

# Functional vowels in main questions in Northern Italian dialects<sup>\*</sup>

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## *1. Introduction*

The aim of this paper is to understand the distribution and the nature of the vowels that appear in preverbal position in many Northern Italian dialects (NIDs). The analysed data come primarily from field work on the Emilian dialect spoken in the town of Donceto (province of Piacenza), which will be compared with data from other dialects.

Previous analyses of preverbal vowels in other NIDs (e.g. Poletto 2000) take them to belong to two different classes of subject clitics: “invariable” subject clitics (i.e., those displaying the same form in all persons of the verbal paradigm) and “deictic” subject clitics (i.e., those displaying different forms in the 1st/2nd person and the 3rd person). The two classes are both merged as functional heads of the CP layer. Two other classes of subject clitics (“person” and “number” subject clitics) are taken to be merged as functional heads of the IP layer.

Emilian data show that this analysis is not sufficient.<sup>1</sup> On the one hand, some properties attributed to deictic subject clitics (SubjCLs) are displayed in Donceto by a vowel which occurs in all persons of the verbal paradigm, a

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<sup>1</sup> In this paper, we focus on interrogative sentences and declaratives sentences with preverbal subjects. For preverbal vowels in declaratives containing topics and foci, see section 8.4.

vowel which would qualify as an invariable subject clitic. On the other hand, in (some) interrogative sentences a pattern is found in which a vowel occurs with the 1sg, 1pl, 2pl forms of the verb. The same pattern is found in declarative sentences.

Our analysis differs from previous proposals in many respects. We suggest that (i) preverbal vowels are the spell-out of functional heads merged not only in the CP, but also in the IP layer; (ii) preverbal vowels can realise different functional heads in one and the same dialect depending on the type of clause in which they occur; (iii) preverbal vowels can have a different distribution in different dialects; (iv) preverbal vowels should be distinguished from true clitic pronouns like 2sg, 3sg and 3pl SubjCLs: while the latter are subject pronouns moved from an argumental position, the former are the spell-out of functional heads in the clausal skeleton (see Cardinaletti and Repetti 2004, 2008). We refer to them with the descriptive term ‘functional vowels’ to indicate that they consist in (phonologically unmarked) vowels.

## ***2. The distribution of preverbal vowels in main questions***

In the dialect of Donceto, both yes-no questions and wh-questions display the preverbal vowel [ə]. The vowel has a different distribution in the two types of questions, which is summarised in (1) and exemplified in (2)-(4):

- (1) a. in yes-no questions, the preverbal vowel is optional in all six persons of the verbal paradigm (2);
- b. in *wh*-questions, its distribution depends on the type of *wh*-element:
- with *wh*-phrases, the vowel is obligatory in all six persons (3);
  - with *wh*-words, the vowel is optional with the 1sg, 1pl, 2pl forms of the verb and impossible in the 2sg, 3sg, 3pl (4).

(2) yes-no questions:

	<i>without preverbal vowel</i>	<i>with preverbal vowel</i>	
a.	be:v-jə	ə be:v-jə	‘am I drinking?’
	bu'vum-jə	ə bu'vum-jə	‘are we drinking?’
	bu'vi:-v	ə bu'vi:-v	‘are you:pl drinking?’
b.	be:v-ət	ə be:v-ət	‘are you:sg drink.?’
	be:və-l	ə be:və-l	‘is he drinking?’
	be:vən-jə	ə be:vən-jə	‘are they drinking?’

(3) *wh*-phrases: [kwã:t an] ‘how many years = how old’

	<i>without preverbal vowel</i>	<i>with preverbal vowel</i>	
a.	*kwã:t an go-jə	kwã:t an ə go-jə	‘how old am I?’
	*kwã:t an gum-jə	kwã:t an ə gum-jə	‘how old are we?’
	*kwã:t an gi:-v	kwã:t an ə gi:-v	‘how old are you:pl?’
b.	*kwã:t an gɛ-t	kwã:t an ə gɛ-t	‘how old are you:sg?’
	*kwã:t an ga-l	kwã:t an ə ga-l	‘how old is he?’
	*kwã:t an gan-jə	kwã:t an ə gan-jə	‘how old are they?’

(4) *wh*-words: [dõ:d] ‘where’

	<i>without preverbal vowel</i>	<i>with preverbal vowel</i>	
a.	dõ:d vo-jə	dõ:d ə vo-jə	‘where am I going?’
	dõ:d num-jə	dõ:d ə num-jə	‘where are we going?’
	dõ:d nɛ:-v	dõ:d ə nɛ:-v	‘where are you:pl going?’
b.	dõ:d vɛ-t	*dõ:d ə vɛ-t	‘where are you:sg going?’
	dõ:d va-l	*dõ:d ə va-l	‘where is he going?’
	dõ:d van-jə	*dõ:d ə van-jə	‘where are they going?’

