
Can We Ever See the Speaker's Coordinates in the C-layer?

3.1 Introduction

So far, it might seem that the high position in the C-layer that I am hypothesizing has some relevance only for SoT phenomena. Therefore, one might be tempted to say that it is not an 'actual' syntactic position, but only an interface epi-phenomenon, showing up in the process of interpreting temporal relations. In other words, in Chapter 2 I argued that the C-layer includes a position for the speaker's temporal (and spatial) coordinates. Two questions arise at this point: Do we ever *see* such a position? That is, is it ever overtly realized with something recognizable as a first person marked item? The second question is: Where exactly does this position lie in the C-layer? The C-layer includes several distinct heads, hierarchically organized, that Rizzi (1997, 2001) and other scholars argue are the syntactic realization of different features. How is this indexical head ranked with respect to the others?

In this chapter I provide an answer to these questions. I show that the position in the C-layer projected by the speaker's coordinates is *visible* in some peculiar structures and that it can be occupied by a verbal form overtly marked with first person features—and *only* first person ones—expressing an epistemic meaning. I will also argue that the position in question is the left-most one in the C-layer. The argument comes from analysis of the distribution of verbal items such as *credo* (I believe/I think), *penso* (I think), *immagino* (I imagine) and the like. In particular I will consider here the properties of *credo*.¹

¹ See also the unpublished analysis provided in Giorgi and Pianesi (2004c).

The main point is the following: *credo* (I believe/I think) is the subjectless first person present tense verbal form of the epistemic verb *credere* (to believe/to think). In Complementizer Deletion structures, the (apparently) embedded clause exhibits several properties typical of main clauses, which are incompatible with the syntax of subordinate sentences. The idea I will develop in this chapter is that when the Complementizer is not lexically realized, the sequence *credo* (I think) + *clause* must be analysed as a mono-clausal structure and not a bi-clausal one. Several arguments can be provided to this effect, which I will discuss in the following sections.

The hypothesis I discuss here is that *credo* (I think) in these cases must be analysed as a head expressing an epistemic value. It moves from a lower modifier position in the C-layer (see Rizzi 1997, 2002) to a higher one that I argue is the highest, left-most one in the layer. The reason it can move so high is because of its first person features, which are the only ones compatible with the projection containing the speaker's coordinates.²

3.2 Epistemic heads in Italian

As illustrated in Chapter 2, in Italian the Complementizer can be omitted in subjunctive contexts and can never be dispensed with if the embedded verb is in the indicative mood. The sentence complement to a *believe* predicate in Italian—*credere*—selects for subjunctive and, accordingly, admits Complementizer Deletion:³

- (1) Gianni ha detto *(che) è partita
Gianni said that she left(IND)

² Jacqueline Guéron (p.c.) proposes an alternative view: *credo* (I believe) could be considered a modal particle, following the proposal developed in Benincà and Poletto (1994) and Guéron (2000, 2006b) for impersonal modal forms, such as *bisogna* (it is needed), hence not an item originating in a lower modifier position. However, I prefer the modifier hypothesis, in that it can unify this item with the others expressing an epistemic value.

³ The observation that other Romance languages do not select a subjunctive in this embedded context, though important in other respects, is not relevant with respect to the present discussion.

- (2) Gianni crede (che) sia partita
Gianni believes that she left(SUBJ)

What is relevant for the present discussion is the distribution of the embedded subject in these sentences. Italian speakers divide in two groups: for some speakers (group (a)) CD is compatible with a preverbal lexical subject, for others (group (b)), it is not. This property is not related to the regional/ dialectal background of the speaker and is not a case of *optionality* either, given that the speakers consistently pattern in one way or the other.⁴

Consider the following sentences (the symbol ‘#’ signals that the sentence is not acceptable for a group of speakers):

- (3) #Mario crede Luisa sia partita
Mario believes Luisa left(SUBJ)
- (4) Mario crede sia partita Luisa
Mario believes left(SUBJ) Luisa
‘Mario believes Luisa left’
- (5) Mario crede sia partita
Mario believes (she) left(SUBJ)

For the (b) group of speakers sentence (3) is ungrammatical—namely, when the Complementizer is omitted, a preverbal lexical subject is impossible. For these speakers the subject must be either postverbal, as in (4), or omitted *tout court*, as in (5).⁵ For group (a) all the sentences in (3)–(5) are grammatical.

For the analysis of the first piece of evidence, which I am going to discuss here, only the judgements of group (b) are relevant.

⁴ This gives rise therefore to a case that might be dubbed as *intra-linguistic micro-variation*. In other words, the Italian language can be viewed as the conjunction of two minimally different grammars: in one of them a preverbal lexical subject is permitted with CD; in the other it is not.

⁵ The distribution of pronouns follows the same pattern:

- i. #Mario crede lei sia partita
Mario believes she left(SUBJ)
- ii. Mario crede tu sia partita
Mario believes you left(SUBJ)

Only the weak pronoun *tu* is acceptable in prenominal position for all speakers; the third person singular pronoun *lei* is acceptable only for the second group.

The important point in this respect is the existence of a contrast between 'ordinary' sentences with CD and those with *credo* and a preverbal subject. Let's now consider the following contrast:

- (6) #Gianni crede Luisa abbia telefonato
Gianni believes that Luisa called(SUBJ)
- (7) Credo Luisa abbia telefonato
(I) believe Luisa called(SUBJ)

Crucially, for group (b) of Italian speakers the sentence in (6) is ungrammatical, whereas for group (a) it is perfect. The difference in grammaticality judgement between the two groups disappears in example (7), however. This sentence is grammatical for all speakers, even for those rejecting the preverbal subject given in example (6).

The only observable difference between the two sentences is that the one in (6) has a third person subject, whereas that in (7) has an (empty) first person subject. My point here is that exactly this difference provides the explanation for the lack of contrast between group (a) and group (b) in the judging of sentence (7). The hypothesis I develop in this chapter, therefore, is that the subjunctive complement clause *Luisa abbia telefonato* (Luisa called) in (7) has a different status with respect to the corresponding embedded clause in example (6).

A consideration that might prove relevant in this respect is that the interpretation of sentence (6) is not quite the same as the interpretation of sentence (7).

By means of sentence (6), the speaker is telling us something about Gianni's beliefs, in particular that *Gianni has the belief that Luisa called*. In other words, the speaker is attributing to Gianni—on the basis of whatever evidence the speaker might judge appropriate and sufficient—an epistemic state concerning the calling of Luisa.

