

The Phonology and Syntax of Preverbal and Postverbal Subject Clitics in Northern Italian Dialects

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We argue that preverbal and postverbal subject clitics in northern Italian dialects are the same lexical items. The different forms of proclitics and enclitics can be explained phonologically (i.e., by phonological constraints ranked in a particular order) and by the hypothesis that morphologically neutral vowels may be inserted in final position (what we call *morphological epenthesis*). The distributional differences in the paradigm derive from a competition between overt clitics and null subjects that is resolved in an intricate way across sentence types and across dialects and that depends on the interaction of clitic and verb movement and on Minimize Structure.

Keywords: subject clitics, northern Italian dialects, clitic phonology, morphological epenthesis, clitic movement, verb movement

1 Introduction

In most northern Italian dialects (NIDs), subject clitic pronouns appear in preverbal position in declarative sentences and in postverbal position in (main) interrogative sentences. The following is a typical paradigm, taken from the dialect of Donceto, an Emilian dialect spoken in the province of Piacenza:¹

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¹Unless otherwise indicated, all data reported in this study are from field research. We are very grateful to our informants for their time and patience. The patterns found in Donceto are common throughout Emilia-Romagna (see Gaudenzi 1889, Zörner 1989, Mandelli 1995, Repetti, to appear).

(1) a.	(ə)- 'be:v	b.	'be:v	-jə?
	ət- 'be:v		'be:v	-ət?
	əl- 'be:və		'be:və	-l?
	(ə)- bu'vum		bu'vum	-jə?
	(ə)- bu'vi		bu'vi:	-v?
	i- 'be:vən		'be:vən	-jə?
	'I/you/he/etc. drink(s)'		'do(es) I/you/he/etc. drink?'	

In declarative sentences, the 1sg, 1pl, and 2pl forms of the verb have an optional preverbal vocalic segment, [ə]; the other three forms have an obligatory preverbal clitic, 2sg [ət], 3sg masculine [əl], 3pl masculine and feminine [i]. In interrogative sentences, a subject clitic is obligatory in postverbal position in all persons. Interrogative sentences may also display the optional preverbal vowel [ə], which is analyzed in Cardinaletti and Repetti 2004 as an interrogative vowel that realizes a functional head of the C(omp) layer (for the notion of layer, see Rizzi 1997). This element will not be discussed here.

We also will not discuss the 3sg feminine /la/, which behaves syntactically like its masculine counterpart and which, phonologically speaking, is realized faithfully in preverbal and postverbal position: [la 'be:və] 'she drinks', ['be:və-la] 'does she drink? (lit. drink-she)'. The only context in which this subject clitic is not realized faithfully is with vowel-initial verbs. In these contexts, the /a/ is not realized: [l ε] 'she is', [l a bu'vi:d] 'she drank (lit. she has drunk)'.

As shown in (1), the distribution and the phonological form of the postverbal elements are in some cases different from what is found in preverbal position. These types of differences between proclitics and enclitics are common in all NIDs. To account for these differences, and for other properties displayed by interrogatives (see sections 6 and 7), various researchers have assumed that enclitic elements do not belong to the same series of pronouns as proclitic elements. This is the standard position, taken, for example, by Poletto (1998:325): when noting differences between preverbal and postverbal subject clitics in Veneto dialects, she states: "non sembra sostenibile l'idea che i proclitici delle frasi assertive e gli enclitici della (sic) interrogative siano elementi della stessa serie, (le differenze non sembrano riconducibili al diverso contesto fonologico)" ('the idea that the proclitics of declarative sentences and the enclitics of interrogative sentences are elements of the same series does not seem tenable, (the differences do not seem to be due to the different phonological contexts)'; our translation).

In this article, we develop an alternative analysis. We claim that in the Emilian dialect of Donceto, as well as in Veneto and Piedmontese dialects discussed in previous works, the postverbal material should be considered a subject clitic belonging to the same series as the three proclitic pronouns in the 2sg, 3sg, and 3pl. The phonological differences can be explained as the result of the language-specific ranking of certain phonological constraints.

Furthermore, we show that subject clitic pronouns are in competition with null subjects, and that the competition is resolved in an intricate way across sentence types and across dialects depending on the interaction between clitic and verb movement and on the principle Minimize Structure (Cardinaletti and Starke 1999). (In the 1sg, 1pl, and 2pl, the optional preverbal schwa

is not a subject clitic, but the default realization of a functional head; see Cardinaletti and Repetti 2004.) We adopt a derivational account of the syntax, which feeds into a constraint-based, Optimality Theory (OT) model of phonology. (See Bošković 2001, Golston 1995, and Selkirk 1995 for syntax-prosody interactions.)

An advantage of the single-paradigm hypothesis is that it allows us to account for the variation observed among NIDs and expressed in many generalizations by Renzi and Vanelli (1983), facts that previous approaches leave unexplained. We show that once the nature of the preverbal and postverbal material is correctly established, the generalizations concerning crosslinguistic variation can be addressed successfully.

The article is organized as follows. In section 2, we discuss previous analyses of these structures. In section 3, we provide crucial prosodic evidence against the previous analyses. We then address the following evidence that motivated the previous approaches: the different forms the clitics take in preverbal versus postverbal position (section 4), the different distribution (mandatory or absent) of the clitics in preverbal versus postverbal position (section 5), modifications to the host verb with enclisis (section 6), and cases where subject proclitics and enclitics cooccur (section 7). We show that all of these facts can be successfully accounted for by adopting the single-paradigm hypothesis. In section 8, we state our conclusions.

2 Previous Accounts

Most researchers agree in analyzing preverbal clitic pronouns in NIDs as heads adjoined to I(nflection). However, phonological and distributional differences between proclitics and enclitics (illustrated in (1)), as well as other properties displayed by interrogatives (discussed in sections 6–7), have led many researchers to assume that enclitic elements do not belong to the same paradigm as proclitic elements.

Researchers have taken two main approaches to analyzing the postverbal material: either as a different series of subject pronouns, or as a verbal affix. Here, we refer to both approaches as the *two-paradigm hypothesis*. In using this terminology, we do not take a stance on the difference between paradigms and series of pronouns; we only point out that those approaches view the preverbal material as lexically different from the postverbal material. Our own claim is that the preverbal and postverbal subject clitic pronouns are lexically the same.

As examples of the approach whereby the postverbal and preverbal forms inhabit separate paradigms, consider Poletto 1993b and Munaro 1999. Poletto (p. 216) suggests that ‘‘interrogative subject clitics . . . are not head adjoined to Agr, as assertive subject clitics are, but NPs in SpecAgr . . . incorporated into C’’ when the verb moves to this head in interrogative sentences.² Munaro (pp. 11, 19) takes the postverbal elements to be a different series of subject clitics generated in the head Type that defines sentence types.

² By claiming that subject enclitic pronouns are NPs in Spec,AgrP, Poletto implies that they are like weak pronouns in Cardinaletti and Starke’s (1999) system. However, subject enclitics do not display the properties of postverbal weak object pronouns, as discussed by Ordóñez and Repetti (2006): they are not stressed, they do not affect the verbal stress pattern, and they are not morphologically more complex than their proclitic counterparts.

The more “traditional” approach to enclitics as verbal affixes is illustrated by the notion of interrogative conjugation found in Benincà and Vanelli 1982:17–18, Benincà 1983:31, Fava 1993:2496, and Loporcaro 1996:470 (see also Rohlfs 1968:150, Zamboni 1974:25), and by the following quotations from more recent works: “the enclitic series is considered to be agreement morphemes that check their features in a projection located quite high in the structure” (Poletto 2000:55); “ICLs [interrogative clitics] are inflectional morphology” (Goria 2004:215).³

The above analyses come at a high cost: they imply that paradigms of pronouns must be marked in the lexicon as “word/affix,” “proclitic/enclitic,” or “declarative/interrogative.” In the absence of definitive evidence, it is preferable not to posit these types of lexical differences; the null hypothesis is that proclitic and enclitic elements are the same lexical items. It is desirable to derive the proclitic versus enclitic status of clitic pronouns from independent phonological and/or syntactic principles. Furthermore, apart from subject clitics, no type of subject is marked with respect to its occurrence in declarative and interrogative sentences. Finally, a two-paradigm hypothesis is not necessary for other clitic elements, such as object clitics, which also appear both proclitically and enclitically (e.g., It. *Maria lo vuole fare*, *Maria vuole farlo* ‘Maria wants to do it’); the two-paradigm hypothesis thus postulates an unmotivated difference between subject and object clitics.

In the following section, we show that the two-paradigm hypothesis is not only unnecessary but empirically inadequate, and we argue instead for the single-paradigm hypothesis.⁴

3 Prosodic Evidence against the Two-Paradigm Hypothesis

In this section, we provide evidence against the two-paradigm hypothesis—and particularly the analysis of subject enclitics as affixes—based on prosodic facts from the dialect of Donceto and from Veneto dialects. Specifically, we show that enclitic pronouns cannot be considered affixes because constraints that apply within the domain of the Prosodic Word (PW) (i.e., stem + affixes) do *not* apply to verb + enclitic units.

We have identified a number of constraints in Donceto and other NIDs that apply to PWs but do not apply to verb + enclitic structures. For example, in Donceto, while words may contain coda clusters such as /st/ ([ust] ‘August’), enclitic /t/ cannot form part of a complex coda: /pas/ + /t/ > *[pas-t] ‘do you pass? (lit. pass-you(SG))’ ([pas-ət]). Several metrical constraints on words in Donceto and other NIDs further illustrate this point. First, if enclitic pronouns were affixes, one might expect them to affect verb stress, as inflectional affixes seem to. For example, in Paduan one finds [ˈmaɲ + i] (‘eat’ 2sg), [maˈɲ + emɔ] (‘eat’ 1pl), both with penultimate stress.

³ A similar analysis has been proposed for French, although the paradigm of postverbal subject clitics does not differ from that of preverbal subject pronouns. Friedemann (1995) analyzes enclitic elements as agreement markers, and Sportiche (1999) analyzes them as morphological affixes on the verb. We return to French in sections 5.2 and 5.5, where we take the more traditional view that preverbal subject pronouns are weak pronouns (i.e., phrases) and postverbal ones are clitic pronouns (i.e., heads).

⁴ The single-paradigm approach has recently been adopted by researchers working on the phonology of Romance object clitics: Popescu (2000) for Romanian, Bonet and Lloret (2005a,b) for Catalan, and José and Auger (2005) for Picard. See also Salvi 2003:212–214 for Italian dialects.

However, enclitics do not affect verb stress (also see footnote 2): Paduan [*'maŋ + i*] ('eat' 2sg), [*'maŋ + i-to*] 'do you eat? (lit. eat-you(SG))' (*[*ma'ŋ + i-to*]). (We indicate an inflectional/derivational morpheme boundary with "'+" and a clitic boundary with "'-'.) Second, all of the dialects examined here display the familiar "three-syllable window" of stress, meaning that stress may fall on one of the final three syllables of the word, but not on the pre-antepenultimate syllable. However, stress does occur in pre-antepenultimate position with verb + enclitic pronouns. For example, in Paduan, *teléfoni-to?* 'do you telephone? (lit. telephone-you(SG))', *Pétene-lo Maria?* 'Does he comb Maria? (lit. comb-he Maria)' show stress on the fourth syllable from the end of the verb + enclitic unit. These facts support the view that enclitic pronouns are prosodically different from suffixes.

