study of Slovene clitics, an area in which work is sorely lacking when compared to the extensive amount of work done on clitics in related languages such as Bulgarian, Macedonian, and Serbo-Croatian.

Initially working through some of the more simple Slovene structures with clitics, we found that neither O'Connor's constraints referring to only prosodic domains nor Anderson's constraints referring to only syntactic domains were able to account for placement of those clitics in all examples. As we examined more complex sentences such as those involving intonational breaks, it became clear that only a combination of both constraint types within a single hierarchy would result in the correct forms. Although in general the amount of research on clitic placement in the midst of intonational boundaries is quickly growing, we are not aware of any considerable analyses of the effects which intonational boundaries may have on the placement of Slovene clitics in particular.

Our investigation has elaborated on the widely cited descriptions of so-called initial clitics in Slovene. The traditional claim that "initial" elements like *ali* have been somehow deleted or left out of constructions in which such clitics appear is upheld when we consider that the element in question is "deleted" only at PF. Such elements are still present syntactically and serve as syntactic hosts in initial positon for 2P clitics to follow. "Initial clitics" can therefore be understood as initial only in prosodic terms. Clitics—or the leftmost clitic in a cluster at least—are actually quite happy in this type of construction since they satisfy both Non-Initial (CL, CP) and ALIGN (CL, L; INTP, L).

Based on evidence from coordinated structures with conjunctions such as in, ter, and sqj, we also discovered that the presence of pro could be a reason for prosodically defined initial clitics. We were then able to extend the notion of pro to account for prosodically defined initial clitics in some uncoordinated structures. Covert material like pro and material optionally "deleted" from initial position as well as the notion of independently motivated syntactic movement such as topicalization all figured prominently in our analysis of the variation in clitic placement between examples like Sposoben direktor je and Je sposoben direktor. In our discussion of these two deceivingly simple examples we demonstrated that topicalization in the syntax does not occur in order to facilitate morphological clitic placement. On the contrary, it is a process which takes place independent of any requirements set by clitic placement constraints. The presence vs. absence of topicalization may still have effects on the exact site(s) of clitic placement, however, as expected.

In section 4 we discussed constraints on the degree of isomorphism of syntactic and prosodic boundaries in order to account for example (f) in tableaux (Q1)—(Q3). Then we introduced the related notion of split CP and IP constituents stemming from medial intonational phrases. We emphasized in this section the importance of establishing finely detailed structural representations as a basis for accurately determining the constraints and ranking of those constraints which correctly account for clitic placement.

Finally, we touched upon an example from Bošković (2001) in which clitic clusters appear to be split by an intervening intonational phrase. Golden (p.c.) claimed that examples such as this were highly ungrammatical to her, but we assumed that Bošković had good reason for citing his example as fully grammatical. After proposing a few finely tuned modifications to the constraint hierarchy in our tableaux throughout the latter half of this work, we found that our final version was able to account for both grammatical and ungrammatical judgements depending on the ranking of two rather lowly ranked constraints. We find that our analysis firmly accounts for all examples of Slovene clitic placement provided. Issues which stemmed from our discussion such as the role of isomorphism of syntactic and prosodic boundaries, the question of internal boundaries for syntactic constituents split by medial intonational phrases, and the (un)grammaticality of cluster splitting will allow us to make small improvements along the way to a thoroughly

exhaustive examination and analysis of clitic placement in Slovene, related Slavic languages, and beyond.

Yale University

### Appendix

Below are tableaux for various examples through section 3 which were not presented in the main text due to space restrictions. We believe that these tableaux, while not absolutely necessary, illuminate quite well the interactions of various constraints in the determination of clitic placement. In each tableau we get the desired output corresponding to a relevant example sentence given earlier.

### (T) (corresponds to (2) and (5))

		Non- Initial (Cl, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final (Cl, IntP)
(a)	[ <sub>CP</sub> #sem [ <sub>TopP</sub> [vse to] <sub>i</sub> [ <sub>IP</sub> pro že navsezgodaj spoznal [t] <sub>i</sub> #]]]	*!	 		***	 
(b)	[CP #[TopP [vse sem to]i [IP pro že navsezgodaj spoznal [t]i#]]]		*!	*	**	
(c)	[CP #[TopP [vse to] sem [IP pro že navsezgodaj spoznal [t] #]]]		1 1 1 1 1	**	*!	
(d) @	[CP #[TopP [vse to]   IP sem pro že navsezgodaj spoznal [t]   #]]]		1 1 1 1 1	**		
(e)	[CP #[TopP [vse to]   IP pro sem že navsezgodaj spoznal [t]   #]]]			**	*!	 