The meaning associated with sentence (7) is not of the same sort, and indeed it would be rather odd if it were. By means of this sentence the speaker is not telling us that he is attributing to himself a certain epistemic state concerning the calling of Luisa—i.e., something like *I have the belief that Luisa called*—but, rather, something like '*perhaps*'

Luisa called (I am not 100% certain about it). In other words, informally speaking, in sentence (7) the calling of Luisa is asserted, and the assertion is qualified by means of the presence of *credo* (I think) as something less than a certainty.⁶

This observation fits well with the previous one: the embedded clause exhibits neither the syntax nor the semantics of a ‘real’ embedded clause. The properties just listed—the availability of a preverbal subject both for group (a) and group (b), and its assertive nature—seem to suggest that the embedded clause is in fact more similar to a main one, in spite of the fact that it appears with the subjunctive mood.

The hypothesis can therefore be rephrased in the following way: in sentence (6), the verbal form *crede* (he believes) is a ‘real’ verb, taking a complement clause; the resulting structure is therefore a bi-clausal sentence. In sentence (7) *credo* (I believe) only specifies the epistemic status of the speaker with respect to the proposition that follows. In these cases *credo* (I believe) must be treated as an epistemic head, ‘disguised’ as a verb. The sentence in (7) therefore has to be analysed as a mono-clausal structure—analogously to *probabilmente Luisa ha telefonato* (probably Luisa called)—and not as a sentence constituted by two clauses.⁷

3.2.1 *The distribution of credo with topic and focus*

Another piece of evidence in favour of the idea that the clause following *credo* (I think) is not an embedded one, but is the main one, comes from the distribution of focus in topic.

⁶ Note however that nothing prevents the meaning in (6) being attributed to (7). In some sense, it is the other way round: it is the meaning of sentence (7) that is not available for (6).

⁷ Giorgi and Pianesi (2004b) also show that this property is unique to first person indicative present tense subjectless verbal forms followed by a clause without the Complementizer. Namely, the behaviour of forms such as: *io credo* (I believe), *io ho creduto* (I have believed), *io credo che* (I believe that), *tu credi* (you believe), etc. parallel third person forms like *Gianni crede* (Gianni believes) given in (6) and differ in the crucial points with respect to sentence (7).

Rizzi (1997) argued that in embedded clauses focus and topic projections are available in post-complementizer position and not in the pre-complementizer one. Consider the following sentences.⁸

- (8) Mario crede che A PARIGI sia andata (non a Londra)
Mario believes that TO PARIS she went (not to London)
- (9) Mario crede che a Parigi, ci sia andata il mese scorso
Mario believes that in Paris, (she) there-went last month
'Mario believes that in Paris she went last month'
- (10) *Mario crede A PARIGI che sia andata (non a Londra)
Mario believes TO PARIS that she went (not to London)
- (11) *Mario crede a Parigi, che ci sia andata il mese scorso
Mario believes to Paris, that (she) there-went last month
'Mario believes that to Paris she went last month'

Recall also that in main clauses, focus and topic are available in the left periphery of the sentence:

- (12) A PARIGI Maria è andata (non a Londra)
TO PARIS Maria went (not to London)
- (13) A Parigi Maria c'è andata il mese scorso
To Paris Maria there-went last month
'To Paris Maria went last month'

Giorgi and Pianesi (2004b) pointed out that, when CD occurs, the acceptability of focus and topic decreases:

- (14) *Mario crede A PARIGI sia andata (non a Londra)
Mario believes TO PARIS (she) went (not to London)
- (15) ??-* Mario crede a Parigi ci sia andata il mese scorso
Mario believes to Paris (she) there-went last month
'Mario believes to Paris she went last month'

The presence of a focus in a complementizer-less structure gives rise to a very degraded sentence, and the presence of a topic to a less-than-acceptable one. Giorgi and Pianesi (2004b) amply discuss this point and provide an explanation both for the contrast between (10)–(11) on one side and (12)–(13) on the other, and for the difference

⁸ For analyses of these positions in Italian, see among the others Cecchetto and Chierchia (1999), Poletto (2000), Benincà (2001), Benincà and Poletto (2004).

between (14) and (15). Their explanation is not relevant here, because the point with respect to the present discussion concerns the fact that—whatever the reason might be—‘normally’ CD is to various degrees incompatible with embedded topic and focus.

Let’s consider again the hypothesis I proposed above, namely, that the clause following *credo* is *not* an *embedded* clause, given that *credo* is not a main clause, but an epistemic head. If this reasoning is correct, we expect the clause following *credo not* to behave as an embedded clause.

In particular, given that complementizer-less embedded clauses show the pattern in (14)–(15), we can check the hypothesis by comparing *credo* + clause with (14)–(15) above. *Credo* + clause can either be compatible with topic and focus or not. If it is not, then the clause behaves as an embedded one. If it is indeed compatible, then the idea put forward here—i.e., that the whole structure is a single sentence, introduced by an epistemic head—receives independent support.

Consider the following sentences:

- (16) Credo A PARIGI sia andata (non a Londra)
(I) believe TO PARIS (she) went (not to London)
- (17) Credo a Parigi ci sia andata il mese scorso
(I) believe to Paris (she) there-went last month
‘I believe to Paris she went last month’

Both examples are grammatical and contrast with sentences (14)–(15) above. Therefore their syntax is not like the syntax of embedded clauses, but resembles that of main sentences.

To summarize: there are several constraints on the distribution of phrases in the left periphery of a complement clause when the Complementizer is omitted: focus and topic phrases are ungrammatical, or very marginal, and preverbal subjects are allowed only for some speakers, but are ungrammatical for other ones. These constraints cease to play a role when a first person form such as *credo* appears.

In other words, in absence of the Complementizer, the clause following a first person, present tense (epistemic) verb does not exhibit

the syntactic properties that are usually observed in complement clauses. The structure therefore can be better analysed as a single clause introduced by an epistemic head.⁹

The fact that the subjunctive mood appears even in these cases makes this evidence particularly interesting, because it shows that it is possible to have a dissociation between the modal–non modal value of the subjunctive form and the syntax attributed to it. In other words, as shown in the preceding chapter, a non-dependent subjunctive can only have a modal interpretation. Consider the following example, repeated from Chapter 2:

- (18) Che ti prenda un colpo!
That you get(SUBJ) a stroke!

Sentence (18) cannot be an assertion and can only express a wish, an exclamation, etc., whereas the *credo* sentences under discussion are (qualified) assertions. The presence of the subjunctive with *credo* therefore requires an explanation. In section 3.4 below, I will consider this issue in more detail.

3.2.2 *Further evidence in favour of a mono-clausal structure: the distribution of francamente (frankly)*

It is well known—see among others Jackendoff (1972) and Cinque (1999, 2004)—that speech act adverbs such as *francamente* (frankly) cannot be embedded:

- (19) Francamente, Mario si e' comportato male
Frankly, Mario has misbehaved
- (20) *Luisa credeva che francamente si fosse comportato male
Luisa believed that frankly he had misbehaved

The presence of these adverbs requires a long pause before the rest of sentence, usually, even if not always, marked in written language with a comma; several word orders are possible. Consider for instance the following examples (the symbol ‘#’ here signals a long pause):

⁹ If the Complementizer is realized, as in *credo che* (I believe that), the structure is bi-clausal.