Additional examples of PW-level constraints that do not apply to verb + enclitic structures come from Paduan. Paduan shows a slight lengthening of the stressed vowel (as compared to an unstressed vowel) in an open syllable, similar to what is found in standard Italian (Alberto Zamboni, pers. comm., Romito and Trumper 1993; see also Canepari 1979:209 for Paduan Italian).⁵ This process applies within inflected words, such as those in (2a). Crucially, it does not occur with verb + enclitic structures (2b). (We indicate slight lengthening of the vowel with a single dot after the vowel. Geminate consonants are disallowed in these dialects; therefore, we do not expect to find raddoppiamento sintattico.) If the enclitic pronoun in (2b) were an inflectional morpheme and therefore part of the same PW as the verb, we would expect lengthening.⁶

(2)	<i>No lengthening</i>	<i>Lengthening</i>
a.	*[el 'ga ^o]	[el 'ga. ^o]
	the rooster	
	*[el 'sito]	[el 'si.to]
	the site	
	'the (Web) site'	
b.	[lo 'ga- ^o]	*[lo 'ga-- ^o]
	it has-he	
	'Does he have it?'	
	[ge 'si-to]	*[ge 'si-.to]
	there are-you(SG)	
	'Are you there?'	

The same holds in Venetian for the 3sg. For the 2sg, most speakers do not allow enclisis (see footnote 29), but for those speakers who do allow it in the 2sg form of interrogatives, the verb

⁵ Romito and Lorenzi (1997) show that in Paduan, unlike Italian, within the context of a phrase only a stressed syllable that is phrase-final is privileged with regard to lengthening. (Romito and Lorenzi's data consist of words in isolation, hence phrases.)

⁶ Some speakers of Paduan exhibit the "l evanescente" (pronunciation of /l/ as semivocalic [ʎ]) in certain contexts, including intervocalic position word-internally (*'kavoli/* > [*'kavo^ʎi*] 'cabbages', */galo/* > [*'ga^ʎo*] 'rooster') and across clitic boundaries (*/ga-lo/* > [*'ga-^ʎo*] 'does he have? (lit. has-he)'), and phrase-initial position in some contexts (*/la kasa/* > [*'^ʎa kaza*] 'the house'). An in-depth discussion of "l evanescente" is beyond the scope of this article.

displays a closed syllable (*gas-tu?* ‘do you have? (lit. have-you(SG))’), so vowel lengthening is neither expected nor attested.

We conclude that in the NIDs that we have investigated, verb + enclitic structures do not form a single PW (i.e., clitics are neither ‘internal clitics’ nor ‘affixal clitics,’ according to Selkirk’s (1995) terminology) and enclitic pronouns cannot be considered affixes on the verb. Instead, we assume that in NIDs, clitics are ‘free clitics’ that are adjoined to the same Phonological Phrase (PP) as the verb.⁷

The fact that verb + enclitic structures are not treated as single PWs argues against analyzing the enclitic elements as inflectional affixes, and hence against one instantiation of the two-paradigm hypothesis. In the following sections, we examine the evidence that motivated the two-paradigm hypothesis—phonological differences between proclitics and enclitics (section 4), distributional differences (section 5), changes to the host verb with enclitic pronouns (section 6), and cooccurrence of proclitics and enclitics (section 7)—and we show that the single-paradigm hypothesis suffices to account for it.

4 On the Phonology of the Preverbal and Postverbal Elements

We first address the issue of the phonological form of the preverbal and postverbal items in (1). Although the two forms are not identical, they are not as different as might be expected under the two-paradigm hypothesis. If the preverbal and postverbal series were totally unrelated (clitic pronoun vs. affix, proclitic vs. enclitic series), greater differences might well exist.

The first observation is that the postverbal clitic found in interrogative sentences in some cases appears to be closely related or identical to the preverbal clitic found in declarative sentences (2sg, 3sg, 3pl), while in other cases the two elements appear to be unrelated (1sg, 1pl, 2pl). The single-paradigm hypothesis straightforwardly accounts for the former case; the latter case requires further discussion.

4.1 2sg, 3sg, 3pl

The single-paradigm hypothesis easily accounts for the 2sg, 3sg, and 3pl subject clitics. In (3), we give our proposed underlying form, as well as the output forms attested in various contexts in Donceto.

⁷ Another possibility would be to assume an additional layer of prosodic structure called the Clitic Group (Nespor and Vogel 1986). Phonologists have suggested various prosodizations of Romance object clitics: as internal clitics (Catalan: Bonet and Lloret 2005a; Neapolitan: Bafile 1991–1992; Lucanian enclitics: Peperkamp 1997; Italian and Neapolitan single clitics: Monachesi 1996); as affixal clitics (Neapolitan: Peperkamp 1997; all Romance languages: Loporcaro 2000); as free clitics (Italian: Peperkamp 1997, Bafile 1991–1992; Argentinian Spanish: Huidobro 2005); as Prosodic Words (Italian and Neapolitan two-clitic clusters: Monachesi 1996); as part of the Clitic Group (all Romance languages: Nespor and Vogel 1986).

(3) <i>Subject clitic</i>	<i>Preverbal position (mandatory)</i>	<i>Postverbal position (mandatory)</i>
2sg: /t/	[ət-] [ət-be:v] 'you drink'	[-ət] [be:v-ət] 'do you drink?' (lit. drink-you)'
	[tə-] [tə-skri:v] 'you write'	[-t] [vɛ-t] 'do you go?' (lit. go-you)'
	[t-] [t-ɛ bu'vi:d] 'you drank'	
3sg: /l/	[əl-] [əl-be:və] 'he drinks'	[-l] [be:və-l] 'does he drink?' (lit. drink-he)'
	[lə-] [lə-skri:və] 'he writes'	
	[l-] [l-a bu'vi:d] 'he drank'	
3pl: /i/	[i-] [i-be:vən] 'they drink'	[-jə] [be:vən-jə] 'do they drink?' (lit. drink-they)'
	[j-] [j-an bu'vi:d] 'they drank'	

The proclitic and enclitic forms of these persons are similar in two ways: the clitics are mandatory both preverbally and postverbally, and the surface forms can be straightforwardly derived from the posited underlying forms.⁸

In both the proclitic and the enclitic case, the assumed underlying form may differ from the various output forms in that an extra schwa may be present either before or after the consonantal part of the pronoun in the 2sg and 3sg, or after the glide in the 3pl. We take this vowel to be epenthetic. First, it has the same quality as the usual phonological epenthetic vowel for this dialect. Second, its position is totally predictable. To make the process of epenthesis clear, we turn now to other data from Donceto and to data from other NIDs (see Repetti 1995a,b).

A consonant that cannot be syllabified with an input vowel is syllabified with an epenthetic vowel (indicated by underlining). The position of the epenthetic vowel varies depending on the phonological context: the input segments should remain contiguous in the output (4a); complex onsets/codas are avoided (4b); the output should end in a consonant (4c). (Words pronounced in isolation constitute a PP, so the constraints responsible for the forms in (4) may be PP-bound, as well as PW-bound.)

- (4) a. /nvud/ > [ən'vu:d] (*[nə'vu:d])
 nephew
 b. /krde/ > [kə'r'de] (*[krə'de])
 believe(2PL)
 c. /magr/ > [mægər] (*[mægrə])
 thin(MASC.SG)

⁸ To account for the postverbal position of the subject pronoun in interrogatives, we assume that the verb moves from its "declarative" position following the subject clitic to a position preceding the subject clitic. For the syntactic analysis of this instance of verb movement, see section 5.2. For verb movement in interrogatives in other NIDs, see Poletto 2000:45.

Within a constraint-based approach to phonology, such as OT (Prince and Smolensky 1993, McCarthy and Prince 1993), we can use the constraints and ranking in appendix A to account for the patterns found in Donceto. Appendix B provides the tableaux illustrating the analysis of the data in (4) and other data motivating the proposed constraint hierarchy.

The syllabification of /s/ + consonant clusters is slightly more complex than the syllabification of other clusters (5). While epenthesis is optional before utterance-initial /sC/ clusters (5a), it is clearly mandatory phrase-internally (5b) since resyllabification takes place across word boundaries. In (5b–d), the epenthetic vowel is placed so that high-ranking constraints are satisfied. (See Repetti 1997 and appendix B.)

- (5) a. /spetʃ/ > [spetʃ]/[əspetʃ]
 mirror
- b. /set spetʃ/ > *[set spetʃ]/[set əspetʃ]
 seven mirrors
- c. /i vurisn par'la/ > [i vu'risən par'læ]
 they would-like to-speak
- d. /i vurisn stu'dja/ > [i vu'risnə stu'djæ]
 they would-like to-study

Considering the process of epenthesis described above, we can now easily account for the syllabification of subject clitics. In the following paragraphs, we briefly describe the syllabification of the 2sg, 3sg, and 3pl subject clitics; and in appendix B, we provide tableaux illustrating the syllabification of proclitics and enclitics.

An epenthetic vowel is not necessary if the consonantal clitic (/t/ or /l/) can be syllabified with the verb as a simple onset (6)⁹ or a simple coda (7).

- (6) /t-ε buvi:d/ > [t ε bu'vi:d] /l-a buvi:d/ > [l a bu'vi:d]
 you(SG)-have drunk he-has drunk
 'you drank' 'he drank'
- (7) /vε-t/ > [vε t] /be:və-l/ > [be:və l]
 go-you(SG) drinks-he
 'are you going?' 'does he drink?'

The epenthetic vowel precedes the consonantal proclitic (/t/ and /l/) when the following verb begins with a single consonant (8a), the result being that the input segments remain contiguous in the output (see (4a)). The epenthetic vowel follows the consonantal proclitic when the verb begins with an /sC/ cluster (8b) so as to form optimal syllables (see (5b)).

⁹ The available data include only vowel-initial auxiliaries and the copula. We predict that the same pattern would hold for lexical verbs beginning with a vowel, but we cannot check this prediction since, to our knowledge, there are no vowel-initial verbs in this dialect. Common Romance vowel-initial verbs are consonant-initial in Donceto: It. *abitare* = /sta/ 'to live', It. *amare* = /vu'le beŋ/ 'to love', It. *entrare* = /vni dentr/ 'to enter', It. *incontrare* = /tru'va/ 'to meet', It. *uscire* = /na fɔra/ 'to exit', and so on.

- (8) a. /t-be:v/ > [ə t be:v] /l-be:və/ > [ə l be:və]
 you(SG)-drink he-drinks
 b. /t-skri:v/ > [t ə skri:v] /l-skri:və/ > [l ə skri:və]
 you(SG)-write he-writes

If, unlike in (7), the consonantal enclitic cannot be syllabified with the preceding verb, an epenthetic vowel is inserted before it (e.g., [be:v-ət] ‘do you drink? (lit. drink-you(SG))’), satisfying the constraint requiring consonants in final position (see (4c)). (This is found with enclitic /t/ only, since enclitic /l/ always follows a verb ending in a vowel representing the 3sg inflectional morpheme.)

As for the proclitic form of the 3pl nominative pronoun (/i/), it is realized as [i] before a consonant ([i-be:vən] ‘they drink’) and as [i] or [j] before a vowel (/i/ can optionally be glided to [j]); [i-an bu'vi:d]/[j-an bu'vi:d] ‘they drank (lit. they-have drunk)’).

The explanation for the phonological realization of the enclitic form of the 3pl pronoun (/be:vən-i/ > ['be:vən-jə] ‘do they drink? (lit. drink-they)’) is slightly more complex. Why is an epenthetic vowel necessary with enclitic /i/? And why does the epenthetic vowel appear *after* the clitic rather than *before* it? The answer to the first question has to do with the inventory of segments permitted in PP-final position. The preference hierarchy of final segments for Donceto (based on frequency, phonological processes such as apocope, the position of epenthetic vowels, etc.) is as follows: stressed vowels and consonants (as seen above) are the most preferred, followed by glides, unstressed [+low] vowels ([a ə æ]), and [ə] (which we analyze as featurally empty). Least preferred are the unstressed [–low] vowels ([i y u e ø o ε ə ə]).¹⁰ Hence, the vocalic clitic /i/ is not permitted in final position. Why do we find ['be:vən-jə] instead of *['be:vən-əj]? The answer has to do with the requirement that the input segments remain contiguous in the output.