## (U) (corresponds to (3), (11), and (13))

		Non-	1 1	ALIGN	ALIGN	Non-
		INITIAL	INTEG	(CL, L;	(CL,	Final
		(CL,	(XP)	INTP,	L; IP,	(CL,
		CP)	; ; ;	L)	L)	INTP)
(a)	[CP #[ko sem se vzdramila]# #sem [IP pro		! ! !		*!	
	ležala na postelji#]]		! !		:	
(b) @	[CP #[ko sem se vzdramila] # [IP #sem pro					
	ležala na postelji#]]		! !			
(c)	[CP #[ko sem se vzdramila]# [IP #pro sem		! !		*1	 
	ležala na postelji#]]		! !		•	
(d)	[CP #[ko sem se vzdramila]# [IP #pro ležala		• • •	*1	**	
	sem na postelji#]]			•		i I
(e)	[CP #[ko sem se vzdramila]# [IP #pro ležala		*1	*	***	
	na sem postelji#]]		• • •			
(f)	[CP #[ko sem se vzdramila]# [IP #pro ležala		! ! !	*1	****	*
	na postelji sem#]]		! ! !	•		

# (V) (corresponds to (14)/(29))

	Non- Initial (Cl, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final (Cl, IntP)
(a) [CP ali #se je [P Rajko res poročil#]]				*!*	
(b) [CP ali [IP #se je Rajko res poročil#]]					
(c) [ <sub>CP</sub> ali [ <sub>IP</sub> #Rajko se je res poročil#]]			*!	*	
(d) [CP ali [IP #Rajko res poročil se je#]]			*!**	***	

# (W) (corresponds to (15)) (Note subject pro vs. object pro here.)

	Non- Initial (Cl, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final (Cl, IntP)
(a) [CP ali #si ga [IP pro videl pro#]]				*!*	
(b) F [CP ali [IP #si ga pro videl pro#]]					I
(c) [ <sub>CP</sub> ali [ <sub>IP</sub> #pro si ga videl pro#]]				*!	
(d) [ <sub>CP</sub> ali [ <sub>IP</sub> #pro videl pro si ga#]]			*!	***	

# (X) (corresponds to (16)) (Note subject pro vs. object pro here.)

	II .		ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final (Cl, IntP)
(a) $\left[ _{CP} \# sem ga \left[ _{TopP} \left[ _{VP} videl pro \right] _{i} \left[ _{IP} pro \left[ t \right] _{i} \# \right] \right] \right]$	*!	! !		****	
(b) $\left[ _{CP}\# \left[ _{TopP}\left[ _{VP}\text{ videl pro}\right] \right] \text{ sem ga } \left[ _{IP}\text{ pro } \left[ t\right] \right] \right]$		l 1	*	*!*	
(c) $\mathcal{F}[CP \#[TOPP [VP videl pro]_i [Psem ga pro [t]_i \#]]]$		1	*		
(d) $\left[ _{CP} \# \left[ _{TopP} \left[ _{VP} \text{ videl pro} \right] \right] \left[ _{IP} \text{ pro sem ga } [t] \right] \right]$			*	*!	

## (Y) (corresponds to (18))

	Non- INITIAL (CL, CP)	INTEG (XP)	ALIGN (CL, L; INTP, L)	ALIGN (CL, L; IP, L)	Non- Final (Cl, IntP)
(a) [ <sub>CP</sub> #je ali [ <sub>IP</sub> Tomaž pozabil drobiž#]]	*!			**	
(b) [ <sub>CP</sub> #ali je [ <sub>IP</sub> Tomaž pozabil drobiž#]]	3 1		*	*!	
(c) F [CP #ali [IP je Tomaž pozabil drobiž#]]		ing the state of	*		
(d) [ <sub>CP</sub> #ali [ <sub>IP</sub> Tomaž je pozabil drobiž#]]	i in	. 1.303	**!	*	
(e) [ <sub>CP</sub> #ali [ <sub>IP</sub> Tomaž pozabil je drobiž#]]			**!*	**	
(f) [ <sub>CP</sub> #ali [ <sub>IP</sub> Tomaž pozabil drobiž je#]]			**!**	***	*

#### Works Cited

Anderson, Stephen R. (1992). *A-Morphous Morphology*. Cambridge: Cambridge UP.