The distribution of preverbal schwa in *wh*-questions with *wh*-words (4) is identical to the distribution of preverbal schwa in declarative sentences, (5):

(5) declarative sentences:

	<i>without preverbal vowel</i>	<i>with preverbal vowel</i>	
a.	'be:v	ə 'be:v	‘I drink’
	bu'vum	ə bu'vum	‘we drink’
	bu'vi	ə bu'vi	‘you:pl drink’
b.	tə skri:v	*ə tə skri:v <sup>2</sup>	‘you:sg write’

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<sup>2</sup> We use a different verb with respect to the rest of the paradigm to clearly show that the preverbal vowel is impossible. In [tə skri:v], an epenthetic vowel follows /t/ in order to syllabify the initial /s/ + consonant cluster of the verb (in careful speech, [ət əskri:v] is also possible). See Cardinaletti and Repetti (2004), (2008) for discussion. Notice that forms such as [ət 'be:v] ‘you:sg drink’ is not a counterexample to the claim made in the text, because the schwa is epenthetic and needed to syllabify the 2sg subject clitic /t/. The fact that Poletto (1993b) and following work did not recognize the epenthetic status of the vowel in the 2sg (e.g. [ət 'be:v]) led her to analyse the Emilian dialects of Piacenza and Bologna as displaying

la 'be:və	*ə la 'be:və <sup>3</sup>	‘she drinks’
i 'be:vən <sup>4</sup>	*ə i 'be:vən	‘they drink’

Before proceeding, it is necessary to point out that the pattern in (4) concerns wh-words which are clitic. Among other syntactic properties that point to the clitic status of *dō:d* in (4), consider the fact that it cannot be used in isolation: \**dō:d?* ‘where?’. Given that the clitic/weak/strong tripartition proposed by Cardinaletti and Starke (1999) has proved to be successful for various categories, such as personal pronouns and adverbs, we believe that it can be extended to wh-elements, and we analyse [dō:d] in (4) as a clitic, i.e., a head.<sup>5</sup>

### ***3. The distribution of preverbal vowels in embedded questions***

Let us consider the distribution of preverbal vowels in embedded questions.

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deictic vocalic clitics (see Poletto 1993b:133).

<sup>3</sup> We use a different gender with respect to the other examples to clearly show that the preverbal vowel is impossible. In [əl 'be:və] ‘he drinks’, the schwa is epenthetic and needed to syllabify the 3sg masc. clitic /l/. See Cardinaletti and Repetti (2004), (2008).

<sup>4</sup> Although it is a vowel, the 3pl /i/ is a true subject clitic pronoun and does not enter the typology of functional vowels discussed in this paper. It occurs in all sentence types and is found both in proclitic and enclitic position (see Cardinaletti and Repetti 2008), while the functional vowels discussed in this paper are only preverbal.

<sup>5</sup> The fact that the vowel in [dō:d] is long does not imply, as it would in Italian, that it has word stress and is thus to be categorised as a weak rather than a clitic form. In the Donceto dialect, atonic vowels can be long ([a:'me] ‘honey’), as can nasal vowels, whether tonic ([kã:p] ‘field’) or atonic ([kō:'tæ] ‘to count’). As we will see below, wh-clitics are found in other NIDs.



paradigm; wh-questions with wh-clitics, embedded questions and declarative sentences display preverbal vowels only in the 1sg, 1pl, 2pl. The two sets of vowels clearly cannot be one and the same element.<sup>6</sup>

#### ***4. Previous analyses***

Preverbal vowels similar to the schwas seen in (2)-(4) are found in other Northern Italian dialects and have been previously analysed by Poletto (2000) as two different classes of SubjCLs merged in the CP layer. They differ with respect to their distribution in wh-questions:

a) invariable SubjCLs (i.e., those which have the same form in all persons of the verbal paradigm) are possible in yes-no questions, but cannot occur in wh-questions, as shown in Paduan (9), taken from Benincà (1983);

b) deictic SubjCLs (i.e., those which have different forms in the 1st/2nd person and 3rd person) are optional in yes-no questions (10), obligatory in wh-questions with wh-phrases (11), and impossible in wh-questions with wh-clitics (12) (data come from the Friulian dialect of San Michele al Tagliamento, Poletto 2000:25, 59-60, 69):<sup>7</sup>

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<sup>6</sup> Manzini and Savoia (2005) provide similar data in many dialects spoken in the Emilia Romagna and Lombardy regions: in yes/no questions, preverbal vowels are optional and very often identical in the whole verbal paradigm (see p. 373). In the same dialects, preverbal vowels also occur in main wh-questions (see p. 404, 480, 509f).

<sup>7</sup> Since the wh-word *do* in (12b) displays the typical behaviour of clitic forms (it cannot be coordinated, occur in isolation, combine with a preposition), Poletto (2000:74) takes it to be

(9) invariable subject clitic (Paduan)

a. *A ve-to via?*

*a go-you:sg away?*

b. *(\*a) dove (\*a) ze-lo ndà?*

*a where a is-he gone?*

(10) deictic subject clitic in yes-no questions (Friulian)

*(I) mangi-tu un milus?*

*i eat-you:sg an apple?*

(11) deictic subject clitic with wh-phrases (Friulian)

a. *Quant \*(i) mangi-tu?*

*when i eat-you:sg?*

b. *Quantis caramelis \*(i) a-tu mangiat?*

*how many sweets i have-you:sg eaten?*

c. *Quant \*(a) van-u a Pordenon?*

*when a go-they to Pordenone?*

(12) deictic subject clitic with wh-words (Friulian)

a. *Quant \*(i) mangi-tu?*

*how much i eat-you:sg?*

b. *Do (\*a) van-u?*

*where a go-they?*

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clitic. The other forms in (12), which Poletto analyses as weak following Cardinaletti and Starke's (1999) typology, should display a similar behaviour, but no data are provided.



c. Se (\*a) fa-nu?

what *a* do-they?

As for embedded questions, Poletto (2000:84) provides one example of embedded subject wh-question from the Alpine Lombard dialect of Livigno containing a vowel which seems to be an invariable subject clitic, and Poletto (2000:73) discusses one example from S. Michele al Tagliamento containing a deictic subject clitic:

(13)a. Al so ca chi c a laverà i piac.