In conclusion, the 2sg, 3sg, and 3pl subject clitics in Donceto have the lexical forms in (3): /t/, /l/, /i/. These clitics are mandatory in proclitic and enclitic position, and the output forms can be accounted for by considering phonological constraints active in the language.¹¹

¹⁰ A final, unstressed [–low] vowel that is part of the grammatical word is permitted because of a higher-ranking constraint requiring the edges of the grammatical word to be aligned with the edges of the PW, thereby banning epenthesis or deletion at the edges of a word: ['kopi] ‘pairs’ (*['kopjə]), ['aku] ‘waters’ (*['akwə]), ['bobi] ‘Bobbio (place name)’ (*['bobjə]), ['ziu] ‘uncle’ (*['ziwə]). Evidence that the final ([–low]) vowel in these examples is part of the lexical stem, and not a separate morpheme, comes from the fact that it is not deleted or shifted in the presence of other inflectional or derivational morphemes: ['kopi]/['kopj + ə] ‘pairs/pair’, ['aku]/['akw + ə] ‘waters/water’, ['bobi]/[bo'bj + ez] ‘Bobbio/ from Bobbio’, ['ziu]/['ziu] ‘uncle/uncles’.

¹¹ Our approach is not novel. Early studies of NIDs treated the vowel in the 3sg subject proclitic as epenthetic (Gorra 1892, Piagnoli 1904, Bertoni 1905). Meyer-Lübke (1923) and Vanelli (1984) treat the vowel in the 2sg subject proclitic as epenthetic; however, they analyze the 3sg subject proclitic as monomorphemic (/VI/). Poletto (2000:14) takes the 2sg and 3sg clitics to have the form /t/ + V and V + /l/, respectively, although she claims that “there are reasons to believe that the vowel here is epenthetic” (p. 177n2).

4.2 *1sg, 1pl, 2pl*

In this section, we analyze the preverbal and postverbal elements in the 1sg, 1pl, and 2pl. We show that the two are not derived from the same form. Instead of taking the two elements to belong to two different series of subject clitics, we conclude that they are independent syntactic entities: the preverbal vowel is not a true subject clitic pronoun (Cardinaletti and Repetti 2004), while the enclitic elements are subject clitic pronouns.

4.2.1 Optional Preverbal Vowels versus Mandatory Postverbal Clitics The data in (9) show that whether or not an item is optional depends on the sentence type. In declarative sentences, the preverbal vowel is optional, while in interrogative sentences the postverbal clitic is mandatory. (Compare this with the other persons of the paradigm, where clitics are mandatory in both preverbal and postverbal position (3).)

(9)	<i>Preverbal position</i>	<i>Postverbal position</i>
	<i>(optional)</i>	<i>(mandatory)</i>
1sg	[ə-] [ə-be:v]/[be:v]	[-jə] [be:v-jə] [-j] [go-j]
1pl	[ə-] [ə-bu'vum]/[bu'vum]	[-jə] [bu'vum-jə]
2pl	[ə-] [ə-bu'vi]/[bu'vi]	[-v] [bu'vi:-v]

This is the first piece of evidence that the enclitic pronoun is not of the same syntactic nature as the preverbal vowel. If, as we claim, the preverbal vowel is not a subject clitic, the postverbal material can be analyzed as a subject clitic. Notice that it behaves like the three subject clitic pronouns discussed in section 4.1 in that it is mandatory.

4.2.2 The Phonological Unrelatedness of the Preverbal Vowel and Postverbal Clitics The second piece of evidence that the enclitic pronoun is not syntactically the same as the preverbal vowel comes from the fact that the two are phonologically unrelated.

If the optional preverbal schwa were the same element as the postverbal subject clitic, we would expect that, given the analysis of question formation adopted in footnote 8, the verb would move from its declarative position following the schwa to a position preceding it, as shown in (10).

- (10) a. /ə-be:v/ > */be:v-ə/
 b. /ə-bu'vum/ > */bu'vum-ə/
 c. /ə-bu'vi/ > */bu'vi-ə/

There is no phonological explanation for the differences between the expected interrogative forms in (10) and the actual ones in (11).

- (11) a. [be:v-jə]
 b. [bu'vum-jə]
 c. [bu'vi:-v]

Let us consider the 1sg. If the input were /be:v-ə/, two possible outputs might be (12a) and (12b). We might expect the fully faithful candidate (12a) to be selected since it is a well-formed

output, and we might expect candidate (12b) to be eliminated since there is no reason to expect a glide before schwa: glide insertion/gliding is not necessary or otherwise attested in this context. However, the actual output form is (12b).

- (12) /be:v-ə/ > a. *['be:v-ə]
 b. ['be:v-jə]

Similar problems arise in the analysis of the other two interrogative forms. The 1pl form, [bu'vum-jə], and the 2pl form, [bu'vi:-v], are not the output forms we expect given the posited inputs /bu'vum-ə/ and /bu'vi-ə/, respectively.

Given the problems with the analysis in (10), we conclude that the attested interrogative output forms are not related to the posited inputs. This conclusion is consistent with the proposal that the optional schwa occurring in preverbal position is not a subject clitic, but a different syntactic entity (see Cardinaletti and Repetti 2004).¹² If it is not a subject clitic, then it should not occur in postverbal position in interrogative sentences (see Renzi and Vanelli 1983:n11). In other words, we expect that the verb does not adjoin to it when it raises to a higher head in interrogative sentences.

Consider now the enclitic elements in (9). We have shown that they are unrelated to the preverbal vowel, so nothing prevents us from considering them subject clitic pronouns. We will show that all the properties displayed by the enclitic elements in (9) are compatible with this hypothesis.

4.2.3 *The Phonology of the 1sg, 1pl, 2pl Subject Enclitics* The proposed underlying forms of the 1sg, 1pl, and 2pl enclitics are listed in (13).

- (13) *Enclitic subject pronouns (interrogative sentences)*
 1sg /i/
 1pl /i/
 2pl /v/

The phonological analysis given in section 4.1 and appendix B for the realization of the 3pl enclitic pronoun /i/ also applies to the 1sg and 1pl enclitic pronoun /i/. In other words, these are syncretic forms.

- (14) a. /be:v-i/ > ['be:v-jə]
 drink-I
 'do I drink?'
 b. /buvum-i/ > [bu'vum-jə]
 drink-we
 'do we drink?'

¹² The optional preverbal element for 1sg, 1pl, and 2pl, realized as optional preverbal schwa in Donceto (1a), displays great crosslinguistic variation and cannot be traced back to any Latin pronoun. These are two additional arguments for keeping them separate from true subject clitics, which are instead rather uniform across dialects (see section 4.3) and which all derive from Latin pronouns (see section 4.2.4). See Cardinaletti and Repetti 2004 for discussion.

This analysis predicts, correctly, that if the verb ends in a stressed vowel, the 1sg or 1pl enclitic should be able to syllabify with it (with gliding of the /i/).

- (15) /go-i/ > [go-j]
 have-I
 ‘do I have?’

The form [go-j] does not violate any high-ranking constraints, and neither does [go-jə], which is an alternate pronunciation in careful speech.

As for the 2pl clitic, /v/, it always follows a vowel representing the 2pl inflectional morpheme, so it surfaces unchanged as [v] in coda position.¹³

- (16) /bu'vi-v/ > [bu'vi:-v]
 drink-you(PL)
 ‘do you drink?’

4.2.4 *Conclusions* The subject clitics proposed for Donceto are listed in (17).

- (17) Donceto subject clitic pronouns

Person	Singular	Plural
1	i	i
2	t	v
3	l	i

The proclitic and enclitic pronouns are the same lexical item. In the 2sg, 3sg, and 3pl, they are realized both preverbally and postverbally. The other three forms only appear postverbally in interrogative sentences. (See section 5.3 for a syntactic account of this distribution.)

The forms of the subject pronouns in (17) are all diachronically motivated. As Vanelli (1984, 1987) and others have noted, the subject clitic pronouns are derived from Latin nominative pronouns. The 2sg /t/ derives from the Latin nominative TU, and the 3sg /l/ and 3pl /i/ derive from the Latin demonstratives ILLU and ILLI, respectively. The 1sg (enclitic) pronoun derives from the Latin 1sg nominative pronoun EGO > /io/, which was reduced to a single vowel, /i/, and then extended to the 1pl (Rohlf's 1968:150). The 2pl (enclitic) /v/ derives from the Latin nominative pronoun VOS.

4.3 *Crosslinguistic Variation in the Phonology of Subject Clitics*

In the above detailed study of the Donceto subject clitic pronouns, we claim that the preverbal and postverbal pronouns are the same lexical item, and that differences between the forms of the

¹³ In the 2pl, the final vowel of the verb is short in the declarative form and long in the interrogative form with an enclitic pronoun: [bu'vi] ‘you(PL) drink’ versus [bu'vi:-v] ‘do you drink? (lit. drink-you(PL))’. In Donceto, certain coda consonants (such as /v/) require the preceding stressed vowel to be long. (See Ghini 2001 for an analysis of ‘lengthening consonants’ in the northern Italian Ligurian dialect of Miogliola.) For other changes to the verb caused by the presence of an enclitic pronoun, see section 6.

pronoun in proclitic and enclitic position can be accounted for phonologically by considering the constraints on phonological structure active in the language (sections 4.1 and 4.2.3). In this section, we show that the same analysis applies to other NIDs. The proclitic and enclitic forms of the pronouns are remarkably similar across dialects, and we account for the crosslinguistic variation observed in the phonological form of subject clitics as a consequence of productive phonological processes active in each dialect.

In (18), we provide the forms of the verb ‘to eat’ with subject clitics in declarative and interrogative sentences in Paduan. (Italian orthographic norms, adopted below for these dialect forms, use ⟨gn⟩ to represent [ɲ], ⟨ge⟩ to represent [dʒe], and ⟨gi⟩ to represent [dʒi] or [dʒ]. In addition, the lack of an accent mark indicates penultimate stress. For the raising of verb-final unstressed /a/ to [e] before subject enclitics in the 3sg and 3pl, see section 6.)

(18) *Paduan* (Benincà and Vanelli 1982)

a.	magno	b.	magno	-(j)?
	te- magni		magni	-to?
	el- magna		magne	-lo?
	magnemo		magnemo	-(j)?
	magné		magné	-o?
	i- magna		magne	-li?
	‘I/you/he/etc. eat(s)’		‘do(es) I/you/he/etc. eat?’	

Note that the phonological similarity between the proclitic and enclitic subject pronouns would be unexplained under the two-paradigm hypothesis: if the enclitic material were an affix or a different series of subject pronouns, as in the analyses mentioned in sections 1–2, we might expect greater variation in the phonological form of the enclitic pronouns with respect to the proclitic ones. Note also the similarity of the subject clitics among the NIDs (compare Donceto (1) with Paduan (18)). If we assume they have similar underlying forms, then we would expect similar outputs, but with some differences since each dialect ranks constraints differently.

The underlying forms of the subject clitic pronouns we propose for Paduan are given in (19). Note that in the dialects of Donceto and Padua, the subject clitic pronouns have nearly identical lexical forms (compare Paduan (19) with Donceto (17)) with the same distribution.