- ---. (1993). Wackernagel's revenge: clitics, morphology, and the syntax of second position. *Language*, 69. 68–98.
- ---. (1995). Rules and constraints in describing the morphology of phrases. In A. Dainora, R. Hemphill, B. Luka, B. Need, and S. Pargman (eds.), *Proceedings of the Chicago Linguistic Society 31: Vol. 2, Parasession on Clitics*. Chicago: Chicago Linguistic Society. 15–31.
- ---. (1996). How to put your clitics in their place, or why the best of account of second-position phenomena may be something like the optimal one. *The Linguistic Review*, 13. 165–91.
- ---. (1997). Towards an optimal account of second position phenomena. In L. Kaiser (ed.), *Y.A.L.E. 1: Studies in the Morphosyntax of Clitics*. New Haven: Dept. of Linguistics, Yale University. 1–27.
- ---. (2000). Towards an optimal account of second-position phenomena. In J. Dekkers, F. van der Leeuw, and J. van de Weijer (eds.), *Optimality Theory: Syntax, Phonology, and Acquisition*. Oxford: Oxford UP. 302–33.
- ---. (2002). An A-Morphous account of Tagalog second position clitics. In S. Inkelas and K. Hansen (eds.), *The Word: Essays in Honor of Paul Kiparsky*. Cambridge: MIT Press. 1–25.

Anderson, Stephen R. and David W. Lightfoot. (2002). The Language Organ: Linguistics as Cognitive Physiology. Cambridge: Cambridge UP.

Bennett, David C. (1986). Towards an explanation of word order differences between Slovene and Serbo-Croatian. *The Slavonic and East European Review*, 64. 1–24.

---. (1987). Word-order change in progress: the case of Slovene and Serbo-Croat and its relevance for Germanic. *Journal of Linguistics*, 23. 269–87.

Billings, Loren A. (2002). Phrasal clitics. *Journal of Slavic Linguistics* **10**. 53–104. [Available as ROA-505, Rutgers Optimality Archive, <a href="http://roa.rutgers.edu">http://roa.rutgers.edu</a>.]

Bošković, Željko. (1995). Participle movement and second position cliticization in Serbo-Croatian. *Lingua*, 96. 245–66.

---. (1997). The Syntax of Nonfinite Complementation: An Economy Approach. Cambridge: MIT Press.

- ---. (2000a). PF Merger in Scandinavian: Stylistic Fronting and Object Shift. Ms.. Storrs: University of Connecticut.
- ---. (2000b). Second position cliticisation: syntax and/or phonology? In F. Beukema and M. den Dikken (eds.), *Clitic Phenomena in European Languages*. Amsterdam: Johns Benjamins. 71–119.
- ---. (2001). On the Nature of the Syntax-Phonology Interface: Cliticization and Related Phenomena. Amsterdam and Oxford: Elsevier, North Holland Linguistic Series: Linguistic Variations Volume 60.

Browne, Wayles. (1974). On the problem of enclitic placement in Serbo-Croatian. In R. Brecht and C. Chvany (eds.), *Slavic Transformational Syntax*. Ann Arbor: Department of Slavic Languages and Literatures, University of Michigan. 36–52.

---. (1993). Serbo-Croat. In B. Comrie and G.G. Corbett (eds.), *The Slavonic Languages*. London and New York: Routledge. 306–87.

Ćavar, Damir. (1996). On cliticization in Croatian: syntax or prosody? In A. Alexiadou, N. Fuhrop, P. Law, and S. Löhken (eds.), Proceedings of the Workshop on the Syntax, Morphology and Phonology of Clitics: Papers on Clitics. 51–65. (Zentrum für Allgemeine Sprachwissenschaft Papers in Linguistics 6.)