*a* it know not who that *a* will-wash the dishes

I don't know who is going to wash the dishes

b. A mi an domandat par'se ch'a nol riveva.

*a* to-me have asked why that *a* not-he arrived

They asked me why he did not come

Poletto (2000:24-26; 71-79) explains this complex distribution of preverbal vowels in cartographic terms. Assuming a hierarchy of projections as in (14),

(14)a. [<sub>LDCP</sub> invariable [<sub>CP</sub> invariable [<sub>CP</sub> invariable [<sub>AgrCP</sub> invariable [IP...

b. [<sub>CP</sub> wh-phrases [<sub>CP</sub> deictic [<sub>AgrCP</sub> wh-clitics [IP

she suggests that invariable SubjCLs are merged in the lowest projection hosting wh-elements, called AgrC, which is targeted by clitic and weak wh-forms (see fn.7). This is the reason that invariable SubjCLs cannot co-occur with wh-clitics. Invariable SubjCLs raise to the head of the projection hosting left-dislocation (LDCP), which is higher than the projection targeted by wh-phrases (Rizzi 1997). By moving through the head of the wh-projection, the

possibility that invariable clitics co-occur with *wh*-phrases is also excluded. As for deictic SubjCLs in (14b), they occur between the positions targeted by *wh*-phrases and weak/clitic *wh*-forms. This assumption should explain why they can co-occur with the former but not with the latter.<sup>8</sup>

Some problems arise with this analysis: first, since preverbal vowels co-occur with subject enclitics (see both the Emilian data in (2)-(4) and the Friulian data in (10) and (11)), the proposal that preverbal vowels are subject clitics implies that there are two subject clitics per sentence; how this fares with thematic theory is not discussed. Second, the assumed movement of invariable clitics to higher heads in (14a) is not motivated. Third, it is not clear why the order “deictic clitic – *wh*-clitic” predicted by the structure in (14b) is never found in any dialect. As for weak *wh*-forms (see fn.7), Poletto (2000:74) proposes that deictic SubjCLs do not undergo the process of spec-head agreement necessary to license weak *wh*-items, but since weak *wh*-items are suggested to occur in the lower specAgrCP, the lack of co-occurrence of the two elements is not explained. The Emilian data seen in (2)-(4) raise further questions. First, they seem to show that two classes of vocalic SubjCLs are too many. Donceto preverbal vowels are found in all persons of the verbal paradigm (in yes-no questions and in *wh*-questions with *wh*-phrases) and seem to qualify as invariable SubjCLs. However, as shown in (3), they can occur in *wh*-questions with *wh*-phrases,

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<sup>8</sup> Invariable and deictic subject clitics occurring in declarative sentences are analysed by Poletto as occupying the same CP positions as in questions. See section 8 for discussion.

something which is impossible with invariable SubjCLs of other dialects (see e.g. Paduan (9b)). They thus seem to have the same distribution as deictic SubjCLs in other dialects, see e.g. Friulian (11).<sup>9</sup> If SubjCLs found in all persons of the verbal paradigm can occur in *wh*-questions with *wh*-phrases, the two classes could be conflated; this implies that the ungrammaticality of (9b) in Paduan must be explained in another way (see sections 8.2 and 8.4). Similar remarks hold for Paduan yes-no questions. As reported in Chinellato (2004a,b), a yes-no question like (9a) is only possible with an intonation of emphasis or surprise and cannot be used as an informative question. True questions as in (15) are ungrammatical:

(15) \*A vu-to un toco del me panin?

*a* want-you-sg a piece of-the my sandwich?

Emilian preverbal vowels, which can occur in yes-no questions, again pattern with deictic SubjCLs of other dialects (see (10)) and not with invariable ones, in spite of the fact that they occur in all persons of the verbal paradigm.

Another way of approaching the cross-linguistic differences keeping the distinction between invariable and deictic SubjCLs intact is to assume the existence

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<sup>9</sup> The preverbal vowels in *wh*-questions in the Emilian dialects of Bologna, Bondeno and Guastalla are treated by Poletto (2000:59-60) together with the deictic subject clitics found in Friulian dialects. As shown by the 2sg and 3pl *wh*-questions reported in Poletto (2000:60) and (2000:69), respectively, where one and the same vowel is found, the Guastalla dialect does not seem to display a deictic system. Similarly to the Donceto data, preverbal vowels in these dialects look like invariable subject clitics and represent a problematic case for the claim (based on Paduan (9)) that invariable subject clitics are not found in *wh*-questions.

of subclasses of invariable clitics, those which can occur in yes-no questions and wh-questions, as in Donceto, and those which cannot, as in Paduan.

That two classes of vocalic SubjCLs are not enough is also shown by another set of Emilian data. A further class is needed to account for the vowel occurring in the 1sg, 1pl, 2pl in declarative sentences (5). This pattern is well-known from traditional descriptions (see Renzi and Vanelli 1983 for many dialects<sup>10</sup> and Vanelli 1984 for Friulian) and quite wide-spread in NIDs: it is not only found in Emilian dialects (Cardinaletti and Repetti 2004), but also attested in Veneto dialects (Central and Northern Vicentino dialects, see Chinellato 2004a,b and section 8.2) and Piedmontese dialects (Tortora 1997:54,fn.36, Goria 2004) (also see Manzini and Savoia 2005:72-82).<sup>11</sup> These vowels qualify neither as invariable nor as deictic subject

<sup>10</sup> Renzi and Vanelli (1983) show that the pattern which we illustrate with data from Donceto (5) contains a vowel in 1sg, 1pl, 2pl forms which is identical in all three forms and optional (see their generalisation #4 and their section 1.2).