(19) Paduan subject clitic pronouns

Person	Singular	Plural
1	i	i
2	t	o
3	l	i~li

In Paduan, as in Donceto, the 1sg and 1pl pronouns are realized only enclitically. In Paduan, various output pronunciations are attested. The subject pronoun /i/ can be faithfully realized in the output (20a) (Benincà and Vanelli 1982:18) or with gliding after the final vowel of the verb (20b) (Zamboni 1974:42); or the final glide can be optionally deleted (20c) (Benincà and Vanelli 1982:18). (The forms in (20c) are similar to those found in Veronese (31); see section 5.4.)

- (20) /maɲo-i/ /maɲemo-i/
 a. [ˈmaɲo-i] [maˈɲemo-i]
 b. [ˈmaɲo-j] [maˈɲemo-j]
 c. [ˈmaɲo] [maˈɲemo]

The 2pl form of the subject clitic, /o/, is also realized in postverbal position only. It can be realized faithfully as [o] (Benincà and Vanelli 1982:18), raised to [u] (Benincà 1983:27), or glided to [w] (Paola Benincà, pers. comm.). All of these variants—[maˈɲe-o], [maˈɲe-u], [maˈɲe-w]—derive from the input /maˈɲe-o/ with, respectively, no changes in the output, unstressed vowel raising in order to maximize the differences between the two hiatus vowels, or avoidance of hiatus through diphthongization.

In section 4.2.4, we provided a historic account of the form of the subject clitic. What is the etymology of the 2pl form /o/ in Paduan? We claim that this pronoun derives from the Latin nominative pronoun *vos*, which became /vo/ (21a). In Old Paduan, there was a tendency to delete intervocalic /v/ (e.g., *zòene* < Latin *IOVENE ‘young’), a tendency that is still productive today: for example, [saˈere] is an alternate pronunciation of [saˈvere] ‘to know’ (Rohlf’s 1966:293, Zamboni 1974:41). Hence, the intervocalic /v/ of **magné-vo* was deleted, resulting in *magné-o* (21b).¹⁴

- (21) a. **magné-vo*
 b. *magné-o*

We now investigate the 3sg clitic, /l/, realized as [el] in proclitic position (22a) and as [lo] in enclitic position (22b).

- (22) a. /l-maɲa/ > [el-ˈmaɲa]
 b. /maɲa-l/ > [ˈmaɲe-lo]

In (22a) and (22b), an extra vowel is inserted in the output forms. Two questions immediately come to mind. First, if this vowel is epenthetic, why does its position vary (i.e., why is it inserted *before* the /l/ proclitically and *after* the /l/ enclitically)? Second, why does the quality of the epenthetic vowel differ in the two forms (/e/ vs. /o/)?

Consider first the proclitic form in (22a). As in Donceto (see section 4.1), an epenthetic vowel is generally inserted before the consonantal proclitic so as to satisfy the CONTIGUITY constraint, and in Paduan the epenthetic vowel is /e/, so the form in (22a) is fully predicted.¹⁵ Enclitically, given

¹⁴ Rohlf’s (1968:149) reports enclitic /o/ for the 2pl form in Florentine (*ate-o sentito?* ‘did you hear? (lit. have-you(PL) heard?’), and he implies that the enclitic form /o/ derives from loss of intervocalic /v/ (Rohlf’s 1966:229).

¹⁵ In Paduan (unlike Donceto), an epenthetic vowel is never inserted before word-initial /sC/ clusters, suggesting that /sC/ clusters are fully acceptable onsets in this dialect. (See section 4.1 for discussion of the syllabification of /sC/ clusters in Donceto.)

(i) /spetʃo/ > [spetʃo]/*[ɛspetʃo]
 mirror

(ii) /l skrive/ > [el skrive]/*[lɛ skrive]
 he writes

the input /maɲa-l/, we might expect a form similar to that found in Donceto (*[¹maɲe-l]), but this is not the case because final /l/ (PW-final as well as PP-final /l/) is not allowed (23a). Hence, a final epenthetic vowel is added. We might expect the resulting form to be *[maɲe-l̩] (23b) with the usual epenthetic vowel /e/. However, this form is also unattested. (23c) shows that the epenthetic vowel appearing in this context is not the usual one. Instead of /e/, we find /o/.

- (23) /maɲa-l/ > a. *[¹maɲe-l]
 b. *[¹maɲe-l̩]
 c. [¹maɲe-l̩]

Why are two different epenthetic vowels used in proclitic and enclitic positions in (22a) and (22b) = (23c)? Since final position is reserved for (vocalic) inflectional morphemes, the epenthetic vowel in (23c) is in a morphologically salient position. And /e/ is a morphologically marked vowel in nominals that represents plural and feminine, two marked categories in the (pro)nominal system. (23b) has a morphologically marked vowel (/e/) in a morphologically salient position (final position), an undesirable structure given that [e] is epenthetic and therefore does not represent a morpheme. Instead, a *morphologically neutral* vowel is used in final position: /o/ (23c). /o/ is less salient within the nominal system because it represents masculine and singular in nominals, two unmarked categories in the (pro)nominal system. (See Ferrari 2005:127, where it is shown that Italian nouns and adjectives ending in /o/ are morphologically neutral.) To be precise, we claim that the [o] of enclitic [lo] is *not* a morpheme, but an epenthetic vowel. Therefore, [lo] receives the default interpretation for gender (masculine) and number (singular).¹⁶

In Paduan, the default *phonological* vowel is different from the default *morphological* vowel.¹⁷

(24) *Paduan*

- Default phonological vowel: /e/
 Default morphological vowel: /o/

There is much evidence from the Italian dialects and from standard Italian of the use of a morphologically neutral vowel rather than the usual epenthetic vowel in positions reserved for inflectional

¹⁶ See Aronoff 1999 for a study of ‘indirect mapping’ between morphosyntax and morphological realizations in inflectional systems. Ours is an example of indirect mapping between morphological and phonological systems.

Further evidence that the [o] of enclitic [lo] does not represent the masculine singular morpheme comes from Turinese (Goria 2004:41, 214, and Cecilia Goria, pers. comm.) (see (32)): enclitic /lo/ is used for all genders and numbers.

- (i) A vnira-l̩ to fradel / toa sorela?
 A comes-LO your brother / your sister
 ‘Does your brother / sister come?’
 (ii) Còs a fan-l̩?
 what A do(3PL)-LO
 ‘What do they do?’

¹⁷ See Evans, Brown, and Corbett 2002 regarding defaults in morphology. Defaults in morphological categories are widely attested; for example, the unmarked or default gender in Romance is usually considered to be masculine. And default morphemes are also attested; for example, /s/ is often claimed to be the default plural marker in German.

morphemes (i.e., final position), a phenomenon we call *morphological epenthesis*.¹⁸ (See Ferrari 2005:140 for an analysis of final ⟨o⟩ in Italian nouns as “a case of morphological epenthesis.”) Other examples of morphological epenthesis include the following: the historical evolution of the 3pl form of present tense verbs in Italian ((AMA)NT > (*ama*)no ‘they love’); the [lo] allomorph (< /l/) of the definite article in Italian; the [lo] allomorph (< /l/) of the 3sg object clitic in some NIDs; the historical development of certain Veronese infinitives (VENDERE > *vendro* ‘to sell’); and so on (see Cardinaletti and Repetti 2007b for discussion). As far as we are aware, we are the first to identify this phenomenon. However, there are numerous cases of languages with more than one epenthetic vowel, and the choice among them is determined, in part, lexically (see Steriade 1995).

In Paduan, we derive proclitic [e] and enclitic [lo] from the same input, /l/.¹⁹ A similar analysis holds for the 2sg: proclitic [te] and enclitic [to] both derive from /t/.

- (25) a. /t-maɲi/ > [te-'maɲi]
 b. /maɲi-t/ > ['maɲi-to]

In the proclitic form, the /t/ cannot be syllabified with the verb, so an epenthetic vowel is inserted. It is not inserted *before* the /t/ (26a) because coda /t/ is not allowed in this dialect (but it is in Donceto; see (1)). Instead, it is inserted *after* the /t/ (26b). Since the [e] of proclitic [te] is not in a morphologically salient position (it is not phrase-final; see footnote 18), morphological epenthesis, requiring the form [to], does not apply to it (26c).

- (26) /t-maɲi/ > a. *[et-'maɲi]
 b. [te-'maɲi]
 c. *[to-'maɲi]

We now turn to the syllabification of verb + 2sg enclitic structures. In (27), we suggest some outputs for the input /maɲi-t/.

- (27) /maɲi-t/ > a. *['maɲi-t]
 b. *['maɲi-te]
 c. ['maɲi-to]

The form in (27a) is not found because coda /t/ is not permitted in this dialect (but it is in Donceto; see (1)). The form in (27b) is also unattested because final position is a morphologically salient

¹⁸ For reasons not discussed here, but which might have to do with the presence or absence of apocope, morphological epenthesis is attested in standard Italian and the Veneto dialects, but not in Donceto (see Cardinaletti and Repetti 2007b). In addition, “final” position can refer to different prosodic domains in different languages. In Paduan, morphological epenthesis applies in PP-final position.

¹⁹ This analysis can also be extended to object clitics. In Veronese, the 3sg masculine accusative pronoun /l/ surfaces as /e/ in proclitic position (*El so* ‘I know it (lit. it [I] know)’) and as /lo/ in enclitic position (*magnar-lo* ‘to eat it’). Bonet and Lloret (2005b:41–42 and n7) discuss similar forms of object clitics in Catalan, although their analysis differs from ours.

position that requires a morphologically neutral vowel. Therefore, the morphologically neutral vowel /o/ is used (27c). This is the same analysis that we used to account for the 3sg form [ˈmaɲe-lo] in (23c).

Finally, consider the 3pl clitic in (28). We propose that it has two underlying forms—/i/ and /li/—and that the choice between the two allomorphs is phonologically conditioned.²⁰ (See McCarthy 2002:153–154 for multiple input analysis, and McCarthy 2002:183–184 for a bibliography on phonologically conditioned allomorphy within OT.)

- (28) a. /li~i-maɲa/ > [i-ˈmaɲa]
 b. /maɲa-li~i/ > [ˈmaɲe-li]

Proclitically, /i/ is chosen over /li/ because of a constraint that favors the shorter allomorph: *STRUCTURE. (See Tranel and Del Gobbo 2002 and references therein for a discussion of the *STRUCTURE family of constraints.) This constraint is crucially ranked higher than the ONSET constraint (requiring syllables to have onsets). Enclitically, /li/ is chosen over /i/; the latter allomorph is not selected because of metrical constraints disfavoring vowels in hiatus and unstressed falling diphthongs. These constraints are ranked higher than *STRUCTURE.

Some speakers pronounce the 3pl interrogative form as [ˈmaɲe-j] ‘do they eat? (lit. eat-they)’ (Zamboni 1974:42). We propose that in these speakers’ grammars the /i/ allomorph is selected instead of /li/ because *STRUCTURE is ranked higher than the other prosodic well-formedness constraints discussed above. In these cases (as opposed to 1sg and 1pl), the offglide is obligatory. (See the discussion of (20) above.) For the syntactic account of this difference, see section 5.4.

The patterns described here are common across the Veneto dialects, and the form of the 3pl masculine accusative clitic in many dialects is identical to that of the 3pl subject clitic. For example, in Bellunese the 3pl forms of the accusative clitic (29) are identical to the 3pl forms of the subject clitic (30): [i] appears proclitically and [li] enclitically.

- (29) a. i-magne
 [I] them-eat
 ‘I eat them.’
 b. magne-li
 eat(IMP)-them
 ‘Eat them!’