Davis, Margaret G. (1989). Aspects of Adverbial Placement in English and Slovene. Munich: Verlag Otto Sagner.

De Bray, Reginald G.A. (1951). Guide to the Slavonic Languages. London: J.M. Dent & Sons.

---. (1980). Guide to the South Slavonic Languages. Part 1 of Guide to the Slavonic Languages, Third Edition, Revised and Expanded. Columbus: Slavica.

Derbyshire, William W. (1993). A Basic Reference Grammar of Slovene. Columbus: Slavica.

Dimitrova-Vulchanova, Mila. (1995). Clitics in Slavic. *Studia Linguistica*, 49. 54–92.

Franks, Steven. (1995). Parameters of Slavic Morphosyntax. New York: Oxford UP.

- ---. (1999). Optimality Theory and clitics at PF. In K. Dziwirek, H. Coats, and C.M. Vakareliyska (eds.), *Annual Workshop on Formal Approaches to Slavic Linguistics: The Seattle Meeting, 1998.* Ann Arbor: Michigan Slavic Publications. 101–16.
- ---. (2000). Clitics at the interface: an introduction to Clitic Phenomena in European Languages. In F. Beukema and M. den Dikken (eds.), *Clitic Phenomena in European Languages*. Amsterdam: John Benjamins. 1–46.

Franks, Steven and Tracy Holloway King. (2000). A Handbook of Slavic Clitics. New York: Oxford UP.

Franks, Steven and Ljiljana Progovac. (1994). On the placement of Serbo-Croatian clitics. In G. Fowler, H. Cooper, and J. Ludwig (eds.), *Proceedings of the 9<sup>th</sup> Biennial Conference on Balkan and South Slavic Linguistics, Literature and Folklore*. Bloomington: Dept. of Slavic Languages and Literatures and the Russian and East European Institute, Indiana University. 69–78. (*Indiana Slavic Studies* 7.)

---. (1999). Clitic Second as Verb Second. Paper presented at the 75<sup>th</sup> Annual Meeting of the Linguistic Society of America, Los Angeles, CA, January 1999.

Fried, Mirjam. (1994). Second-position clitics in Czech: syntactic or phonological? *Lingua*, 94. 155–75.

Golden, Marija. (1990). Transformational-generative approaches to Slovene syntax. *Slovene Studies*, 12. 205–15.

- ---. (1996). Interrogative wh-movement in Slovene and English. Acta Analytica, 14. 145–86.
- ---. (1997a). The Empty Category Principle and the interrogative wh-movement of argument phrases in Slovene and English. In Language, Mind, and Society, Zbornik referatov z mednarodnega posvetovanja v Mariboru, 1.-3. junij, 1995. Maribor: Pedagoška fakulteta, Univerza v Mariboru. 24–34.
- ---. (1997b). Multiple wh-questions in Slovene. In W. Browne, E. Dornisch, N. Kondrashova, and D. Zec (eds.), Annual Workshop on Formal Approaches to Slavic Linguistics: The Cornell Meeting, 1995. Ann Arbor: Michigan Slavic Publications. 240–66.

Golden, Marija and Milena Milojević Sheppard. (2000). Slovene pronominal clitics. In F. Beukema and M. den Dikken (eds.), *Clitic Phenomena in European Languages*. Amsterdam: John Benjamins. 191–207.

Halpern, Aaron L. (1992). *Topics in the Placement and Morphology of Clitics*. Ph.D. dissertation, Stanford University, Stanford.

- ---. (1995). On the Placement and Morphology of Clitics. Stanford: CSLI Publications.
- ---. (1998). Clitics. In A. Spencer and A. Zwicky (eds.), *The Handbook of Morphology*. Oxford and Malden: Blackwell. 101–22.

Harrison, K. David. (1997). The morphology of special NP clitics: the Albanian definite article. In L. Kaiser (ed.), *Y.A.L.E. 1: Studies in the Morphosyntax of Clitics*. New Haven: Dept. of Linguistics, Yale University. 45–74.

Herrity, Peter. (2000). Slovene: A Comprehensive Grammar. London: Routledge.