<sup>11</sup> Goria (2004:121) shows that two Piedmontese dialects (Turinese and Astigiano) that seem to have deictic and invariable subject clitics, respectively, display an optionality in the paradigms that makes them resemble the 1sg, 1pl, 2pl pattern (also see Parry 1993):

(i)	Torinese	Astigiano	
1sg	(i) mangio	(a) mangio	I eat
2sg	it mange	at mange	you:sg eat
3sg	a mangia	a/al/'l mangia	he eats
1pl	(i) mangioma	(a) mangioma	we eat
2pl	(i) mange	(a) mange	you:pl eat
3pl	a mangio	a mangio	they eat

clitics in Poletto's typology (Poletto 2000 did not analyse this pattern, however).<sup>12</sup> As a consequence of the previous point, the parallel behaviour of the declarative sentences in (5) and the interrogative sentences in (4) and (6)-(8) was not previously noticed.

### ***5. The analysis: functional vowels***

Because of the reasons pointed out in the preceding discussion, we suggest that Emilian preverbal vowels are not instances of the two classes of invariable and deictic SubjCLs merged in CP. We suggest that they are the spell-outs of functional heads of the left periphery and the higher portion of the IP layer. We base our analysis on Rizzi's (1997), (2001) cartography of the left periphery and Cardinaletti's (2004) multiple subject approach.

The left periphery of embedded and main questions looks as in (16a) and (16b), respectively. Int is the position of the interrogative complementiser *se* in (17a), which precedes the focalised constituent *questo* occurring in specFocP (Rizzi 2001:289). Q is the head of the projection hosting the wh-phrase *che cosa* in (17b), which follows the focalised constituent *a Gianni* (Rizzi 1997:330,n.18). As (17c) shows, wh-phrases and focalised constituents

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<sup>12</sup> In Benincà and Poletto (2005:274), this pattern is identified in the Venetian dialect of the XVI century and analyzed as realising person features. If person features are encoded in IP-internal projections, their proposal is not in contradiction with our proposal that preverbal vowels can also occur IP-internally.

cannot co-occur in main questions (Rizzi 1997:291). This can be captured by assuming head movement of Q to Foc, creating the complex head Q+Foc (Rizzi 2006:128,n.8):

(16)a. embedded questions: Force (Top) Int (Top) Foc Q Fin Subj T

b. main questions: Force (Top) Int (Top) Q+Foc Q Fin Subj T

(17)a. Mi domando se QUESTO gli volessero dire, non qualcos'altro.

I wonder whether this [they] to-him wanted [to] say, not something else

b. Mi domando A GIANNI che cosa abbiano detto, non a Piero

I wonder to Gianni what [they] have said, not to Piero

c. \*A GIANNI che cosa hai detto, non a Piero?

to Gianni what [you] have said, not to Piero?

With these assumptions in mind, we develop our analysis of preverbal vowels in interrogative clauses as follows:

a) in main **wh-questions with wh-phrases**, the preverbal vowel is the spell out of the complex Q+Foc head. We call it an 'interrogative vowel'. The interrogative head has an edge feature which attracts the wh-phrase. We exemplify the derivation with the 2sg form of (3b):<sup>13</sup>

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<sup>13</sup> In (18) and the following structures, verb – subject clitic inversion is obtained by moving the two elements to Y (see Cardinaletti and Repetti 2008, 2010, for discussion). We take the Y head to be located in the INFL layer. This is coherent with the wide-spread proposal that no V-to-C movement takes place in Romance languages (see Cardinaletti and Repetti 2008:543, fn.26 and the references quoted there). V-to-Y movement is motivated by the need to check the inflectional [wh] feature on the verb (Rizzi 1996, 2001) against the Y head.

(18)  $[_{\text{FocP}} \text{kwã:t an } \emptyset \text{ } [_{\text{QP}} \emptyset \text{ } [_{\text{FinP}} \text{ } [_{\text{SubjP}} \text{ } [_{\text{YP}} \text{gɛ-t } [_{\text{TP}} \text{t } \text{gɛ} \text{ } [_{\text{VP}} \text{t } \text{gɛ} \text{ kwã:t an}]]]]]]]]]]]$

b) in main **yes-no questions**, the preverbal vowel is an ‘interrogative vowel’ that spells out the Int(errogative) head; an empty operator (OP) is inserted in SpecIntP (Rizzi 2001, De Crousaz and Shlonsky 2003). We exemplify the derivation with the 2sg form of (2b):

(19)  $[_{\text{IntP}} \text{OP } (\emptyset) \text{ } [_{\text{FinP}} \text{ } [_{\text{SubjP}} \text{ } [_{\text{YP}} \text{be:v-ət} \text{ } [_{\text{TP}} \text{t } \text{bɛ:v} \text{ } \dots \text{ } [_{\text{VP}} \text{t } \text{bɛ:v} \text{ } ]]]]]]]]]]$

c) in main **wh-questions with wh-clitics**, the monosyllabic *wh*-word cliticises to the Focus head and excludes merge of the ‘interrogative vowel’. We exemplify the derivation with the 2sg form of (4b):