We have accounted for all the data from Paduan. Note that the phonological treatment of Donceto and Paduan subject clitics straightforwardly accounts for most of the data from other dialects as well, including Bellunese (30), Veronese (31), and Turinese (32).

²⁰ In Donceto, the forms of the 1sg, 1pl, and 3pl clitics are identical (17). This is not the case in Paduan. Here, the 1sg and 1pl clitics are identical (/i/), but the 3pl has two allomorphs (/i/ and /li/). Similarly, in the dialect of Bologna, the enclitic forms of the 1sg and 1pl pronouns are identical to each other but different from the 3pl form: [ˈkræd-ja] ‘do I believe? (lit. believe-I)’, [karˈdæn-ja] ‘do we believe? (lit. believe-we)’, [ˈkrædn-i] ‘do they believe? (lit. believe-they)’ (data are from Gaudenzi 1889).

(30) *Bellunese* (Nicola Munaro, pers. comm.)

a.	magne	b.	magne	-e? ²¹
	te- magna		magne	-tu?
	al- magna		magne	-lo?
	magnon		magnon	-e?
	magné		magné	-o?
i-	magna		magne	-li?
	'I/you/he/etc. eat(s)'		'do(es) I/you/he/etc. eat?'	

(31) *Veronese* (Alessandro Niero, pers. comm.)

a.	magno	b.	magno?	
	te- magni		magni	-to?
	el- magna		magne	-lo?
	magnemo		magnemo?	
	magnì		magnì	-o?
i-	magna		magne	-li?
	'I/you/he/etc. eat(s)'		'do(es) I/you/he/etc. eat?'	

(32) *Turinese* (Goria 2004:110 and Cecilia Goria, pers. comm.)

a.	mangio	b.	mangio	- <u>ne</u> ?
	it- mange		mange	-to?
	mangia		mangia	- <u>lo</u> ?
	mangioma		mangioma	- <u>ne</u> ?
	mange		mange	- <u>ne</u> ?
	mangio		mangio	- <u>ne</u> / <u>lo</u> ?
	'I/you/he/etc. eat(s)'		'do(es) I/you/he/etc. eat?'	

Superficial differences between Donceto/Paduan and the data above can easily be accounted for. Bellunese is similar to Paduan except that in Bellunese, the 3sg proclitic is [al] (instead of [el]) because of the velarization of vowels before /l/, common among NIDs: vowel + /l/ may become

²¹ This form is actually pronounced with a short final vowel, although morphologically we analyze it as consisting of two identical vowels word-finally. Vowel shortening is due to the fact that Bellunese does not permit unstressed long vowels in the output. The presence of the enclitic /e/ in the 1sg is supported by auxiliary and modal verbs that do not display inflectional /e/ in the 1sg.

- | | | |
|-------|----------|--------------|
| (i) | ɔ | ɔ-e? |
| | [I] have | have-I |
| | | 'do I have?' |
| (ii) | son | son-e? |
| | [I] am | am-I |
| (iii) | pɔs | pɔs-e? |
| | [I] can | can-I |

/al/, /ol/, /ul/, occasionally with loss of the coda /l/ (see Vanelli 1992).²² As for the Bellunese 2sg clitic, we suggest that there are two allomorphs in the input, /t/ and /tu/; /t/ (with epenthesis) is used preverbally, and /tu/ postverbally. While a full investigation of Bellunese is beyond the scope of this article, the analysis of the Bellunese 2sg forms will also apply to those Venetian varieties with 2sg enclitic [tu]: *gas-tu?* ‘do you have? (lit. have-you(SG))’.²³

In Turinese, the only preverbal subject clitic is the 2sg. (In the other persons, optional proclitic vowels are found that are comparable to the optional preverbal schwa in Donceto (1a).) Note the syncretism displayed by the 1sg, 1pl, 2pl, and 3pl enclitics. The form /ne/ is taken to derive historically from the 1pl subject pronoun (< Latin NOS), which was generalized to the 1sg and then to the 2pl and 3pl (see Parry 1998).

4.4 Conclusions

In conclusion, our discussion of dialects from different areas of northern Italy (an Emilian dialect, many Veneto dialects, and a Piedmontese dialect) has shown that the paradigms of proclitic and enclitic pronouns are rather similar across dialects and that the minor differences that are observed can be explained by the phonological constraints active in the individual languages and by the syncretism that took place in some forms. The phonological similarity found across dialects would be surprising under the two-paradigm hypothesis—and especially the version of the two-paradigm hypothesis that considers the enclitics to be inflectional—given that affixes are quite different across dialects (compare the verbal suffixes for Donceto (1), Paduan (18), Bellunese (30), Veronese (31), and Turinese (32)). Similarly, the language-internal phonological similarity between the proclitic and enclitic forms is natural under the single-paradigm hypothesis, while it would be accidental under the two-paradigm hypothesis.

A phonological account of subject clitic pronouns in all NIDs is clearly beyond the scope of this article. However, we believe that most cases can be accounted for along the lines suggested here.

5 On the Distribution of Preverbal and Postverbal Subject Clitics

We now turn to the differences in the distribution of subject clitics in declarative and interrogative sentences (see (3) and (9)). We claim that subject clitics need to be licensed by verb raising. When this does not occur, the null subject *pro* is inserted.

²² In Bellunese, as in the other NIDs discussed so far, the 3sg subject clitic is realized as /l/ if epenthesis is not necessary, that is, if the clitic /l/ can be syllabified as a coda (/lu l parla/ > [lu l parla] ‘he speaks (lit. he he-speaks)’; Zamboni 1974:58) or as an onset (/l ε/ > [l ε] ‘he is’ (also [el ε])); Zamboni 1974:59).

²³ Venetian differs from the other Veneto varieties in that the 2sg proclitic form is *ti* and not *te* (compare (ia) in footnote 29 with the paradigms in (18), (30), and (31)). The /i/ in 2sg *ti* might be correlated with the /i/ found on the verb in enclitic contexts (see footnote 33), where the other dialects have /e/.

5.1 On the Partial Pro-Drop Properties of Northern Italian Dialects

What is the subject in the 1sg, 1pl, and 2pl in (9) in Donceto? The answer depends in part on the analysis of the optional preverbal schwa. If we take the (optional) preverbal schwa to be an (optional) subject clitic, then when it is not present, the subject can only be the null weak pronoun *pro*, as in Italian. The absence of the schwa mandates the presence of *pro* since null clitics do not exist (see footnote 28). If, on the other hand, we do not analyze the optional preverbal schwa as a subject clitic (as in Cardinaletti and Repetti 2004, where it is taken to be the default realization of a functional head), *pro* is required even when the schwa is present.

In previous accounts of subject clitics in NIDs, the subject is taken to be invariably *pro*. Subject clitics are taken to enrich the I(nfl) head so that it can license the null subject (see, e.g., Brandi and Cordin 1981, 1989, Kayne 1983, Burzio 1986, Rizzi 1986, Suñer 1992, Poletto 1993a, 1996, 2000, Roberts 1993, Sportiche 1999). In minimalist terms, subject clitics are merged in the I head(s).

These approaches cannot, however, explain why a pronoun appears enclitically in those persons (1sg, 1pl, 2pl) that do not require it in proclitic position. Why does I license a null subject in declarative sentences, but not in interrogative sentences? And what about the other persons of the paradigm? Is *pro* also present in interrogative sentences or not? To account for these cases, some have proposed the two-paradigm hypothesis, which claims that in interrogative sentences a different paradigm is used.

Our approach differs in that we take the obligatory subject clitics to be the true subjects of the clause, which, like their object counterparts, are moved from the thematic position as in the traditional derivational analysis by Kayne (1975) (see section 5.2). This is the case of the 2sg, 3sg, and 3pl pronouns in both declarative and interrogative sentences (for further discussion of this hypothesis, see Cardinaletti and Repetti 2006).²⁴

In sections 4.2.1–4.2.2, we have shown that if the postverbal elements in (9) are not related to the optional preverbal vowel, they can be analyzed as enclitic subject pronouns. We suggest that in the 1sg, 1pl, and 2pl, the enclitic pronouns are the true subjects of the clause on a par with the subject clitics in the other three persons of the paradigm. The proposal is summarized in (33) for Donceto.

(33) Donceto

Person	Preverbal subject pronouns		Postverbal subject pronouns	
	Singular	Plural	Singular	Plural
1	<i>pro</i>	<i>pro</i>	<i>i</i>	<i>i</i>
2	<i>t</i>	<i>pro</i>	<i>t</i>	<i>v</i>
3	<i>l</i>	<i>i</i>	<i>l</i>	<i>i</i>

²⁴ Manzini and Savoia's (2002, 2005) analysis implies that NIDs are not null subject languages. In this respect, it is similar to our analysis, at least for the 2sg, 3sg, and 3pl. Kayne (2001:sec. 11) also suggests that overt subject clitics in the third person do not cooccur with *pro*.

Combined with the proposal that subject clitic pronouns (whether in proclitic or enclitic position) belong to a single series of pronouns, (33) implies that the clitic series is in competition with the null subject (*pro*). In the 1sg, 1pl, and 2pl, the subject is null in declarative sentences, while it is an enclitic pronoun in interrogative sentences (*/i/, /i/, /v/,* respectively).²⁵

In what follows, we address the syntactic question raised by the proposal in (33): Why is it that *pro* occurs in declarative sentences and subject clitics occur in interrogative sentences in the 1sg, 1pl, and 2pl? In other words, how is the subject chosen in the two cases? This question is composed of two parts: Why is the null subject *pro* not possible in interrogative sentences, (34a)? And, vice versa, why is a proclitic pronoun not possible in declarative sentences in these persons, (34b)? We address the former question in section 5.3, and the latter in section 5.5.

- | | | | |
|---------|------------------|--------------------|-------------------|
| (34) a. | *be:v <i>pro</i> | *bu'vum <i>pro</i> | *bu'vi <i>pro</i> |
| | drink [I] | drink [we] | drink [you(PL)] |
| | 'do I drink?' | 'do we drink?' | 'do you drink?' |
| b. | *i be:v | *i bu'vum | *v bu'vi |
| | I drink | we drink | you(PL) drink |

5.2 On the Derivation of Subject Clitics

As noted earlier, we adopt a derivational approach to clitic placement. Sportiche (1989), Belletti (1999), and Cardinaletti and Starke (1999) interpret the derivation as a two-step movement: XP-movement followed by X- (head) movement. A consequence of the two-step derivation is that clitic pronouns occupy a structurally higher position than weak pronouns, which undergo just the XP-movement step. This is shown for subject pronouns in French in (35), which reproduces the currently assumed analysis of declarative and interrogative sentences in this language (Kayne 1983, Rizzi 1986, Rizzi and Roberts 1989, Roberts 1993, Cardinaletti and Starke 1996:sec. 4.1.3, 1999:secs. 3.1–3.2, Vecchiato 2000, among many others).²⁶

- | | |
|---------|--|
| (35) a. | [_{TP} il _k a . . . [_{VP} t _k bu]] |
| | he has drunk |
| a'. | *[_{YP} il _k [_{TP} t _k a . . . [_{VP} t _k bu]]] |
| b. | [_{YP} a _i -t-il _k [_{TP} t _k t _i . . . [_{VP} t _k bu]]] |
| | has-he drunk |
| b'. | *[_{YP} a _i -t [_{TP} il _k t _i . . . [_{VP} t _k bu]]] |

In declarative sentences (35a), the weak pronoun *il* occurs in Spec,TP. The clitic pronoun *il* in (35a') is ungrammatical. In interrogative sentences (35b), the postverbal pronoun *il*, taken to be

²⁵ For a similar proposal for Valdôtain and Paduan, see Roberts 1993 and Poletto 1993b, respectively. Their analyses differ from ours, however, in that they assume the *pro* versus clitic distinction in all persons of the paradigm, while we take *pro* to be present in declarative sentences only in the 1sg, 1pl, and 2pl.