- (21) Mario, #francamente#, si è comportato male
Mario, frankly, has misbehaved
- (22) (?)Mario si è, #francamente#, comportato male
Mario has, frankly, misbehaved
- (23) Mario si è comportato male, #francamente!
Mario has misbehaved, frankly!

The impossibility of embedding *francamente* persists even when it appears in sentence-final position:

- (24) *Luisa credeva che si fosse comportato male, francamente
Luisa believed that he had misbehaved, frankly

The only interpretation for (24) is the one where *francamente* refers to the speaker—i.e., it is speaker-oriented—and not to Luisa—i.e., it is not subject-oriented—and takes the whole sentence in its scope.

The embedding of the adverb doesn't seem to improve with CD (in the relevant reading, where the adverb is referring to Luisa's thought):

- (25) *Luisa credeva, francamente, si fosse comportato male
Luisa believed, frankly, (he) had misbehaved
- (26) *Luisa credeva si fosse comportato male, francamente
Luisa believed (he) had misbehaved, frankly

The unavailability of an embedded reading might easily follow from the consideration that speech act adverbs must establish a relation between the speech act and its agent. Therefore, it cannot be acceptable in clauses dependent upon a propositional attitude, such as fearing, believing, etc., as it makes no sense to attribute to somebody a frank attitude in believing, fearing, etc., something. On the contrary, this is naturally possible with an act of communication:

- (27) Mario disse a tutti che francamente era stanco di ascoltare sciocchezze
Mario told everybody that frankly he was tired of hearing silly things

In sentence (27) the adverb *frankly* can be attributed to the subject *Mario* as well, given that he is the agent of a speech act. Concluding, *francamente* never appears in embedded contexts, unless they express speech acts.

Let's now compare these cases with the clauses appearing with complementizer-less *credo*. The following sentence is perfectly grammatical:

- (28) *Credo, francamente, si sia comportato male*
 (I) believe, frankly, (he) has misbehaved

As illustrated by the following example, the post-sentential position of the adverb is grammatical as well:

- (29) *Credo si sia comportato male, francamente*
 (I) believe (he) has misbehaved, frankly

These sentences all mean that the speaker judges frankly that the subject has misbehaved. There is therefore a systematic contrast between the *credo* cases in the sentences (28) and (29) and (24)–(26) with a third person main verb.

It can be immediately observed that this pattern is what one would expect given a mono-clausal analysis for the *credo* sentences under scrutiny. First, notice that the grammaticality of the sentence decreases if the Complementizer is introduced, either to the right of the adverb or to its left:

- (30) *?(?)Credo che, francamente, si sia comportato male*
 (I) believe that, frankly, (he) has misbehaved
- (31) *?(?)Credo, francamente, che si sia comportato male*
 (I) believe, frankly, that (he) has misbehaved

The contrast with (28) might be not very sharp, but it is still quite systematic. Consider also that as soon as the main verb is a past form, the sentence is strongly degraded:

- (32) *??Ho creduto/credetti, francamente, si fosse comportato male*
 (I) believed(PR PERF/SIMPLE PAST), frankly, he had misbehaved

The meaning of (32) is that at utterance time the speaker is frank when he says that he had a belief that such and such. In other words, the sentence is grammatical only if interpreted bi-clausally, where *frankly* modifies the main verbal form and the word order is acceptable only if there is a long pause between the *creduto/credetti* (I believed) and the adverb. Notice that we find a decreased grammaticality even when

the subject, *io* (I) is overt, analogously to the cases we discussed in the previous section:

- (33) ??Io credo francamente si sia sbagliato
I believe frankly (he) was wrong

These data show that if we have a true main clause propositional attitude predicate, there is no room—or, at least, less room—for an embedded *frankly*. This is not true with *credo* followed by a complementizer-less clause.

If this is the case, the hypothesis discussed in this chapter seems to be correct: the complementizer-less clause following *credo* does not exhibit the properties of embedded clauses. On the contrary, the grammar for main clauses can accommodate the phenomena just described, under the hypothesis that *credo* occupies a head position in the left, pre-subject, layer of the sentence.

3.2.3 The structural position of epistemic heads

Let's consider now the exact location of the epistemic item *credo* in the C-layer. In this section I will show that *credo* originates in the position typical of epistemics in Italian—Rizzi's (2002) Modifier position—and then it must move to a higher position in the C-layer. I will argue that this happens because it incorporates first person morphological features. This analysis will provide additional arguments in favour of the existence of a projection dedicated to the syntactic representation of the speaker's coordinates in the left periphery of the clause. I will also compare its distribution with the one of another verbal element used adverbially, i.e., the third person plural present form of the verb *dire* (say), *dicono* (they say), and show that it might provide further arguments in favour of the conclusion proposed here.

In the following discussion I compare *credo* with the epistemic adverb *probabilmente* (probably, possibly), trying to determine whether the two occupy the same position or not. Given that both are epistemic items, one would expect *probabilmente* and *credo* to exhibit the same distribution, modulo the fact that *probabilmente* is a phrase, whereas *credo* is a head.

Consider the following contrast, where the epistemic adverb/head is combined with a focused phrase:

- (34) ??*Probabilmente* A PARIGI Paolo è già stato (non a Londra)
Probably to Paris Paolo has already been (not to London)
- (35) *Credo* A PARIGI Maria sia andata (non a Londra)
(I) believe TO PARIS Maria went (not to London)

The example in (35) is actually better than the one in (34). Recall also that, as discussed in the previous section, the word order found in a sentence such as (35) does not obtain with *real* CD subordinate clauses:

- (36) *Gianni crede A PARIGI (#Maria) sia andata (non a Londra)
Gianni believes TO PARIS (Maria) went (not to London)

I argued above that, while in a complementizer-less embedded clause a focus projection in the left periphery position is not acceptable, in sentence (35) it is possible because it is a mono-clausal structure and not a bi-clausal one.

The sentence in (34), however, is also clearly mono-clausal, therefore, if nothing else is added to the analysis, the contrast would remain unaccounted for.

In the spirit of the cartographic approach (Rizzi 1997, Cinque 1999)—which connects word order to syntactic structures, passing through Kayne's (1994) anti-symmetry—it can be said that, since *credo* is on the *left* of the focus projection, it must also occupy a higher position in the syntactic structure. On the other hand, *probabilmente* does not have this option, and must appear in a position lower than focus. But *where* exactly in the structure? Moreover, the following question would be still more relevant: *why* do we find the contrast between *credo* and *probabilmente* illustrated by sentences (34) and (35)?