(20)  $[_{\text{FocP}} \text{dõ:d } [_{\text{QP}} \text{dõ:d} \text{ } \text{Q } [_{\text{FinP}} \text{ } [_{\text{SubjP}} \text{ } [_{\text{YP}} \text{vɛ-t} \text{ } [_{\text{TP}} \text{t } \text{vɛ} \text{ } [_{\text{VP}} \text{t } \text{vɛ} \text{ } \text{dõ:d} \text{ } ]]]]]]]]]]]]$

If *wh*-clitics pattern with pronominal clitics in undergoing a two-step derivation (XP-movement followed by head-movement), we might wonder what the landing site of the XP-movement step of their derivation is. We propose that it is the specifier of the Q head hosting [wh] features. As in the case of personal pronouns, weak *wh*-forms need to move to the specifier of a head with relevant features;

d) in **embedded questions**, interrogative vowels are excluded: in yes-no questions (6), the Int head is realised by the complementiser *se*; in *wh*-questions with *wh*-phrases (7), the Q head is realised by an empty complementiser, as assumed in V/2 languages to prevent movement of the verb to the CP layer in embedded questions.

Consider now the preverbal vowel in the 1sg, 1pl, 2pl in (4a): we take it to be the same element as the one that occurs in the same persons in

declarative sentences (5a) and embedded questions (6a,a’)-(8a), namely a vowel spelling out a functional head of the subject-field of the INFL layer (Cardinaletti 2004). We call this head Z and the vowel ‘subject-field vowel’. The structures we suggest for (4a) and (5a)-(6a are depicted in (21), where the derivation is exemplified for the 1sg:<sup>14</sup>

- (21) a.  $[_{\text{FocP}} \text{d}\ddot{o}:\text{d} [_{\text{QP}} \text{d}\ddot{o}:\text{d} [_{\text{FinP}} [_{\text{SubjP}} [_{\text{ZP}} (\text{ə}) [_{\text{YP}} \text{vo-j}\ddot{a}} [_{\text{TP}} \text{j}\ddot{a} \text{v}\ddot{o}} [_{\text{VP}} \text{j}\ddot{a} \text{v}\ddot{o}-\text{d}\ddot{o}:\text{d}} ]]]]]]]]$   
 b.  $[_{\text{FinP}} [_{\text{SubjP}} [_{\text{ZP}} (\text{ə}) [_{\text{YP}} [_{\text{TP}} \emptyset \text{be:v} [_{\text{VP}} \emptyset \text{be:v}} ]]]]]]$

The fact that in declarative sentences, the vowel occurring in the 1sg, 1pl, 2pl follows a preverbal subject (which occurs in SpecSubjP, Cardinaletti 2004) confirms that ZP is a projection of the IP layer. Given the person features involved, the preverbal subject is a strong pronoun (e.g. the 1sg *me* in (22)):

- (22)  $[_{\text{SubjP}} \text{me} [_{\text{ZP}} (\text{ə}) [_{\text{YP}} [_{\text{TP}} \emptyset \text{be:v} [_{\text{VP}} \emptyset \text{be:v}} ]]]]]]$  ‘I drink’

The structure in (16b) predicts that interrogative vowels should occur higher than preverbal subjects which sit in specSubjP. Unfortunately, the position

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<sup>14</sup> For the fact that 1sg, 1pl, 2pl questions display overt enclitics (*jə* in (21a)), while the corresponding declaratives display null subjects ( $\emptyset$  in (21b)), see Cardinaletti and Repetti (2008), (2010). If the (identical) vowel found in the 1sg, 1pl and 2pl is not a simple case of homophony, the question arises as to which features these three persons of the paradigm have in common. In the feature system proposed by Gorla (2004: Ch.4), the 1sg, 1pl and 2pl have the following features in common: [- (add,sg)][+part], i. e., they indicate the participants in the speech act that are not a singular addressee (for the motivations that the 2sg is characterized by the feature [+ (add,sg)], see Gorla 2004: 130; 3sg and 3pl are characterized by the features [- (add,sg)][-part]). The Z head can thus be taken to encode the [- (add,sg)][+part] features. For a different view, see Chinellato (2004b).





(24)a. ə ə be:v-jə? *interrogative vowel + subject-field vowel*

b. kwā:t an ə ə go-jə? *interrogative vowel + subject-field vowel*

No long preverbal vowel is ever found in the 1sg, 1pl, 2pl with *wh*-clitics (4a) and in embedded questions (6a)-(8a), where only the subject-field vowel can occur, or with any of the 2sg, 3sg, 3pl forms of the verb (2b)-(3b), where only the interrogative vowels can be found. A summary of the interrogative data is provided in (25):<sup>15</sup>

(25) Distribution of preverbal vowels	2sg, 3sg, 3pl	1sg, 1pl, 2pl
Yes-no questions:	Optional • interrogative vowel	Optional • interrogative vowel or • subject-field vowel or • interrogative vowel + subject-field vowel
Wh-phrases:	Obligatory • interrogative vowel	Obligatory • interrogative vowel or • interrogative vowel + subject-field vowel
Wh-clitics:	Impossible	Optional • subject-field vowel
Embedded questions:	Impossible	Optional • subject-field vowel

### 7. Questions without subject-verb inversion

Further evidence in support of our analysis comes from questions without

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<sup>15</sup> The same distribution of functional vowels in questions and the same data with long and short preverbal vowels are attested in a nearby dialect, spoken in the town of Gazzoli.