²⁶ For present concerns, it is not crucial to establish which head the verb moves to in French interrogative sentences. In (35b), we have called this head Y. There is evidence that in Romance languages, the verb undergoes short movement to a position of the I layer and does not reach a head of the C layer (see Kayne 1994:44, 139n15 and Sportiche 1999 for French, Suñer 1994 for Spanish, Guasti 1996 and Cardinaletti 2007 for Italian, Munaro 1999 for Lombard and Veneto dialects).

a true clitic, cliticizes (i.e., adjoins) to the functional head Y, and the verb adjoins to it. The weak pronoun is in turn ungrammatical (35b').

Verb movement in interrogative sentences is motivated by the need to check the inflectional [wh] feature on the verb (Rizzi 1996, 2001) against the Y head. Notice that this feature does not have a morphological realization in French, or in Italian and the NIDs, whereas it is morphologically realized in other languages (Rizzi 1996:66).

To explain enclisis in (35b), we follow Rizzi's (1993/2000:109) proposal.

(36) Enclisis occurs if

- a. the verb is morphologically complete under the cliticization site, and
- b. the verb must move at least as far as the cliticization site.

Enclisis is permitted in (35b) because the verb is morphologically complete; that is, it has checked all its 'morphologically overt affixes' before adjoining to (the clitic adjoined to) the head Y (as stated above, the features on Y are not morphologically expressed in French). The representations in (35a'), where the clitic has raised but the verb has not, and in (35b'), where the verb has moved across the weak subject pronoun *il*, are both considered ungrammatical. Why?

The French paradigm shows that there is a correlation between the scope of verb movement and the occurrence of clitic pronouns. If the verb does not raise to a head higher than T, as in declarative sentences (35a), then a clitic pronoun, which needs to raise to a higher head (the X head in (42c) below), is not licensed by the verb (35a'). When verb movement takes place to check the interrogative feature, as in interrogative sentences (35b), the head movement step of the clitic derivation becomes possible and gives rise to a grammatical output.

Not only is the clitic pronoun *il* possible, it is obligatory, as in (35b) (vs. (35b')). This is so because, according to the choice principle discussed in Cardinaletti and Starke 1999:sec. 7, a clitic pronoun should always be preferred over a weak pronoun. In Cardinaletti and Starke's Deficiency Theory, a clitic pronoun has a structure smaller than that of a weak pronoun, and the principle Minimize Structure requires that the smallest possible structure be chosen ('economy of representations').²⁷ The sentence in (35b'), which contains weak *il* instead of clitic *il*, is ruled out. (For another instance of a clitic pronoun chosen over a weak pronoun, see Cardinaletti and Starke 1996:sec. 3.3.)

²⁷ Minimize Structure explains the distribution of the different series of pronouns. In (i), we provide an example of how it works in Italian. In anaphoric contexts, a strong pronoun (*lui*) is disallowed, and a clitic pronoun (*lo*) is preferred ((ia) vs. (ib)), unless the strong pronoun is required for independent reasons, such as for coordination ((ic) vs. (id)).

- (i) So che Gianni è ora a Venezia . . .
 [I] know that Gianni is now in Venice
- a. *Inviterò lui.
 [I] invite(FUT) him
 - b. Lo inviterò.
 [I] him invite(FUT)
 - c. Inviterò lui e Maria.
 [I] invite(FUT) him and Maria
 - d. *Lo inviterò e Maria.
 [I] him invite(FUT) and Maria

5.3 Clitic Pronouns in Interrogative Sentences

The analysis developed for French allows us to account for the interrogative sentences in Donceto and to explain the ungrammaticality of (34a). As in French, verb movement applies in Donceto interrogative sentences (see footnote 8 and section 5.2). The verb moves to (the clitic adjoined to) the head Y, and the verb-enclitic order is produced. Here, we illustrate the derivation for the 2sg.

- (37) [Y_P be:v_i-ət_k [T_P t_k t_i . . . [V_P t_k t_i]]]
 drink-you(SG)
 ‘do you drink?’

In the 1sg, 1pl, and 2pl of Donceto, the paradigm is formally identical to French (35), modulo *pro*-drop. We illustrate the derivation for the 1sg in (38).

- (38) a. [T_P *pro*_k be:v_i . . . [V_P t_k t_i]]
 a'. *[Y_P i_k [T_P t_k be:v_i . . . [V_P t_k t_i]]]
 I drink
 b. [Y_P be:v_i-jə_k [T_P t_k t_i . . . [V_P t_k t_i]]]
 drink-I
 ‘do I drink?’
 b'. *[Y_P be:v_i [T_P *pro*_k t_i . . . [V_P t_k t_i]]]

Declarative sentences contain the weak subject *pro*, as shown in (38a), which is parallel to (35a), and do not contain the clitic pronoun *i*, as shown in (38a'), which is parallel to (35a'). In interrogative sentences, verb movement makes a clitic pronoun possible, providing a support for the clitic moved to Y, as shown in (38b), which is parallel to (35b). According to Minimize Structure, a clitic pronoun, if possible, is preferred over the weak pronoun *pro*. The starred sentence in (38b') (see also (34a)) is parallel to French (35b').²⁸

The preference for an overt clitic pronoun over a null weak pronoun might sound surprising in view of the Avoid (overt) Pronoun principle proposed by Chomsky (1981). If Avoid Pronoun is correctly understood, there is no contradiction between this principle and what we are proposing: Avoid Pronoun is equal to saying that a null weak pronoun (*pro*) is preferred over an overt strong pronoun, and it thus reduces to Minimize Structure (see Cardinaletti and Starke 1999:sec. 7.2).

²⁸ On the proposal that *pro* is a weak pronoun (i.e., a maximal projection), see Cardinaletti and Starke 1999:sec. 3.4. Evidence that *pro* must be considered a weak pronoun also comes from the fact that null clitic pronouns do not exist (Cardinaletti 2002). If they existed, sentences with and without clitic pronouns would be expected to behave in the same way, but this is not what is found. Italian sentences with an anticipatory object clitic, such as (i), are instances of right-dislocation, while sentences without such an anticipatory pronoun, such as (ii), are instances of marginalization. If null clitic pronouns do not exist, it follows that a null subject (*pro*) can only be a maximal projection, hence a weak pronoun.

- (i) L'ho già comprato, il giornale.
 [I] it-have already bought the newspaper
 (ii) Ho già comprato, il giornale.
 [I] have already bought the newspaper

- (39) So che Gianni_i è ora a Venezia. *pro_i/*Lui_i* ha appena chiamato.
 [I] know that Gianni is now in Venice [he]/*he has just called

Note that Avoid Pronoun does not say anything about the choice between clitic and weak pronouns, while Minimize Structure accounts for these cases as well (also see section 5.2 for French).

In conclusion, the presence of 1sg, 1pl, and 2pl subject enclitic pronouns in interrogative sentences is a consequence of the syntactic derivation and in particular of the scope of verb movement. This is rather straightforward, given that enclitic pronouns are found in interrogative sentences and that the verb in interrogative sentences is taken to move to a higher position than the verb in declarative sentences.

5.4 Crosslinguistic Variation in Interrogative Sentences

Another positive consequence of our analysis is that it can predict the crosslinguistic variation concerning the number of subject clitics found in preverbal versus postverbal position, which varies from dialect to dialect, but in a predictable way. If enclitic elements were not pronouns but agreement markers, morphological affixes, or a different series of subject clitics, as in the analyses discussed in sections 1 and 2, there would be no way to account for such crosslinguistic variation; one might instead expect fully regular paradigms (i.e., paradigms in which enclitic pronouns were always obligatory), or enclitic paradigms whose differences with respect to the proclitic paradigms were arbitrary.

The generalization describing the crosslinguistic variation in the number of subject clitics found in preverbal versus postverbal position can be summarized as follows (Renzi and Vanelli's (1983) Generalization 9; our translation):²⁹

²⁹ As the italicized *if*-clause in (40) explicitly states, the generalization is valid for those dialects where verb movement produces a verb-enclitic order. A dialect such as Venetian, which has three proclitic pronouns ([ti], [el], [i]) but (in some varieties) only two enclitic pronouns ([lo], [i]), does not contradict this generalization, despite prima facie evidence (data from Poletto 2000:29–30).

- (i) a. Ti ga do libri.
 you(SG) have two books
 b. Coss' ti ga?
 what you(SG) have
 'What do you have?'
 (ii) a. El ga do libri.
 he has two books
 b. Cossa ga-lo?
 what has-he
 'What does he have?'
 (iii) a. I ga do libri.
 they have two books
 b. Cossa ga-i?
 what have-they
 'What do they have?'

As shown in (ib), 2sg interrogatives do not display enclitic pronouns because they are not formed by verb movement, which makes the absence of a 2sg enclitic pronoun (and the presence of the same 2sg proclitic pronoun as in declaratives) a trivial consequence. Note, however, that those varieties of Venetian that do form 2sg interrogatives by verb movement also have 2sg enclitics in interrogatives: *Cossa ga-s-tu?* 'What do you have? (lit. what have-s-you(SG))'.

- (40) *If interrogative sentences are formed via subject-inversion [i.e., via verb movement],*
- a. the number of enclitic pronouns found in interrogative sentences is equal to or greater than the number of proclitic pronouns found in declarative sentences, and
 - b. the subject pronouns found in proclitic position are also found in enclitic position.

The data shown in (1), (18), (30), (31), and (32) illustrate the generalization. Donceto is very similar to Bellunese and Paduan in that three proclitics are present in declarative sentences and six enclitics in interrogative sentences (but two are optional in Paduan; see (20c)). In Veronese, declarative sentences display three subject proclitics and interrogative sentences display four subject enclitics. In Turinese, only one clitic is found preverbally and all six are found in postverbal position. (Renzi and Vanelli's generalization is also valid for Surmiran Rumantsch, where there are five postverbal subject clitics but no preverbal ones; see Anderson 2005:208.)

The Paduan and Bellunese enclitic paradigm is derived in the same way as that of Donceto. Verb movement to Y produces the verb-enclitic order in the 2sg, 3sg, and 3pl. In the other persons of the paradigm, the verb also moves to Y, hence higher than in the corresponding declarative sentences. Verb movement makes the enclitic subject possible instead of the null category *pro*. Turinese is the same except for the fact that only one proclitic is found. In the other persons, the verb also moves higher than in declarative sentences, and the enclitic pronoun appears in all six persons, as in Donceto, Paduan, and Bellunese.

To account for the Veronese data, we suggest a similar analysis: verb movement to Y produces the verb-enclitic order in the 2sg, 3sg, and 3pl. In the other persons, the verb also moves higher than in the corresponding declarative sentences, so that an enclitic pronoun appears in the 2pl. In the 1sg and 1pl, however, no pronoun is available.

In other dialects, such as that of Trieste, verb movement to Y does not take place in any person, and subject pronouns are proclitic in both declarative and interrogative sentences (see Poletto 1993b:228).³⁰

- (41) *Triestine* (Maurizio Viezzi, pers. comm.)

a.	magno	b.	magno?
	te- magni		te- magni?
	eI- magna		eI- magna?
	magnemo		magnemo?
	magné		magné?
	i- magna		i- magna?
	'I/you/he/etc. eat(s)'		'do(es) I/you/he/etc. eat?'