Rizzi (2001, 2002) and Cinque (2004) convincingly argue that left-peripheral adverbs are located in a *Modifier* position in the left-side layer of the clause. They provide arguments in favour of the hypothesis that such a position is lower than the focus position. According to their proposal, therefore, the basic location for an adverb like *probabilmente* should be on the right—therefore, lower in the syntactic structure—of the focus phrase, as in the following case:

- (37) A PARIGI probabilmente Paolo è già stato (non a Londra)
To PARIS probably Paolo has already been (not to London)
- (38) [_{FocP} A PARIGI] [_{ModP} probabilmente] Paolo è già stato (non a Londra)
To PARIS probably Paolo has already been (not to London)

The structure in (38) would account for the fact that a focus phrase must precede the adverb and cannot follow it, as shown by the marginality of example (34) above. The word order in (34) would be a violation of the hierarchical ordering of functional projections in the left periphery given in (38). Hence, it is correctly predicted to be ungrammatical.

This account leaves a problem remaining, though. If *credo* behaves as an epistemic head that can appear in the same projection as *probabilmente*, e.g., ModP, then (35) should be on a par with (34), whereas it is not.

The proposal I will argue for in this section is that Rizzi's idea can be maintained, but should be supplemented with the hypothesis that *credo* in mono-clausal structures, by virtue of its inherent properties, moves to a still higher position. This idea would answer the questions above: *credo* raises to the left periphery where the speaker's coordinate is represented, because it is specified as a first person item, whereas *probabilmente* cannot do this, since it is not marked that way.

Morphologically, *credo* is a bi-morphemic verbal form. It is constituted by the verbal root *cred-* and the morphological ending *-o*—i.e., the first person singular morpheme. Hence, even when it works as an epistemic adverb, it maintains its ordinary phi-features, which must be checked. This cannot obtain, as in normal cases, in the T position, because *credo*, due to its peculiar adverbial status, is generated too high up to make it possible. The only possibility, therefore, is that *credo*'s first person singular phi-features are checked in the higher Complementizer projection where the speaker's coordinates are represented. Hence, the word order in (35) is obtained through overt movement.¹⁰

¹⁰ In principle, an explanation should also be provided for the non-fully ungrammatical status of (34). The sentence is in fact judged from 'marginal' to 'very marginal', but not fully ungrammatical. A possible account would be to say that in sentence (34) *probabilmente*, by virtue of its being semantically related with the speaker—given that it expresses an epistemic status of the speaker—can be properly interpreted in the speaker's projection. The semantics of the sentence therefore works out properly, but the syntactic requirements are violated, given that the movement is not triggered as it should be.

3.3 *Dicono* (they say) as an evidential head

A further argument in favour of overt movement of *credo* to a speaker-dedicated projection is provided by its distribution when appearing together with the evidential item *dicono* (they say). *Dicono* (they say) can be analysed in a way analogous to *credo* as an evidential head, i.e., as a verbal form actually expressing a functional head. In this section I will consider the properties of *dicono* (they say) in this particular usage and compare it with the analysis of *credo* discussed in the previous section.¹¹

3.3.1 *The distribution of dicono*

Dicono is the third person plural present tense form of the verb *dire* (say). Giorgi and Pianesi (2004c) argue that this form shares with *credo* the possibility of being analysed as an adverbial head, when it appears in a subjectless context and is followed by a complementizer-less clause. In particular, they claim that it can be considered as an *evidential head*.¹²

The analysis of *dicono* parallels the one provided for *credo*. From the interpretive point of view, analogously to the case of *credo*, this verbal form does not express the literal meaning it expresses 'normally'. Consider for instance the following cases:

- (39) Gianni e Mario dicono che Paola è partita
Gianni and Maria say that Paola left(IND)
- (40) Dicono Paola sia partita
(They) say Paola left(SUBJ)

Sentence (39) is the usual bi-clausal structure, where the speaker tells us about a speech act by Gianni and Mario concerning the leaving of Paola. Sentence (40), on the contrary, does not have this

¹¹ See, in a similar vein, the analysis of *bisogna* (lit: is needed) proposed in Benincà and Poletto (1994) and Guéron (2000). *Bisogna* is a verb of necessity, which is taken to occupy a functional left-peripheral position.

¹² There is a very extensive and very interesting literature on the notion of evidentiality. Here I am adopting a narrow view of it, namely I only consider heads, expressing the *source* of the information. Typologically and philosophically, the issue is much broader than that, and I will not even attempt to provide an analysis of the general notion.



interpretation. By means of this sentence the speaker is not informing her audience about a speech act by a plurality of people concerning the leaving of Paola. As a matter of fact, sentence (40) does not imply the existence of any actual speech act. What this sentence means is that *there is a rumor* concerning the leaving of Paola. In other words, by means of *dicono* the speaker signals that she does not take responsibility for the following content. Notice also that in these cases, as exemplified by (40), the embedded verb appears in the subjunctive, an option not allowed in the normal usage of the verb *dire* (say):¹³

- (41) *Gianni e Mario dicono che Paola sia partita
Gianni and Mario say that Paola left(SUBJ)

The evidential head interpretation is allowed when the subjectless form *dicono* is followed by a complementizer-less clause containing a subjunctive verbal form. If these conditions are not met, the interpretation is the bi-clausal one. Consider for instance the following contrast:

- (42) Dicono Gianni sia partito all'alba
(They) say Gianni has(SUBJ) left at dawn
- (43) *Loro dicono Gianni sia partito all'alba
They say Gianni has(SUBJ) left at dawn

The introduction of a lexical subject, even if pronominal, as in (43), makes the sentence ungrammatical. In (43) the embedded verbal form must in fact appear in the indicative, and CD is not available, as expected:

¹³ I will not discuss in depth the very nature of the epistemicity and evidentiality. For the sake of this work, I will follow Giorgi and Pianesi (2004c) and use the term epistemicity as referring to the (internal) relationship between a subject and a given propositional content and the term *evidentiality* as referring to the source of the reported content, as known to the speaker. Implicitly, by means of an evidential the speaker often provides an assessment of the reliability of the information. The fact that *credo* bears first person features, and that *dicono*—or *si dice*—third person ones, might therefore be intuitively connected with the distinction between epistemicity and evidentiality: the internal state of the speaker, on one side, and the external source of information on the other one. For an analysis of evidentiality in Romance, see also Squartini (2001b).



- (44) Loro dicono *(che) Gianni è partito all'alba
They say that Gianni has(IND) left at dawn

The complementizer cannot be omitted, as is always the case in indicative clauses. Like *credo*, *dicono* must have a head status and cannot be combined with other phrases, such as a subject, or a temporal morpheme, which might compel an analysis in which it projects as a full Verb.