The question as to why preverbal vowels are sometimes optional and sometimes obligatory, which also arises in cross-dialectal analysis (see section 8.3), is left open here.

subject-verb inversion. As in many other NIDs, yes-no questions can be formed in Donceto by adding interrogative intonation to declarative word orders, as shown in (26a,b). In this case, the subject-field vowel can occur (26a), but the interrogative vowel cannot, (26c,d). Remember that the vowel in the 2sg subject clitic *ət* in (26b) is an epenthetic vowel inserted to syllabify the clitic /t/ (see fn.2):

- (26)a. ə be:v? ‘I drink?’  
 b. ət be:v? ‘you:sg drink?’  
 c. (\*ə) la skri:və? ‘she is writing?’  
 d. (\*ə) i be:vən? ‘they drink?’

We suggest that in these cases, the left periphery is not activated, and no functional vowel spells out the Int head. The IP internal Z head is however spelled out by *ə* (26a).

A similar restriction is found in wh-questions in the dialect of Gazzoli. In this dialect, two different forms for the word meaning ‘where’ exist: a long form, which we take to be a strong form and with which the interrogative vowel is mandatory (compare (27a) with (3)), and a short form, which we take to be a clitic form and with which the interrogative vowel is impossible (the subject-field vowel is optional) (compare (27b) with (4)):

- (27)a. ‘strong’ form                      b. clitic form
- ō:də \*(ə) vo-jə                      ō:d (ə) vo-jə                      ‘where am I going?’  
     ō:də \*(ə) num-jə                      ō:d (ə) num-jə                      ‘where are we going?’  
     ō:də \*(ə) nɛ:-v                      ō:d (ə) nɛ:-v                      ‘where are you:pl going?’

õ:də *(ə) vɛ-t	õ:d (*ə) vɛ-t	‘where are you:sg going?’
õ:də *(ə) va-l	õ:d (*ə) va-l	‘where is he going?’
õ:də *(ə) van-jə	õ:d (*ə) van-jə	‘where are they going?’

In Gazzoli, lack of verb - subject clitic inversion in main questions is also marginally possible with wh-clitics, as shown in (28a). With the strong wh-form *õ:də*, however, verb - subject clitic inversion is required, and the interrogative vowel is also required; see the contrast between (28b) and (28c):

- (28) a. ?õ:d õ va, Giani? / ?Giani, õ:d õ va? ‘where he goes, Gianni?’  
 b. \*õ:də ə õ va, Giani? / \*Giani, ondə ə õ va? ‘where he goes, Gianni?’  
 c. õ:də ə va-l, Giani / Giani, õ:də ə va-l? (see (27a))

These data show that the activation of the Q+Foc head with strong wh-forms (and the consequent realisation by *ə*) necessarily implies the activation of the lower head Y, where verb - subject clitic inversion obtains.

### **8. Comparative remarks and open issues**

If the analysis developed so far is correct, it can be applied to other dialects. In particular, we predict that there can be (i) cross-linguistic differences in the distribution of functional vowels depending on the functional head realised in each dialect, and (ii) more than one type of functional vowel in one and the same dialect, as we have seen above for Donceto, where we have identified two types of functional vowels, i. e., the interrogative and the subject-field

vowels. In what follows, we show that both predictions are correct.<sup>16</sup>

### *8.1 Deictic clitics*

In *wh*-questions, Friulian deictic SubjCLs have the same distribution as Donceto interrogative vowels: they are required with *wh*-phrases, but impossible with *wh*-clitics (compare (11) with (3), and (12) with (4)). Deictic SubjCLs in questions can be analysed along the same lines as Donceto interrogative vowels. In *wh*-questions with *wh*-phrases, they spell out the complex head Q+Foc; *wh*-clitics cliticise to Foc and make the realisation of the focus head through the interrogative vowel impossible.

The main difference between the Friulian and the Donceto data has to do with the quality of the vowel. In Donceto, the vowel is the same in all persons of the verbal paradigm (i. e., [ə]), while in Friulian, the preverbal vowel is [i] in the 1st/2nd persons and [a] in the 3rd person. This is surprising if, as we suggest, the vowel spells out the complex head Q+Foc. Why should the interrogative vowel have two different realisations depending on the persons of the paradigm? Suppose that the two vowels spell out a combination of functional heads, as we have seen for Donceto. The interrogative vowel in (11) can be seen as the realisation of a complex head which also incorporates subject features: Subj+(Fin+)Q+Foc:

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<sup>16</sup> The second prediction is correct for the Southern Veneto dialect of Loreo, whose vocalic subject clitics are invariable in main declarative sentences (Poletto 2000:20) and deictic in embedded sentences (Poletto 2000:84).

(29)a. Force (Top) Int (Top) Foc Q Fin Subj Y TP

b. Force (Top) Int (Top) Subj+Fin+Q+Foc ~~Q Fin Subj~~ Y TP

It is straightforward to assume that (i) the Subj head shares features with the lower functional heads of the IP, and (ii) incorporation makes inflectional features be copied onto the CP layer. In this way, CP vowels are sensitive to the type of subjects present in the clause.

In Friulian, deictic clitics also occur in declarative sentences. In this case, they follow preverbal subjects (Poletto 2000:151). If preverbal subjects sit in SpecSubjP (Cardinaletti 2004), deictic clitics in declarative sentences are to be analysed as IP-internal vowels (also see section 8.2 for Veneto dialects). This analysis seems superior to the proposal by Poletto (2000) according to which (in all sentence types) deictic SubjCLs occur between the positions targeted by *wh*-phrases and weak/clitic *wh*-forms (14b). This portion of clause structure is never activated in declarative sentences, and it is therefore surprising that in these sentences, a deictic clitic realizes this CP head. Preverbal vowels can also be said to occur in IP in those Friulian questions in which *wh*-phrases are followed by the complementizer (13b). If the complementizer sits in the Fin head (as in Benincà 2001:62), the preverbal vowel must necessarily occupy a IP-internal head.