Kaiser, Lizanne. (1997). The morphological cliticization of object-shifted weak pronouns in Swedish. In L. Kaiser (ed.), *Y.A.L.E. 1: Studies in the Morphosyntax of Clitics*. New Haven: Dept. of Linguistics, Yale University. 99–130.

Kaisse, Ellen M. (1981). Separating phonology from syntax: a reanalysis of Pashto cliticization. *Journal of Linguistics* 17. 197–208.

- ---. (1982). Sentential clitics and Wackernagel's Law. In D.P. Flickinger, M. Macken, and N. Wiegand (eds.), *Proceedings of the First West Coast Conference on Formal Linguistics*. Stanford: Dept. of Linguistics, Stanford University. 1–14.
- ---. (1985). Connected Speech: The Interaction of Syntax and Phonology. Orlando: Academic Press.

Klavans, Judith L. (1985). The independence of syntax and phonology in cliticization. *Language*, 61. 95–120.

---. (1995). On Clitics and Cliticization: The Interaction of Morphology, Phonology, and Syntax. New York and London: Garland.

Kunzmann-Müller, Barbara. (1991). Slowenische Konjunktionen in Adversativ-konstruktionen: Erkundungen und Versuch einer Beschreibung. *Južnoslovenski filolog*, 47. 161–76.

---. (1994). Grammatikhandbuch des Kroatischen und Serbischen. Frankfurt am Main and New York: Peter Lang.

Legendre, Géraldine. (1996). Clitics, Verb (Non-)Movement, and Optimality in Bulgarian. Technical Report JHU-CogSci-96-5, Dept. of Cognitive Science, The Johns Hopkins University, Baltimore. [Available as ROA-165, Rutgers Optimality Archive, <a href="http://roa.rutgers.edu">http://roa.rutgers.edu</a>.]

- ---. (1997a). Optimal Clitics and Verb Movement in Romanian. Technical Report JHU-CogSci-97-7, Dept. of Cognitive Science, The Johns Hopkins University, Baltimore.
- ---. (1997b). Optimal Romanian Clitics: A Cross-Linguistic Perspective. Technical Report JHU-CogSci-97-9, Dept. of Cognitive Science, The Johns Hopkins University, Baltimore.
- ---. (1997c). Secondary predication and functional projections in French. *Natural Language and Linguistic Theory*, 15. 1–45.
- ---. (1998a). Morphological and prosodic alignment at work: the case of South-Slavic clitics. In K.N. Shahin, S.J. Blake, and E.-S. Kim (eds.), *Proceedings of the Seventeenth West Coast Conference on Formal Linguistics*. Stanford: CSLI Publications. 436–50.

- ---. (1998b). Second position clitics in a verb-second language: conflict resolution in Macedonian. In J. Austin and A. Lawson (eds.), *Proceedings of the Fourteenth Eastern States Conference on Linguistics*. Ithaca: CLC Publications, Cornell University. 139–49.
- ---. (2000a). Morphological and prosodic alignment of Bulgarian clitics. In J. Dekkers, F. van der Leeuw, and J. van de Weijer (eds.), *Optimality Theory: Phonology, Syntax, and Acquisition*. Oxford and New York: Oxford UP. 423–62.
- ---. (2000b). Optimal Romanian clitics: a cross-linguistic perspective. In V. Motapanyane (ed.), *Comparative Studies in Romanian Syntax*. Oxford: Elsevier, North Holland Linguistic Series 58. 227–64.
- ---. (2000c). Positioning Romanian verbal clitics at PF: an Optimality-Theoretic analysis. In B. Gerlach and J. Grijzenhout (eds.), *Clitics in Phonology, Morphology and Syntax*. Amsterdam and Philadelphia: Johns Benjamins. 219–54.
- ---. (2001). Masked second-position effects and the linearization of functional features. In G. Legendre, J. Grimshaw, and S. Vikner (eds.), *Optimality-Theoretic Syntax*. Cambridge: MIT Press. 241–77.

Lencek, Rado. (1982). The Structure and History of the Slovene Language. Columbus: Slavica.

Marušič, Franc. (2002). Slovenian Clitics Revisited. Ms., State University of New York-Stony Brook, Stony Brook.

---. (2003). CP Under Control. Paper presented at the Fifth European Conference on Formal Description of Slavic Languages, University of Leipzig, Leipzig, Germany, November 2003.