In the literature, there is no account for the generalization in (40). We provide one here, based on our analysis of the distributional differences between preverbal and postverbal subject

³⁰ This possibility also exists in many other NIDs (see footnote 29 and Poletto 1993b:227 for Venetian, Roberts 1993:344–346 for some Valdôtain dialects, and Manzini and Savoia 2005:528–529 for Lombard and Romagnol dialects). In Donceto, yes/no questions can also have the same subject-verb order as declarative sentences, plus interrogative intonation: *ət be:v?* 'do you drink? (lit. you(sc) drink)'.

clitics. Since, in our analysis, the occurrence of the clitics in postverbal position depends on the scope of verb movement, we predict that the same number of pronouns will be found in enclitic position as is found in proclitic position, or more (but not fewer). Because of verb movement, pronouns for certain persons of the paradigm can become available in interrogative sentences that are not possible in declarative sentences. In conclusion, crosslinguistic variation in the occurrence of proclitic versus enclitic pronouns is due to the differing scope of verb movement in the various persons.

5.5 A Consequence of the Analysis: Weak Pronouns in Declarative Sentences

We now address the question raised by (34b): why is an overt 1sg, 1pl, and 2pl subject clitic ungrammatical in proclitic position, and why is a null subject found instead? The answer also explains why in declarative sentences, some persons of the paradigm have a null subject (*pro*), while the others have a proclitic pronoun (see (33)).

Under the hypothesis that *pro* is a weak pronoun, the ungrammaticality of (34b) shows that in preverbal position, a weak pronoun is used instead of its clitic counterpart. According to the choice principle discussed by Cardinaletti and Starke (1999:sec. 7), this is an unexpected state of affairs since, as shown in sections 5.2 and 5.3, a clitic pronoun should always be preferred over a weak pronoun. Since Donceto has clitic pronouns (i.e., those used in enclitic position in interrogative sentences), why is a weak pronoun used in preverbal position instead of its clitic counterpart? Given that a weak pronoun is possible only if the clitic alternative is independently ruled out, we should look for a reason that excludes the occurrence of preverbal clitic pronouns in these persons of the paradigm.

Notice that the same question arises in French for all persons of the paradigm. Since French has clitic subject pronouns (i.e., those used in enclitic position in interrogative sentences), why are weak pronouns used preverbally in declarative sentences instead of their clitic counterparts?

We suggest that the correlation between verb movement and the distribution of subject clitics provides the answer here, too. The impossibility of preverbal clitics in the 1sg, 1pl, and 2pl of Donceto and in all persons in French declarative sentences has to do with the limited scope of verb movement in these persons. As shown in section 5.3, a pronoun can cliticize (i.e., move a step further than its weak counterpart) only if the verb moves sufficiently high in the layer to support it. If this is correct, it follows that, in the persons of the Donceto paradigm that have proclitic pronouns (2sg, 3sg, 3pl), the finite verb must move to a higher head than it does in those persons that have *pro* as a subject (1sg, 1pl, 2pl). We provide the relevant structures in (42), where we call the extra inflectional head *X*. As suggested above for interrogative sentences, the ungrammaticality of (42c') can be understood as the result of an economy consideration ('economy of representations'): since a subject clitic pronoun is available, it is preferred over its weak counterpart because it has a smaller structure. In (42b), *pro* is allowed because the subject clitic is independently ruled out, (42b') (see (38a')).³¹

³¹ Standard Italian has the same structure as (42b) in all persons of the paradigm. Thus, it behaves like French (42a) modulo *pro*-drop: [_{TP} *pro*_k V_i . . . [_{VP} t_k t_i]].

- (42) a. French: $[\text{TP } \text{je}/\text{tu}/\text{il}_k \text{ V}_i \dots [\text{VP } \text{t}_k \text{ t}_i]]$
 I/you/he, etc.
- b. Donceto 1sg, 1pl, 2pl: $[\text{TP } \text{pro}_k \text{ be:V}_i \dots [\text{VP } \text{t}_k \text{ t}_i]]$
- b'. Donceto 1sg, 1pl, 2pl: $*[\text{XP } \text{i}_k \text{ I} \text{ be:V}_i \text{ drink} \text{ } \dots [\text{VP } \text{t}_k \text{ t}_i]]]$
- c. Donceto 2sg, 3sg, 3pl: $[\text{XP } \text{ot}_k \text{ you} \text{ be:V}_i \text{ } \text{t}_i \text{ drink} \text{ } \dots [\text{VP } \text{t}_k \text{ t}_i]]]$
- c'. Donceto 2sg, 3sg, 3pl: $*[\text{XP } \text{ } \text{be:V}_i \text{ } \text{pro}_k \text{ t}_i \text{ } \dots [\text{VP } \text{t}_k \text{ t}_i]]]$

What is X in (42)? Following current assumptions, we take person-related features to be encoded in functional heads. Each projection realizes a different feature or a set of features (see, e.g., Shlonsky 1989, Cardinaletti and Roberts 1991/2002, Poletto 2000, Manzini and Savoia 2002, Sigurðsson and Holmberg 2006). We take these I projections to build a ‘‘subject field.’’ Thus, X is a functional head of the subject field.

Assuming Rizzi’s (1993/2000) proposal in (36), we find proclisis in (42c) because the verb is not morphologically complete when it moves to X. In X, it checks the relevant inflectional features that are part of its morphological makeup.

The scope of verb movement is often related to the features that the verb must check overtly. The proposal in (42) implies that the verb must overtly check more features in the 2sg, 3sg, and 3pl than in the other persons of the paradigm. The comparative data discussed in the next section provide evidence that our proposal is on the right track.

5.6 Crosslinguistic Variation in Declarative Sentences

Although the system found in Donceto and the Veneto and Friulian dialects, shown in (18), (30), (31), and (41), is the most common one among NIDs, the subject proclitics—/t/, /l/, /i/—are not present in all NIDs. Data are not random, however, and some generalizations do hold, as observed in Renzi and Vanelli’s (1983) typological study of subject clitics in Romance (our translation).

- (43) a. Generalization 1: If a variety has at least one subject clitic, it is 2sg.
 b. Generalization 2: If a variety has two subject clitics, they are 2sg and 3sg.
 c. Generalization 3: If a variety has three subject clitics, they are 2sg, 3sg, 3pl.

Renzi and Vanelli observe that in all dialects that have subject clitic pronouns, there is a clitic for the 2sg. Furthermore, if a variety has only one subject clitic, it is the 2sg (e.g., Turinese and Franco-Provençal). In our terms, this means that the 2sg verb must move higher than verbs conjugated in the other persons, making the clitic pronoun possible instead of the weak counterpart *pro*. Similarly, Generalization 2 states that if a variety has two subject clitics, they are the 2sg and 3sg (e.g., the dialect of Milan). In this case, both the 2sg verb and the 3sg verb must move higher than the verbs conjugated in the other persons. And Generalization 3 says that if there are three subject clitics, they are the 2sg, 3sg, and 3pl, suggesting that the 3pl verb (as well as the 2sg and 3sg verbs) must move higher than the verbs conjugated in the other persons (this is the case in many NIDs, including Donceto and Paduan, as we have shown). In conclusion, variation

In Paduan (18), Bellunese (30), and Veronese (31), a word-final unstressed /a/, which is the inflectional morpheme representing the third person forms of first conjugation verbs (and in Bellunese also the 2sg), is raised to [e] before clitics.

Fava (1993:2511) analyzes similar facts in Alto-Vicentino as an argument for the existence of an interrogative inflection. We believe that this is not a convincing argument, for two reasons: vowel raising is found not only with subject clitics but with object clitic pronouns as well, and not only with interrogatives but also with imperatives. For example, in Paduan and Bellunese, /a/-to-[e] raising is also found with enclitic object pronouns occurring with imperative verbs.

- (46) a. Magna la minestra!
 eat the soup
 b. Magne-la!
 eat-it

Notice that it is not possible to account for the modifications to the host verb with object clitics in terms of the two-paradigm hypothesis. Should we assume that enclitic object pronouns are different from proclitic object pronouns? Or should we treat the modified verb with enclitics as belonging to an imperative conjugation different from the conjugation of the imperative verb without enclitics?

Whatever the reason for the modifications to the host verb with object enclitics, the same analysis can be used to explain the modifications to the verb with subject enclitics. In conclusion, modifications to the verb when followed by an enclitic subject cannot count as an argument for the two-paradigm hypothesis of subject clitics.³³

7 On the Cooccurrence of Proclitics and Enclitics

Since, as we suggest, proclitics and enclitics are the same element, we expect that they cannot give rise to doubling. This prediction is borne out in Donceto (47) and in many other NIDs. In some NIDs, however, sentences parallel to (47a–c) are possible in the 2sg (see Benincà 1986 and Gorla 2004 for Piedmontese) and the 3sg (see Poletto 2000:54–55 for the dialects in (48)).

- (47) a. *ət be:v-ət?
 you(SG) drink-you(SG)
 ‘do you drink?’

³³ The phenomenon is also attested in Venetian, where the verb-final vowel /a/ is raised to [i] with both enclitic subjects in interrogatives (in archaic forms) (i) and enclitic objects in imperatives (ii) (see also Salvi 2003:211).

- (i) a. El compra el giornal.
 he buys the newspaper
 b. Compri-o el giornal, paron?
 buys-he the newspaper sir
 ‘Are you buying the newspaper, sir?’
 (ii) a. Compra el giornal!
 buy(IMP) the newspaper
 b. Compri-o!
 buy(IMP)-it

- b. *əl be:və-l?
 he drinks-he
 ‘does he drink?’
- c. *i be:vən-jə?
 they drink-they
 ‘do they drink?’
- (48) a. *Rodoretto di Prali (Piedmontese-Provençal)*
 Sok a l a-lo fait?
 what he has-he done
 ‘What did he do?’
- b. *Pra del Torno (Provençal)*
 La baŋ-la?
 it rains-it
 ‘Is it raining?’

According to Poletto (2000:54–55), this is another piece of evidence supporting the two-paradigm hypothesis, since the same element cannot appear simultaneously before and after the verb. Notice, however, that the double occurrence of clitics is also marginally attested in the case of object clitics. See (49), which is an Italian example from Berretta 1985:194 (also see Kayne 1989:256n37 and references cited therein).

- (49) Ancora una volta mi hanno voluto riconfermarmi la fiducia.
 again one time to.me they-have wanted [to] reconfirm-to.me the confidence
 ‘Once again they wanted to reconfirm to me their confidence.’

Sentences like (49) have never been used as evidence to suggest a two-paradigm hypothesis for object clitics. Whatever analysis turns out to be correct for the object case in (49), it can be extended to the subject case in (48).

We tentatively suggest that both (48) and (49) can be accounted for under the copy theory of movement (Chomsky 1993) by assuming that in these (exceptional) cases, both the trace and the head of the chain are spelled out. In (48), we take enclitic *lo/la* to be the head of the chain, while in (49), the head of the chain is proclitic *mi*. This is an independent difference due to the different derivation of the two cases.

For concreteness, let us look at a possible derivation of (48b). The verb first adjoins to X. The pronoun cliticizes to the X head and then moves further to Y. The verb adjoins to the pronoun found in Y, pied-piping the trace of the pronoun. If both the trace and the head of the chain are spelled out, subject clitic reduplication results.³⁴

- (50) [_{YP} [Ia_k baŋ_i]_j-Ia_k [_{XP} [t_k t_i]_j [_{TP} t_k t_i . . . [_{VP} t_k t_i]]]]

³⁴ If the derivation in (50) is correct, it shows that the ban against excorporation applies only to the verb (Rizzi 1993/2000:118), while excorporation of the clitic pronoun is possible.

Note that the proclitic and the enclitic forms can be superficially different, as discussed in this article and as illustrated by the [(a)l] versus [lo] contrast in (48a).