Furthermore, analogously to what I illustrated above for *credo*, the interpretation of (44) is the standard one: the speaker is reporting a speech act by somebody concerning the leaving of Gianni. The same is true with respect to a past form:

- (45) *Hanno detto che Gianni sia/fosse partito all'alba
They said that Gianni left (PRES SUBJ/PAST SUBJ) at dawn
- (46) Hanno detto *(che) Gianni è partito all'alba
They said that Gianni left(IND) at dawn

When *dire* (say) appears in the past, the embedded verb cannot appear in the subjunctive and the Complementizer cannot be omitted. Therefore, the form that is compatible with the structure CD+subjunctive is only the subjectless present tense form.¹⁴

As a final argument in favour of this analysis of *dicono* as a functional head, note that the verb *dire* can take an indirect object, as in the following sentence:

- (47) Gianni ha detto a Paolo che Maria è partita
Gianni said to Paolo that Maria has(IND) left

¹⁴ The imperfect of the indicative gives much better results, even if judgements vary among speakers:

- i. Dicevano Gianni fosse partito all'alba
They said(IMPV IND) Gianni left (PAST SUBJ) at dawn

I will consider the properties of the imperfect in Chapter 4 and suggest an explanation for its acceptability in this sentence and in similar ones.

Finally, note also that the third person singular impersonal form of *dire* (say) formed by the clitic *si* followed by the third person singular form of the verb, *si dice* (CL*si*-says), has the same properties as *dicono*:

- i. Si dice Gianni sia partito all'alba
SI-says Gianni has(PRES SUBJ) left at dawn



The presence of the dative is totally excluded in the construal under scrutiny here:

- (48) **Dicono a tutti Maria sia partita*
(They) say to everybody Maria has(SUBJ) left
- (49) *Dicono a tutti che Maria è partita*
(They) say to everybody that Maria has(IND) left

There is a clear contrast between these examples: the sentence in (48) can only have the literal meaning as a *saying* predicate. Therefore if there is a dative, the verb must be followed by the Complementizer *che* (that) and an embedded indicative verbal form, as in sentence (49).

The main observation relevant to the present discussion is that in sentence (40), as in sentence (42), the embedded subject can appear in preverbal position. We know that for a group of Italian speakers CD clauses cannot have a preverbal subject. In this case, however, the sentence is grammatical for everybody.

All these properties can be explained in the same way as for *credo*. *Dicono* contrasts with *loro dicono* (they say), or *hanno detto* (they said), in that the former is interpreted as an evidential head—giving rise to a mono-clausal structure—whereas the latter are regular saying verbs taking a subordinate clause. Therefore, when *dicono* is a functional head there is no constraint concerning the appearance of a preverbal subject, as there is none in regular main clauses.

3.3.2 *The structural position of evidential heads*

Let's consider now what is the position occupied by *dicono* when it must be analysed as an evidential head. Recall that I showed above that *credo* moves from its base modifier position to the speaker projection in C. Analogously to what is illustrated above for *credo*, *dicono* in these cases can be followed by a topic:

- (50) *Credo a Parigi ci sia andata il mese scorso*
(I) believe to Paris she there-went last month
- (51) *Dicono a Parigi ci sia andata il mese scorso*
(They) say to Paris she there-went(SUBJ) last month



A Parigi (in Paris) appears in between the verbal form *dicono* and the complementizer-less clause. I showed above that this is not a possible option for structures to be analysed as instances of CD. Consider again example (15), which I repeat here for simplicity:

- (52) ??-*Mario crede a Parigi ci sia andata il mese scorso
 Mario believes to Paris (she) there-went last month
 'Mario believes to Paris she went last month'

The contrast cannot be made minimal, because *dire* (say) in normal cases selects for an indicative, which never admits CD. However, what is relevant here is that sentence (51) patterns with sentence (50) and not with (52).

Consider however the following data:

- (53) Credo A PARIGI sia andata (non a Londra)
 (I) believe TO PARIS she went(SUBJ) (not to London)
- (54) ?*Dicono A PARIGI sia andata (non a Londra)
 They say TO PARIS she went(SUBJ) (not to London)

I illustrated above that intervening focus and topic behave alike with respect to *credo*. This is not the case with *dicono*. A focused constituent following *dicono* does not give rise to an acceptable sentence. In this case there is a contrast with *credo*.

A natural way to look at (54) is to say that *dicono* cannot move past the focus projection contained in the C-layer. Recall also that in Italian there is only one such projection, therefore, there is no other way to obtain the word order in example (54).

A plausible explanation for this contrast immediately comes to mind: this phenomenon can be traced back to the different feature specification of the two verbal forms. *Credo*, being marked with first-person features, can move overtly to the speaker's projection in the C-layer, whereas *dicono*, being third person plural and not referring to the speaker, but to an external source, cannot. Therefore *dicono* cannot appear on the left of the focus projection.

On the other hand, as pointed out by Rizzi (2001, 2002), topic phrases can appear much more liberally in the tree, so that the issue does not arise in connection with the reciprocal order with respect to

a topic. In this case, in fact, it is possible to hypothesize the existence of a topic lower than the Modifier projection.

As expected under this hypothesis, the following example is a considerable improvement on the one given above:

- (55) A PARIGI dicono sia andata (non a Londra)
TO PARIS they say she went (not to London)

Let us consider now the reciprocal distribution of epistemics and evidentials. Cinque (1999) investigated the distribution of adverbs appearing in the upper part of the clause. He convincingly showed that the evidential projection intervenes between the evaluative and the epistemic projection, as exemplified by the relative orders of adverbs (cf. Cinque 1999, ch. 4):

- (56) Fortunately_{evaluative} > allegedly_{evidential} > probably_{epistemic}

Leaving aside the evaluative projection, on which I have nothing to say here, evidential items occupy a position on the left of the epistemic ones. *Dicono* complies with this generalization, as shown by the following example:¹⁵

- (57) Dicono probabilmente Gianni sia partito
(They) say probably Gianni has(SUBJ) left

Word order in (57) is as predicted by Cinque's hierarchy, given that the evidential head *dicono* precedes the epistemic adverb *probabilmente*.¹⁶

Consider now the following examples including the epistemic head *credo*, instead of an adverb like *probabilmente*:

- (58) *Dicono creda Maria sia partita
(They) say (I) believe Maria left(SUBJ)
- (59) Credo dicano Maria sia partita
(I) believe (they) say Maria left(SUBJ)

These sentences contrast with the examples given above. As I just illustrated, the grammatical word order according to Cinque's

¹⁵ I thank G. Cinque for pointing out this important piece of evidence to me.

¹⁶ The reverse word order is also possible:

- i. Probabilmente dicono sia partito
Probably (they) say (he) left

hierarchy should be the one in (58), and not the one in (59), contrary to facts.