Further evidence for our hypothesis comes from Veneto dialects. Studying the distribution of preverbal vowels in eleven Veneto dialects, Chinellato (2004a,b) found that the deictic system of Northern Vicentino,

where the same vowel occurs in the 1st and 2nd persons,<sup>17</sup> is spurious and it indeed hides a 1sg, 1pl, 2pl + 2sg system. In the 2sg, the preverbal vowel *a* is only possible in exclamative sentences and incompatible with the exclamative marker *ecome se* in (30a), which introduces an embedded sentence. The vowels in the 1sg, 1pl, 2pl can instead co-occur with it (30b):<sup>18</sup>

(30)a. *Ecome se (\*a) te ghe pianto!*

indeed you:sg have wept

b. *Ecome se a go / a ghemo / a gavi pianto!*

indeed I have / we have / you:pl have wept

The 2sg *a* also differs from the 1sg, 1pl, 2pl *a* in that it cannot follow a strong pronominal subject (see (31a)). If Chinellato is correct, in (30b) *a* is not a deictic clitic occurring in the CP layer, but it presumably realizes the IP-internal Z head seen in (21). The contrast in (30) supports our proposal that (i) different sentence types (here, exclamatives vs. embedded clauses) may display different preverbal vowels, and (ii) different types of preverbal vowels can be found in one and the same dialect.<sup>19</sup>

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<sup>17</sup> Differently from Friulian dialects, no preverbal vowel occurs in the 3rd person.

<sup>18</sup> This is not an isolated case. Chinellato shows that in the variety of Salzano, *a* is only found in the 2sg in exclamative contexts and ungrammatical in other persons and sentence types.

<sup>19</sup> Chinellato suggests that 2sg *a* is an exclamative marker, a proposal criticized by one reviewer. Whatever the analysis of 2sg *a* in exclamatives, the point made in the text holds.

## 8.2 Veneto dialects and *wh*-questions

In the eleven Veneto dialects investigated by Chinellato (2004a,b), preverbal vowels are impossible in all *wh*-questions. This restriction seems to be independent of the persons of the paradigm in which the vowels occur and whether the vowels are possible in yes-no questions or not, as the data in (31b-g) show. The data are compared with those of Donceto in (31a):<sup>20</sup>

(31)preverbal vowel	<i>wh</i> -Q	yes-no-Q	declaratives	persons
a. Donceto	√	√	√	all/1sg, 1pl, 2pl
b. Eastern Polesano	*	√	√	all
c. Eastern Vicentino	*	√	√	all
d. Paduan	*	*	√	all
e. Central Polesano	*	*	√	1sg, 2sg, 1pl, 2pl
f. Northern Vicentino	*	*	√	1sg, 1pl, 2pl
g. Central Vicentino	*	*	√	1sg, 1pl, 2pl

As Chinellato himself has concluded, preverbal vowels in Veneto dialects do not instantiate either of the two classes postulated by Poletto (2000). Many more classes of subject clitics are needed to account for the great micro-variation found in this dialectal area (also see section 8.4).

These data can be addressed more easily if functional vowels realise different functional heads in the different dialects and if more than one type of

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<sup>20</sup> In the persons in which they occur, preverbal vowels are identical. No vowel occurs in the other persons of the paradigm (see fn.17). In (31), we consider declaratives without left periphery. For declaratives with left-peripheral constituents, see section 8.4.



vowel exist in one and the same dialect depending on the sentence type in which they occur. For instance, in Eastern Polesano and Eastern Vicentino (31b-c), vowels realize the Int head in yes-no questions and other heads in declaratives and with left-peripheral items (see section 8.4). In the dialects in (31d-g), the Int head cannot be realized by preverbal vowels. In none of the Veneto dialects in (31b-g) can the Q+Foc head be realised by preverbal vowels.

### *8.3 Cross-linguistic variation in wh-questions and yes-no questions*

As we have just seen, in Veneto dialects, preverbal vowels are impossible in wh-questions with wh-phrases. In Emilian and Friulian dialects, preverbal vowels are instead obligatory, (3) and (11). Finally, in Piedmontese dialects, preverbal vowels are optional (Goria 2004:44, 214). This wide cross-linguistic variation needs to be studied in more detail than can be done in this paper.

Another dimension of variation is the interpretation associated with the presence of preverbal vowels. For instance, Poletto (2000:75) points out that in the Friulian dialect of S. Michele al Tagliamento, the presence of the vocalic segment triggers a different meaning of the wh-question when it co-occurs with some wh-elements like *dulà* ‘where’ and *coma* ‘how’ (namely a surprise interpretation; for a similar reading triggered in yes-no questions, see below in the text). These data are accounted for by assuming that the wh-element is ambiguous between a strong form (which behaves like the wh-phrases in (11) and can move to the relevant, higher interrogative projection, presumably similar to what happens in rhetorical questions,

Obenauer and Poletto 2000) and a deficient form (which behaves like the wh-clitics in (12)).<sup>21</sup>

Similarly, in yes-no questions, the preverbal vowel can be optional (Emilian dialects, (2) and fn.6; some Veneto dialects, (31b-c); Piedmontese dialects: Gorla 2004:43) or impossible (some Veneto dialects, (31d-g)). We suggest that the Int head can be realized by a vowel only in the former group of dialects. In some dialects, the presence of functional vowels correlates with a different interpretation; this is the case of Friulian (10), where the presence of the preverbal vowel signals surprise and the request of additional information (Poletto 2000:69). The difference in interpretation suggests that different heads of the CP layer are realised by the vocalic segments in e.g. Friulian and Emilian dialects: the functional heads responsible for the non-canonical interpretation of questions and Int, respectively.<sup>22</sup>

The situation in wh-questions with wh-clitics seems to be more regular: in this case, interrogative vowels are impossible in all dialects. This fact can be captured with the proposal suggested above that wh-clitics and preverbal vowels compete for the same position and are therefore mutually exclusive.