McCarthy, John and Alan Prince. (1993a). Generalized alignment. In G.E. Booij and J. van Marle (eds.), *Yearbook of Morphology 1993*. Dordrecht: Kluwer. 79–153. [Available as ROA-7, Rutgers Optimality Archive, <a href="http://roa.rutgers.edu">http://roa.rutgers.edu</a>.]

---. (1993b). Prosodic Morphology I: Constraint Interaction and Satisfaction. Technical Report No. 3, Center for Cognitive Science, Rutgers University, New Brunswick. [Available in revised form (12/2001) as ROA-482, Rutgers Optimality Archive, <a href="http://roa.rutgers.edu">http://roa.rutgers.edu</a>.]

O'Connor, Rob. (2002). The Placement of Enclitics in Bosnian, Croatian and Serbian. Ms., University of Manchester, Manchester, England. [Available as ROA-521, Rutgers Optimality Archive, <a href="http://roa.rutgers.edu">http://roa.rutgers.edu</a>.]

Priestly, Tom M.S. (1993). Slovene. In B. Comrie and G.G. Corbett (eds.), *The Slavonic Languages*. London and New York: Routledge. 388–451.

Prince, Alan and Paul Smolensky. (2004). Optimality Theory: Constraint Interaction in Generative Grammar. Malden, MA: Blackwell. [An earlier, long-standing version from 1993 was made available in 2002, in revised form, as ROA-537, Rutgers Optimality Archive, <a href="http://roa.rutgers.edu">http://roa.rutgers.edu</a>.]

Progovac, Ljiljana. (1996). Clitics in Serbian/Croatian: Comp as the second position. In A. Halpern and A. Zwicky (eds.), *Approaching Second: Second Position Clitics and Related Phenomena*. Stanford: CSLI Publications. 411–28.

- ---. (1998). Clitic clusters and coordination: the case of Serbo-Croatian. In J. Austin and A. Lawson (eds.), *Proceedings of the Fourteenth Eastern States Conference on Linguistics*. Ithaca: CLC Publications, Cornell University. 161–69.
- ---. (2000). Where do clitics cluster? In F. Beukema and M. den Dikken (eds.), *Clitic Phenomena in European Languages*. Amsterdam: Johns Benjamins. 249–58.

Pullum, Geoffrey K. and Arnold M. Zwicky. (1984). The syntax-phonology boundary and current syntactic theories. *The Ohio State University Working Papers in Linguistics*, 29. 105–16.

---. (1988). The syntax-phonology interface. In F.J. Newmeyer (ed.), Linguistics: The Cambridge Survey; Volume I, Linguistic Theory: Foundations. Cambridge: Cambridge UP. 255–80.

Radanović-Kocić, Vesna. (1988). *The Grammar of Serbo-Croatian Clitics: A Synchronic and Diachronic Perspective*. Ph.D. dissertation, University of Illinois, Urbana-Champaign.

---. (1996). Placement of Serbo-Croatian clitics: a prosodic approach. In A. Halpern and A. Zwicky (eds.), *Approaching Second:* Second Position Clitics and Related Phenomena. Stanford: CSLI Publications. 429–45.

Rehder, Peter. (1998). Das Slovenische. In P. Rehder (ed.), Einführung in die slavischen Sprachen. Darmstadt: Wissenschaftliche Buchgesellschaft. 230–45.

Richardson, Matthew. (1997). Czech clitics: 2P or not 2P that is the question. In L. Kaiser (ed.), *Y.A.L.E. 1: Studies in the Morphosyntax of Clitics*. New Haven: Dept. of Linguistics, Yale University. 131–50.

Rivero, María-Luisa. (1997). On two locations for complement clitic pronouns: Serbo-Croatian, Bulgarian and Old Spanish. In A. van Kemenade and N. Vincent (eds.), *Parameters of Morphosyntactic Change*. Cambridge: Cambridge UP. 170–206.

Roberts, Taylor. (1996). The Optimal Second Position in Pashto. Ms., MIT, Cambridge. [Available as ROA-174, Rutgers Optimality Archive, <a href="http://roa.rutgers.edu">http://roa.rutgers.edu</a>.]