This contrast however is predicted by the hypothesis proposed above: *credo* must move to a higher position to check its first person, speaker-oriented features, whereas *dicono* does not. The meaning obtained in this way is accordingly the following: ‘according to the epistemic state of the speaker—i.e., less than absolute certainty—there is evidence—coming from an external unspecified source—that P’.

To conclude this section, therefore, it is possible to claim that there is a syntactic position in the left periphery of the clause explicitly marked as speaker-related to which items overtly move under the appropriate conditions.

Where exactly is this position located? According to the analysis given above, it is the left-most one in the C-layer. Putting together these observations with Rizzi’s (2001, 2002) and Cinque’s (1999), it is possible to hypothesize the following structure for the left-peripheral structure. The evidential head *dicono* is located in the Evidential position in the Modifier layer, higher than epistemics. Differently from *credo*, however, it cannot raise out of it:

(60) $\text{dicono}_{\text{evidential}} > \text{credo}_{\text{epistemic}}$

(61) $[_{C-\text{Speaker}} \text{credo} \dots [_{\text{INT}} [_{\text{FOC}} [_{\text{MODIFIER}} \dots$

(62) MODIFIER has to be expanded as: $\dots [_{\text{evaluative}} [_{\text{evidential}} [_{\text{epistemic}} \dots$

Dicono is therefore originally higher than *credo*. The latter however can appear in the left-periphery, whereas *dicono* cannot. The distribution of a focus projection follows from this view.¹⁷

The interpretation is, however, totally different, in that, as expected, *dicono* ceases to be an evidential. Therefore the sentence means something like: ‘probably there are people who say that Gianni left’. Importantly, epistemicity does not concern the leaving of Gianni, but the saying by the people. As a consequence, the example is not relevant to the present analysis.

¹⁷ Rizzi (2002) considers the position in Spec,MOD(ifier) as recursive, in order to permit multiple adverbs to appear. However, this layer must be internally structured in a fixed hierarchical fashion, in order to cope with Cinque’s (1999) observations. If the present analysis is correct, presumably Rizzi’s suggestion cannot be maintained, given that multiple heads positions are also needed, beside the specifiers. I will not consider this point any further in this book, because it is not central to the argument developed here.

3.4 A brief remark on parentheticals

Credo, together with other similar verbal forms such as *suppongo* (I suppose), *temo* (I fear), *spero* (I hope), can be used as a parenthetical, occurring in various positions inside the clause. The literature on parentheticals is huge and very complex, also because this kind of structure comes in many varieties. Exhaustive analysis and unification of their typology is not my goal here. The parentheticals relevant to my topic are those constituted in Italian by a single subjectless verb—as opposed to a whole sentence. I will consider e.g. *credo* (I believe), but not the *as* parenthetical *come Maria sostiene* (as Maria claims). I dub these *mono-verbal parentheticals*.¹⁸

Consider the following example:

- (63) Maria (*credo*)₁ è (*credo*)₂ andata (*credo*)₃ a Parigi (*credo*)₄
 Maria ((I) believe) has(IND) ((I) believe) gone ((I) believe) to Paris ((I) believe)

In example (63) an indicative verbal form appears; I will come back to this point in a while. The single verb parenthetical can appear in many positions inside the clause. These positions are also available for left-peripheral adverbs in general, such as *probabilmente* (probably), *forse* (perhaps), *sicuramente* (surely), *fortunatamente* (fortunately), *presumibilmente* (presumably), etc.¹⁹

¹⁸ Rooryck (2001a, 2001b) proposes a unification of parentheticals with evidentiality and treats evaluative and epistemic modals on a par with evidentials.

¹⁹ Consider also that as soon as the head analysis is not available any more, grammaticality decreases. This is the case if the first person *credo* (I believe) is substituted by the third person one *crede* (believes) with the subject *Gianni*:

- i. ??Maria, Gianni crede, è andata a Parigi
 Maria, Gianni believes, has gone to Paris
- ii. ?*Maria è, Gianni crede, andata a Parigi
 Maria has, Gianni believes, gone to Paris
- iii. ?*Maria è andata, Gianni crede, a Parigi
 Maria has gone, Gianni believes, to Paris
- iv. ??Maria è andata a Parigi, Gianni crede
 Maria has gone to Paris, Gianni believes

- (64) Maria (forse)₁ è (forse)₂ andata (forse)₃ a Parigi (forse)₄
 Maria (perhaps) has(IND) (perhaps) gone (perhaps) to Paris (perhaps)

As I remarked above, the main difference between the parenthetical *credo* and the left-periphery one is that the latter triggers the subjunctive mood, whereas all the positions in (63) do not:

- (65) *Maria (credo)₁ sia (credo)₂ andata (credo)₃ a Parigi (credo)₄
 Maria ((I) believe) has(SUBJ) ((I) believe) gone ((I) believe) to Paris ((I) believe)

A possible hypothesis unifying the left-most *credo* structures we saw above, with the parenthetical construals like (64), would be to say that *credo* can occupy various head positions inside the clause, and that they are related through movement.

The triggering of the subjunctive only takes place when *credo* lands in the left-most position in the C-layer. This is a most natural assumption, given that the presence of a subjunctive according to the present hypothesis is triggered exclusively under a C-T relation. If this relation fails to be established, no subjunctive can appear—modulo the *modal* meanings discussed in Chapter 2 section 3 above.²⁰

According to Rizzi (2001, 2002), the basic position for adverbs is the one marked in sentences (64) and (65) by subscript 2, namely, the position inside the main VP, higher than the participle projection. The position marked with the subscript 3 is inside the participial projection and is basically given as well. *Credo* 1 might be taken to appear in Rizzi's left-periphery position *Modifier*—the Modifier position discussed in the previous section—with topicalization of the subject. Therefore, this case would be obtained by means of movement of *credo* to Mod(ifier). As far as position 4 is concerned, various analyses seem possible. It might be obtained via movement of the participial projection, followed by movement of the rest of the

With respect to these cases, there is a minimal contrast with *as* parentheticals:

- v. Maria (come Gianni crede) è (come Gianni crede) andata (come Gianni crede) a Parigi (come Gianni crede)
 Maria (as Gianni believes) has (as Gianni believes) gone (as Gianni believes) to Paris (as Gianni believes)

²⁰ For further discussion of this point, see section 3.5 below.

clause to its left. Conversely, it might also be thought that the right-most position is a basic position as well, conveying a peculiar after-thought meaning. In this perspective, therefore, the parenthetical *credo* would be no parenthetical at all. It is always a functional head allowed to occupy several positions inside the clause.