In conclusion, double occurrence of subject clitics does not provide definitive evidence for the two-paradigm hypothesis; it can be handled under the single-paradigm hypothesis as well.

8 Conclusions

A detailed study of the dialect of Donceto, diachronic considerations, and crosslinguistic evidence lead us to propose that proclitic and enclitic forms of the subject pronoun in NIDs are derived from the same lexical item. We take this to be the null hypothesis.

We have further shown that the evidence for the two-paradigm hypothesis is not convincing and that the facts adduced to support that hypothesis can be accounted for easily and more successfully under the single-paradigm hypothesis. We have shown that

- the different surface forms, both language-internally and across languages, can be accounted for by studying the productive phonological processes of each dialect;
- the different distribution of subject clitics in declarative and interrogative sentences, both language-internally and across dialects, can be accounted for by making precise hypotheses about clitic movement and verb movement;
- depending on verb movement, clitic pronouns are in competition with the weak pronoun *pro*;
- the distribution of clitic and weak subject pronouns in French can be accounted for in the same way;
- the minor changes to the host verb across dialects also occur with other verb forms and object clitics;
- cases of doubling of clitics in some dialects can be explained by adopting the copy theory of movement.

More generally, we also hope to have illustrated how a detailed, in-depth study of both the phonology and the syntax of a single language (in this case, the Donceto dialect) can shed light on theoretical issues (such as the nature of the subject), on the limits of crosslinguistic variation among closely related languages (such as the number of subject clitics found in preverbal versus postverbal position in NIDs), and on puzzles that have vexed Romance scholars for decades (such as the relationship between preverbal and postverbal subject clitics).

Appendix A: Donceto Constraints and Ranking

Undominated constraints for Donceto include these:

σ-STRUC(TURE)

A portmanteau constraint collapsing all undominated constraints on syllable structure (see Bonet and Lloret 2005b:54). /s/ + consonant clusters violate this constraint word- and

phrase-internally, but, as in many languages, these clusters are tolerated in phrase-initial position.

ALIGN-R/L(SUB-σ)

Align the R/L edge of the lexical word to the R/L edge of some subsyllabic constituent, margin or nucleus. (Bonet and Lloret (2005b:61) introduce this constraint to account for the fact that complex onsets and codas are not formed as a result of the syllabification of clitics with their host.)

Other highly ranked constraints include MAX, DEP(C), LINEARITY, and so on. Candidates that violate these constraints (by deletion, consonant epenthesis, metathesis/fusion, respectively) are not included in the tableaux in appendix B.

The following constraints are ranked lower than the above-mentioned constraints:

NOFINAL-VIG

An unstressed vowel or a glide must not be in final position (see McCarthy and Prince 1994: 357, Bonet and Lloret 2005b).

NOFINAL-V_[-low]

An unstressed [-low] vowel [i y u e ø o ε æ ɔ] must not be in final position. This constraint is within the spirit of the ‘‘No[i]’’ constraint (‘‘No short high unstressed vowel in open syllable’’) posited by Abu-Mansour (1995) and Kager (1999) to account for syncope and epenthesis in Arabic. But see Davis and Zawaydeh 1997 for arguments against this approach.

CONTIGUITY

All contiguous input segments must be contiguous in the output (see Bonet and Lloret 2005b, Lamontagne 1996).

The above three constraints apply to both the PW and the PP; that is, there are both a CONTIGUITY(PW) constraint and a CONTIGUITY(PP) constraint. That these three constraints also apply within the domain of the PP is a necessary component of our proposal since we analyze clitic + host units as PPs, and these constraints apply to those units.

DEP

No vowel epenthesis (see McCarthy and Prince 1995).

SON(ORITY)CON(TOUR)

A coda must be more sonorous than the following onset (see Davis and Shin 1999). We adopt the following standard sonority hierarchy: stops < fricatives < nasals < liquids < glides < vowels.

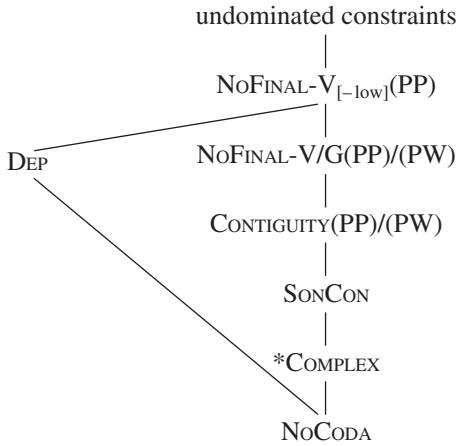
**COMPLEX*

No complex onsets or codas (see Prince and Smolensky 1993).

NOCODA

A syllable must not have a coda (see Prince and Smolensky 1993).

We propose the following constraint ranking for the dialect of Donceto:



Appendix B: Donceto Syllabification

The following tableaux illustrate the syllabification of words, phrases, and verb + clitic units in Donceto. Some phonetic details (such as vowel length) are not indicated.

- Syllabification of words in isolation: PW in isolation = PP (see Büring and Gutiérrez-Bravo 2001).

(51) CONTIGUITY(PP)/(PW) >> NoCODA

/nvud/ 'grandson'	CONTIG(PP)/(PW)	NoCODA
a. n̩.vúð	*!	
b. ɲ n.vúð		*

(52) *COMPLEX >> NoCODA

/krde/ 'to believe'	*COMPLEX	NoCODA
a. ɲ k̩r.dé		*
b. kr̩.dé	*!	

(53) NoFINAL-V/G(PP)/(PW) >> CONTIGUITY(PP)/(PW)

/magr/ 'thin(MASC SG)'	NoFIN-V/G(PP)/(PW)	CONTIG(PP)/(PW)
a. má.ɡr̩	*!	
b. má.ɡr̩	*!	
c. ɲ má.ɡ̩r		*

(54) SONCON >> *COMPLEX

/magra/ 'thin(FEM SG)'	SONCON	*COMPLEX
a. $\text{m}^{\text{a}}\text{.gr}^{\text{a}}$		*
b. $\text{m}^{\text{a}}\text{g}^{\text{.ra}}$	*!	

(55) CONTIGUITY(PP)/(PW) >> SONCON

/psa/ 'kick'	CONTIG(PP)/(PW)	SONCON
a. $\text{p}^{\text{a}}\text{.s}^{\text{a}}\text{é}$	*!	
b. $\text{p}^{\text{a}}\text{p}^{\text{.s}}\text{a}^{\text{é}}$		*

- Resyllabification across word boundaries: PP is the domain of resyllabification (see Peperkamp 1997:29).³⁵

(56) CONTIGUITY(PP) >> SONCON

/set gat/ 'seven cats'	CONTIG(PP)	SONCON
a. $\text{s}^{\text{é}}\text{.t}^{\text{#}}\text{g}^{\text{á}}\text{t}$		*
b. $\text{s}^{\text{é}}\text{.t}^{\text{#}}\text{a}^{\text{.gat}}$	*!	

(57) σ -STRUCTURE >> CONTIGUITY(PP), CONTIGUITY(PW)

/set spɛtʃ/ 'seven mirrors'	σ -STRUC	CONTIG(PP)	CONTIG(PW)
a. $\text{s}^{\text{é}}\text{.t}^{\text{#}}\text{s}^{\text{p}}\text{é}^{\text{t}}\text{ʃ}$	*! (*sC/ onset)		
b. $\text{s}^{\text{é}}\text{.t}^{\text{#}}\text{a}^{\text{s}}\text{.p}^{\text{é}}\text{t}^{\text{ʃ}}$		*	
c. $\text{s}^{\text{é}}\text{.t}^{\text{#}}\text{s}^{\text{a}}\text{.p}^{\text{é}}\text{t}^{\text{ʃ}}$		*	*!

(58) NOFINAL-V/G(PW) >> CONTIGUITY(PP), CONTIGUITY(PW)

/i vurisn par'la/ 'they would like to speak'	NOFIN-V/G(PW)	CONTIG(PP)	CONTIG(PW)
a. $\text{i.vu.rí.s}^{\text{a}}\text{n}^{\text{.}}\text{p}^{\text{a}}\text{r.l}^{\text{a}}\text{é}$		*	*
b. $\text{i.vu.rís.n}^{\text{a}}\text{.p}^{\text{a}}\text{r.l}^{\text{a}}\text{é}$	*!	*	

³⁵ See Peperkamp 1997 for discussion of the problem of resyllabification for Strict Layering, although we do not adopt her conclusion that "prosodic word boundaries are readjusted when resyllabification applies" (p. 30). See also Cardinaletti and Repetti 2007a. A full discussion of this topic is beyond the scope of this article, but we believe that the problems with Strict Layering can be accounted for within the framework of OT by ranking certain constraints (in particular, ALIGN(PW, σ) and EXHAUSTIVITY) lower than other constraints favoring unmarked syllable structures.

(59) σ -STRUCTURE \gg NoFINAL-V/G(PP), NoFINAL-V/G(PW)

/i vurisn stu'dja/ 'they would like to study'	σ -STRUC	NoFIN-V/G(PP)	NoFIN-V/G(PW)
a. i.vu.rí.s <u>ə</u> n.#stu.djæ	*! (*sC/ onset)	*	
b. ☞ i.vu.rís.n <u>ə</u> ʃs.tu.djæ		*	*

- Syllabification of subject clitics with verbal hosts: clitics are “free clitics,” meaning that they are adjoined at the level of the PP; therefore, clitic + host units form a PP.

(60) CONTIGUITY(PP) \gg NoCODA

/l bevə/ 'he drinks'	CONTIG(PP)	NoCODA
a. .l <u>ə</u> .bé.v <u>ə</u> .	*!	
b. ☞ . <u>ə</u> l.bé.v <u>ə</u> .		*

(61) σ -STRUCTURE \gg CONTIGUITY(PP)

/l skrivə/ 'he writes'	σ -STRUC	CONTIG(PP)
a. . <u>ə</u> l.skri.v <u>ə</u> .	*! (*sC/ onset)	
b. ☞ .l <u>ə</u> s.kri.v <u>ə</u> .		*
c. .l <u>ə</u> .skri.v <u>ə</u> .	*! (*sC/ onset)	*

(62) NoFINAL-V/G(PP) \gg NoCODA

/bev t/ 'do you(sg) drink?'	NoFIN-V/G(PP)	NoCODA
a. .bé.v <u>ə</u> t <u>ə</u> .	*!	*
b. ☞ .bé.v <u>ə</u> t.		*
c. .bé.v <u>ə</u> t.		**!

(63) ALIGN(SUB- σ) \gg NoFINAL-V_[-low](PP), CONTIGUITY(PP) \gg SONCON, NoCODA

/van i/ 'do they go?'	ALIGN(SUB- σ)	NoFIN-V _[-low] (PP)	CONTIG(PP)	SONCON	NoCODA
a. .v <u>á</u> .ni.		*!			
b. .v <u>á</u> .n <u>ə</u> j.			*!		*
c. .v <u>á</u> .n <u>ə</u> j <u>ə</u> .	*!				
d. ☞ .v <u>án</u> .j <u>ə</u> .				*	*

(64) NoFINAL-V_[-low](PP) >> DEP

/van i/ 'do they go?'	NoFIN-V _[-low] (PP)	DEP
a. .vá.ni.	*!	
b. [f] .ván.jə.		*

(65) NoFINAL-V_[-low](PP), DEP >> NoCODA

/go-i/ 'do I have?'	NoFIN-V _[-low] (PP)	DEP	NoCODA
a. .go.i.	*!		
b. .go.jə.		*!	
c. [f] .goj.			*

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