Schütze, Carson T. (1994). Serbo-Croatian second position clitic placement and the phonology-syntax interface. In A. Carnie, H. Harley, and T. Bures (eds.), *Papers on Phonology and Morphology*. Cambridge: Dept. of Linguistics and Philosophy, MIT. 373–473. (*MIT Working Papers in Linguistics 21*.)

---. (1996). Serbo-Croatian clitic placement: an argument for prosodic movement. In J. Toman (ed.), *Annual Workshop on Formal Approaches to Slavic Languages: The College Park Meeting, 1994.* Ann Arbor: Michigan Slavic Publications. 225–48.

Selkirk, Elisabeth. (1978). On Prosodic Structure and its Relation to Syntactic Structure. Bloomington: Indiana University Linguistics Club.

- ---. (1981). On prosodic structure and its relation to syntactic structure. In T. Fretheim (ed.), *Nordic Prosody II: Papers from a Symposium*. Trondheim: TAPIR. 111–40.
- ---. (1984). Phonology and Syntax: The Relation between Sound and Structure. Cambridge: MIT Press.
- ---. (1995). The prosodic structure of function words. In J. Beckman, L. Walsh Dickey, and S. Urbanczyk (eds.), *Papers in Optimality Theory*. Amherst: University of Massachusetts Graduate Linguistics Student Association. 439–70. (*University of Massachusetts Occasional Papers in Linguistics*, 18.)
- ---. (1996). The prosodic structure of function words. In J.L. Morgan and K. Demuth (eds.), Signal to Syntax: Bootstrapping from Speech to Grammar in Early Acquisition. Mahwah: Lawrence Erlbaum Associates. 187–214.

Tomić, Olga Mišeska. (1996). The Balkan Slavic clausal clitics. *Natural Language and Linguistic Theory*, 14. 811–72.

- ---. (1997). Non-initial as a default clitic position. *Journal of Slavic Linguistics*, 5. 301–323.
- ---. (2000). On clitic sites. In F. Beukema and M. den Dikken (eds.), Clitic Phenomena in European Languages. Amsterdam: John Benjamins. 293–316.

Toporišič, Jože. (1965–70). *Slovenski knjižni jezik*. 4 vols. Maribor: Obzorja.

---. (1969). Zakaj ne po slovensko: Slovene by Direct Method. Ljubljana: Slovenska izseljenska matica.

- ---. (1976). Slovenska slovnica. Maribor: Obzorja. (Reprinted 1984, 1991, and 2000.)
- ---. (1982). *Nova slovenska skladnja*. Ljubljana: Državna založba Slovenije.
- ---. (1992a). Enciklopedija slovenskega jezika. Ljubljana: Cankarjeva založba.
- ---. (1992b). Zakaj ne po slovensko: Slovene by Synthetic Method. Ljubljana: Filozofska fakulteta.
- ---. (1994). Slovenski jezik in sporočanje 1. Maribor: Obzorja. (Reprinted 1996 and 1997.)
- ---. (1996). Slovenski jezik in sporočanje 2. Maribor: Obzorja. (Reprinted 1997.)

Truckenbrodt, Hubert. (1995). Phonological Phrases: Their Relation to Syntax, Focus, and Prominence. Ph.D. dissertation, MIT, Cambridge.

---. (1999). On the relation between syntactic phrases and phonological phrases. *Linguistic Inquiry*, 30. 219–55.

VanLoon, Jennifer. (1997). Pronominal morphology in Sulimani Kurdish. In L. Kaiser (ed.), *Y.A.L.E. 1: Studies in the Morphosyntax of Clitics*. New Haven: Dept. of Linguistics, Yale University. 151–74.

Vries, Mark de. (1999). Extraposition of Relative Clauses as Specifying Coordination. In T. Cambier-Langeveld, A. Lipták, M. Redford, and E.J. van der Torre (eds.), *Proceedings of the 7<sup>th</sup> Conference of the Student Organization of Linguistics in Europe*. Leiden: SOLE. 293–309.

Wackernagel, Jacob. (1892). Über ein Gesetz der indogermanischen Wortstellung. *Indogermanische Forschungen*, 1. 333–436.