Consider finally that both parenthetical *credo* and left-periphery *credo* cannot be embedded:

- (66) *Paolo ha detto che Maria, *credo*, è andata a Parigi
 Paolo said that Maria, (I) believe, went(IND) to Paris
- (67) #Paolo ha detto che *credo* Maria sia andata a Parigi
 Paolo said that (I) believe Maria went(SUBJ) to Paris

Sentence (66) is grammatical only for the speakers who accept a preverbal subject with CD, showing therefore that the mono-clausal analysis triggered by epistemic *credo* is not available, analogously to what illustrated in section 3.2.3.

Note that *dicono* exhibits similar properties:

- (68) Maria (dicono)₁ è (dicono)₂ andata (dicono)₃ a Parigi (dicono)₄
 Maria ((they) say) has(IND) ((they) say) gone ((they) say) to Paris
 ((they) say)

Analogously to parenthetical *credo*, *dicono* can only trigger the indicative and not the subjunctive, as shown by the following example:

- (69) *Maria (dicono)₁ sia (dicono)₂ andata (dicono)₃ a Parigi (dicono)₄
 Maria ((they) say) has(SUBJ) ((they) say) gone ((they) say) to Paris
 ((they) say)

The same explanation as above can be taken to hold here as well: only under a C-T relation can the subjunctive appear, given that it is not a main assertive verbal form. Other expressions, such as the already mentioned *si dice* (SI-says), *raccontano/si racconta* (they tell/SI-tell), etc., pattern like *dicono*.

Naturally enough, the verbs listed above with *credo*—i.e., *suppongo* (I suppose), *temo* (I fear), *spero* (I hope)—are all intuitively amenable to an epistemic analysis, expressing different degrees of certainty. Analogously, the verbs patterning with *dicono* are all interpretable as evidentials. Interestingly, other verbs which cannot be analysed in

this way are not acceptable as verbal parentheticals. Consider for instance the following examples:²¹

- (70) *Maria (rimpiango)₁ è (rimpiango)₂ andata (rimpiango)₃ a Parigi (rimpiango)₄
 Maria ((I) regret) has(IND) ((I) regret) gone ((I) regret) to Paris ((I) regret)
- (71) *Maria (so)₁ è (so)₂ andata (so)₃ a Parigi (so)₄
 Maria ((I) know) has(IND) ((I) know) gone ((I) know) to Paris ((I) know)
- (72) *Maria (telefonano)₁ è (telefonano)₂ andata (telefonano)₃ a Parigi (telefonano)₄
 Maria ((they) call) has(IND) ((they) call) gone ((they) call) to Paris ((they) call)

The reason for this incompatibility might follow from the analysis of the mono-verbal parentheticals I proposed above. Only the verbs which are compatible with an epistemic or evidential analysis can be generated as epistemic and evidential adverbs, and consequently occupy the Modifier position licensing them as mono-verbal parentheticals. Other first person or third person verbal forms, even if looking superficially identical, cannot.²²

²¹ Notice that the English translation might be misleading. The English *I regret*, which is certainly acceptable, at least in position 4:

- i. Mary left, I regret

is not in this case really corresponding to *rimpiango*, which would be its literal translation, but rather to the Italian *temo* (lit: I fear), which is acceptable as well:

- ii. Maria è partita, temo
 Mary left, I regret (lit: I fear)

Consider also that *so* (I know) gives unacceptable results, but the locution *per quel che ne so* (as far as I know) is on the contrary acceptable in both languages:

- iii. Maria (per quel che ne so)₁ è (per quel che ne so)₂ andata (per quel che ne so)₃ a Parigi (per quel che ne so)₄
 Maria (as far as I know) has(IND) (as far as I know) gone (as far as I know) to Paris (as far as I know)

²² Following the analysis provided by Cinque (1999), evaluative adverbs are structurally very close to evidential and epistemic ones. So far, however, I have not been able to identify a verbal evaluative item similar to *credo* and *dicono*. Further investigation is required.

3.5 Further issues: interrogatives and embedded contexts

In this section I consider some issues closely connected with the investigation of the position occupied by *credo* in the sentence and therefore with the syntactic properties of the speaker's projection. In section 3.5.1 I show that, due to its first person feature specification, epistemic *credo* is incompatible with questions, behaving differently in this respect from other epistemic adverbs. For the same reason, I show that it cannot appear in embedded clauses. In section 3.5.2 I briefly analyse the distribution of items that might linearly and hierarchically precede the speaker's projection in the left periphery.

As briefly discussed in section 3.4, according to Rizzi (2002), the pre-sentential position of an adverb is derived via movement from a sentence internal one. The MOD(ifier) position is lower than that of wh-items and interrogative phrases such as *perché* (why). Rizzi (2002) does not consider epistemic and evaluative adverbs in particular, but they seem to follow the same generalization, in that they cannot precede the interrogative position:

- (73) *Fortunatamente, chi ha vinto la gara?
Lukily, who won the race?
- (74) *Fortunatamente, perché Gianni ha vinto la gara?
Lukily, why did Gianni win the race?
- (75) Chi fortunatamente ha vinto la gara?
Who lukily won the race?
- (76) Perché fortunatamente Gianni ha vinto la gara?
Why did lukily Gianni win the race?
- (77) *Sicuramente, chi ha vinto la gara?
Surely, who won the race?
- (78) *Sicuramente, perché Gianni ha vinto la gara?
Surely, why did Gianni win the race?
- (79) Chi sicuramente ha vinto la gara?
Who surely won the race?
- (80) Perché sicuramente Gianni ha vinto la gara?
Why did surely Gianni win the race?

Both *fortunatamente* (fortunately) and *sicuramente* (surely) can only follow the interrogative phrase, as expected if its position is higher than the Modifier one. *Credo* does not pattern in this way, given that it does not exhibit any contrast between a pre-interrogative position and a post-interrogative one:

- (81) *Chi credo abbia vinto la gara?
Who do (I) believe won the race?
- (82) *Perché credo Gianni abbia vinto la gara?
Why do (I) believe Gianni won the race?
- (83) *Credo chi abbia vinto la gara?
(I) believe who won the race?
- (84) *Credo perché Gianni abbia vinto la gara?
(I) believe why Gianni won the race?

A sentence such as (81) can only be accepted a pseudo-echo, rhetorical, question when endowed with an appropriate intonation. The non-echo reading, in which I ask myself about the person I believe has won the race, is syntactically available but semantically nonsense. As to (82), it can be used again as a pseudo-echo question, on a par with (81), or as a way to ask the reason why I (the speaker) have that specific belief, a nonsense again. Excluding the pseudo-echo question case, therefore, the only possibility for these sentences to be grammatical consists in assigning them a bi-clausal analysis. Even this possibility, however, is ruled out in examples (83) and (84), because of the impossibility of assigning them the correct syntactic structure. Therefore, there is no way in which epistemic *credo* can be compatible with interrogative phrases.