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<sup>21</sup> In this analysis, it is unclear why the vowel which is obligatory with wh-phrases (11) does not also correlate with the non-canonical interrogative interpretation.

Remember that in Gazzoli, strong and deficient wh-items have a different morphological form (27), and no apparent optionality of the preverbal vowel as in Friulian arises.

<sup>22</sup> For the Emilian dialects spoken in Piacenza and Guastalla, Poletto (2000:69) reports that sentences with the preverbal vowel are used in out-of-the-blue questions. This observation is in line with the results of our field research: in Donceto, the vowel seems to be truly optional.

It should however be remembered that, as we have seen for Donceto, wh-questions with wh-clitics can display IP-internal vowels (what we have called subject-field vowels). While analysing this type of wh-questions, the occurrence of functional vowels should be compared with their distribution in declarative sentences and embedded questions.

#### *8.4 Paduan and constructions with left-peripheral constituents*

Consider now Paduan sentence in (9b), repeated here for convenience:

(32) Dove (\*a) zelo ndà?

where *a* is-he gone?

Paduan vowel *a* is found in all persons of the paradigm in declarative sentences and is ungrammatical in wh-questions. Given the Donceto data in (3), the ungrammaticality of (32) with *a* is surprising. Why do Donceto and Paduan differ in this respect?

As said above in section 8.2, preverbal vowels are impossible in wh-questions in all Veneto dialects investigated by Chinellato (2004a,b). (32) could be an instance of this general restriction operating on this dialect family.

There might be another explanation for the data in (32). Paduan does not display preverbal vowels in any left-peripheral construction (Benincà 1983; see (15) for yes/no questions). The ungrammaticality of (32) could thus be seen as a consequence of this other more general restriction operating on this dialect. That Paduan is indeed special among Veneto dialects can be seen by the distribution of vowels in the many constructions studied by Chinellato

(2004a,b). His data can be summarised as follows:

(33)

	yes-no	> LD	> Focus	> QP-subj.	> strong subj.	> Ø
Eastern Polesano	√	√	√	√	√	√
Eastern Vicentino	√	√	?	√	?	√
Central Polesano	*	√	√	-- <sup>23</sup>	√	√
Northern Vicentino	*	*	√	-- <sup>23</sup>	√	√
Central Vicentino	*	*	*	-- <sup>23</sup>	√	√
Paduan	*	*	*	*	*	√

The table in (33) shows that there is an implicational scale for the occurrence of preverbal vowels among the different constructions involving the left periphery and the high IP layer. This implicational scale correlates with the functional hierarchy in (34b) (see (16) and (21); for the projection hosting quantified DP subjects, see Tortora 1997:67, Cardinaletti 2004:134):

- (34)a. yes-no > LD > Focus > QP-subj. > strong subj. > Ø
- b. Int    Top    Focus    Quant    Subj    T

This micro-variation can be accounted for by saying that in different dialects, preverbal vowels spell out different heads of the left-periphery and the highest portion of the IP layer. For reasons of space, we cannot analyse in detail the derivation of the observed implicational scale, to which we will

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<sup>23</sup> Since in Central Polesano, Northern Vicentino and Central Vicentino, preverbal vowels are not found in the 3rd person (fn. 17), they cannot occur with quantified subjects. In the persons in which they occur, preverbal vowels are possible with strong pronouns (as signalled in (33) by the next column to the right, headed by “strong subj.”).

return in future work. As stated above, the only exception to this implicational scale is provided by the incorporated Q+Focus head, which is never realised by a preverbal vowel in Veneto dialects. This peculiarity of Veneto dialects also remains an open issue here.

### **9. Conclusions**

In conclusion, the hypothesis that preverbal vocalic segments are two different classes of SubjCLs merged in the CP layer is not sufficient to handle the Emilian data in (2)-(4) (and the data from other NIDs, as shown by Cardinaletti and Repetti 2004, Chinellato 2004a,b, Gorla 2004, Manzini and Savoia 2005), unless we want to assume many further classes of vocalic SubjCLs. We have suggested that the preverbal schwas in (2)-(5) are “functional vowels” which realise different functional heads of the clausal skeleton in different sentence types. Our data also show that functional vowels can be merged in both the CP and the IP layers. The functional vowels of the two layers can be found in one and the same *dialect*: see e.g. (2)-(3) and (4)-(5), respectively, for the Emilian dialect of Donceto. We have seen that similar evidence comes from other dialects, such as the Veneto dialects. Nothing prevents functional vowels of the CP and the IP layers from co-occurring in one and the same *sentence*, as we have seen in (24). While we believe to have paved the way for a more satisfactory understanding of the microvariation found in NIDs with respect to preverbal vowels, the broader question remains open: it remains to be established why in (many) NIDs, functional heads of

the clausal skeleton can be spelled out by phonologically unmarked material.

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