Wilder, Chris. (1997a). English finite auxiliaries in syntax and phonology. In J.R. Black and V. Motapanyane (eds.), *Clitics, Pronouns and Movement*. Amsterdam and Philadelphia: John Benjamins. 321–62. Also (1996). In A. Alexiadou, N. Fuhrop, P. Law, and S. Löhken (eds.), *Proceedings of the Workshop on the Syntax, Morphology and Phonology of Clitics: Papers on Clitics*. 166–91. (Zentrum für Allgemeine Sprachwissenschaft Papers in Linguistics 6.))

---. (1997b). Some properties of ellipsis in coordination. In A. Alexiadou and T. Hall (eds.), *Studies in Universal Grammar and Typological Variation*. Amsterdam: Johns Benjamins. 59–107.

Wilder, Chris and Damir Ćavar. (1994a). Long head movement? Verb movement and cliticization in Croatian. *Lingua*, 93. 1–58.

---. (1994b). Word order variation, verb movement, and economy principles. *Studia Linguistica*, 48. 46–84.

---. (1997). Verb Movement, Cliticization, and Coordination. Ms., Zentrum für Allgemeine Sprachwissenschaft, 6, Berlin, Germany and University of Hamburg, Hamburg, Germany.

Zwicky, Arnold M. (1977). *On Clitics*. Bloomington: Indiana University Linguistics Club.

#### **POVZETEK**

## O SKLADENJHSKIH IN PROZODIČNIH DOLOČNICAH PRI UMEŠČANJU NASLONK V SLOVENŠČINI

V pričujoči analizi umeščanja slovenskih naslonk na drugo mesto v povedi avtor ugotavlja, da je umeščanje že najbolje pojmovati kot oblikoslovni proces besednozvezne afiksacije, kot predlagata že Anderson (1992, 1995, 1996, 2000) in Legendre (1996, 1997a, 1998a, 1998b, 2000a, 2000b, 2000c). Pregled prostih povedi (tj. takih, ki vsebujejo le en stavek brez intonacijskih premorov) in zloženih povedi (takih, ki vsebujejo različne vrste odvisnikov ali drugih delov, ki jih spremljajo intonacijski premori, npr. vrivke, pristavke in oziralne odvisnike) pokaže, da analize v okviru optimalnostne teorije (Prince in Smolensky 2004), ki temelji na omejitvah, ki se nanašajo izključno na skladenjske (npr. CP in IP) ali izključno na prozodične določnice (npr. na fonološke in intonacijske fraze; prim. O'Conor 2002 za bosanski/hrvaški/srbski jezik), ne morejo v celoti pojasniti različnih pojavov pri umeščanju naslonk v slovenščini. Glede na to avtor meni, da hierarhično urejene oblikoslovne omejitve, ki jih je mogoče kržiti, in ki se nanašajo tako na skladenjske kot na prozodične določnice, lahko bolje pojasnijo umeščanje naslonk v navedenih tipih povedi. Ta njegov predlog ponuja razlago za slovenske povedi, v katerih se naslonke z drugega mesta pojavljajo na začetku tako v prozodičnem kot skladenjskem smislu, če upoštevamo možnost, da obstaja fonološko ništa prvina, npr. pro, ki zaseda prvo mesto v skladnji. Tako lahko zaključimo, da tudi v takih primerih deluje (skladenjsko usmerjena) umestitev na drugo mesto. Glede na to, da je predhodna prvina (npr. pro) prikrita, je uresničena tudi hierarhično nižja omejitev, ki zahteva, da naslonke z drugega mesta nastopajo na začetku v intonacijski frazi, in sicer tako, da se poravnata leva robova zadevne naslonke in intonacijske fraze. Bolj zapleteno zložene povedi v slovenščini nadalje kažejo vsestransko delovanje omejitev na umeščanje naslonk, ki se nanašajo na skladenjske in prozodične določnice.

#### 

## Community of the commun

The second of th was a second of the second of ri de de la companya 

THE SECOND SECURITY AND SECURITY OF THE SECOND SECURITY OF THE SECOND SE  $\overline{a}_{i}$ 

 $-\omega$  of  $\frac{\omega}{2\pi}$  of  $\omega$ 

The second of th 260 H 193 H in the second of the second of

the second of th