The analysis discussed here provides an explanation for these observations. In examples (81) and (82) *credo*, if interpreted as an epistemic head, must be taken to appear in the basic Modifier position. Since it bears first person singular features it is *speaker-oriented*. Questions, however, are typically hearer-oriented: it is the point of view of the addressee that they ask about. Hence, there is no way of making the two compatible and the only possible reading is the bi-clausal one.

In examples (83) and (84) on the other hand, *credo* has moved to the high speaker position in the C-layer. The mono-clausal analysis is impossible for the reasons just given and the bi-clausal one is also

ruled out, due to the syntactic position of *credo*. Consequently, in this case even the pseudo-echo interpretation is not available. *Dicono*, on the contrary, is predicted to be compatible with questions:

- (85) Chi dicono abbia vinto la gara?
Who do (they) say won the race?
- (86) *Dicono chi abbia vinto la gara?
They say who won the race?

As expected, *dicono* can only follow and not precede the Interrogative position because it is not forced of its Modifier position.

This analysis also predicts that *credo* is incompatible with embedded contexts. To illustrate this point, let's consider more closely the meaning associated with epistemic adverbs:

- (87) Probabilmente Gianni è partito
Probably Gianni left
- (88) Maria ha detto che probabilmente Gianni è partito
Maria said that probably Gianni left(IND)
- (89) Maria crede che probabilmente Gianni sia partito
Maria believes that probably Gianni left(SUBJ)

The adverb *probabilmente* (probably) in sentence (87) expresses the opinion of the *speaker* concerning the embedded event. Namely, according to the speaker, the (past) leaving of Gianni is probable. The adverb in the embedded clause in example (88) does not express the point of view of the speaker, but of the referent of the grammatical subject—that is, *Maria*. The same holds of (89): the bearer of the attitude with respect to the content expressed by the embedded clause, *Maria*, is the person whose epistemic point of view is reported by means of the epistemic adverb. On the other hand, the epistemic adverbs in examples (88) and (89) cannot be used to express the point of view of the speaker. In other words, they are interpreted *locally*, and, to the extent the metaphor goes, they cannot be interpreted *de-re*.

It is possible to express these properties by saying that the epistemic adverb is *anchored* at the interface to the bearer of the attitude. The anchoring has the purpose and the effect of linking the epistemic state to a subject: the speaker in the case of main clauses,

and the bearer of the attitude in the case of embedded ones. In a way, this process is analogous to what happens with the temporal interpretation—see Giorgi and Pianesi (2001a, 2003, 2004b)—and with the binding of long distance anaphors—see Giorgi (2006, 2007).

With these remarks in mind, consider what happens in the case of an interrogative sentence:

- (90) Chi probabilmente è andato a Parigi?
Who probably went to Paris?

The adverb *probably* in this case does not refer to the epistemic state of the speaker. It can have the *objective* meaning—i.e., the speaker might be enquiring about the people having an objective probability of having left for Paris. The speaker might also be asking about the person who *probably* left *according to the hearer's opinion*. Namely, in this case the interpretation is epistemic again and the bearer of the epistemic state is the addressee. Even in this case, therefore, the anchoring of the epistemic adverb is shifted, in the sense that it is not referred to the speaker, but to another discourse participant.

Consider now epistemic *credo* in embedded clauses. Recall that a preverbal subject in CD structures is acceptable only for a group of speakers, call it group (a). For group (b), i.e., the speakers who do not admit a preverbal lexical subject with CD sentences, its presence gives rise to ungrammaticality:

- (91) Maria ha detto che credo Gianni si sia sbagliato (**for group (b))
Maria said that (I) believe (Gianni) was wrong
- (92) Maria ha detto a tutti che io credo che Gianni si sia sbagliato
Maria told everybody that I believe that Gianni was wrong

For group (b) speakers, therefore, the presence of subject *Gianni* in sentence (91) is a test for mono-clausality, i.e., can only be possible with the epistemic interpretation of *credo*. Interestingly, for these speakers the sentence in (91) is ungrammatical. This piece of evidence can be readily explained on the basis of the hypothesis proposed here: the anchoring of epistemics must be local, but *credo* can only refer to the speaker, because of its feature specifications.

The sentence in (92), on the other hand, is a normal sentence, in which *credo* heads a verbal projection and takes a C projection as a complement—no CD—and is therefore grammatical for everybody.

One might wonder why in a sentence such as (92), which is a Double Access Reading one, the embedded C-speaker position is not available for valuing the features of the epistemic *credo*.

My proposal is that actually the intermediate speaker's coordinates are available for valuing *credo*, from the syntactic point of view. The interpretive component, however, gives a deviant result. Note in fact that by means of a communication verb such as *dire* (say), the speaker reports the content of a speech act by the subject, so that it is impossible to assign *credo* an epistemic interpretation obligatorily referring to the actual speaker, while being embedded under a communication predicate. In other words, *credo* must have been part of the original speech act, but if so, it cannot be reported by means of an item marked with unvalued first person features. The appropriate report would therefore be something like the following one:

- (93) Maria ha detto che *secondo lei* Gianni si era sbagliato
 Maria said that *according to her* Gianni was wrong

Or, conversely, something like the following:

- (94) Maria ha detto che *secondo me* Gianni si era sbagliato
 Maria said that *according to me* Gianni was wrong

It depends on the owner of the reported epistemic opinion. Note also that, as expected under this hypothesis, the epistemic reading of *credo* is much more acceptable if the main clause features the first person:

- (95) Ho scritto a Luisa che *credo* Gianni si sia sbagliato
 I wrote to Luisa that I believe Gianni was wrong

According to my judgement, and that of other speakers as well, in this case, it is possible to understand the sentence in the following way: the content I wrote is '*Gianni was wrong*', but in reporting it I am further qualifying it as less than a certainty—i.e., I am attributing to it my own epistemic evaluation. Notice that for group (b) speakers, rejecting the preverbal subject with CD, this is the only possible interpretation. Speakers who accept a preverbal subject might also

have a second reading, according to which *credo* is part of the content of my writing—i.e., *I wrote that I think*, etc.

Finally, compare epistemic adverbs with speech act ones. A speech act adverb like *francamente* cannot be embedded, analogously to what happens for *credo*:

- (96) Francamente, Gianni si è sbagliato
Frankly, Gianni was wrong
- (97) *Maria credeva che, francamente, si fosse sbagliato
Maria believed that, frankly, he was wrong

However, it can appear in interrogative clauses:

- (98) Francamente, chi si è sbagliato?
Frankly, who was wrong?

Interestingly, this sentence is ambiguous. It can have a rhetorical meaning, to convey, e.g., that I, the speaker, do not think that anybody was wrong: *Francamente, chi si e' sbagliato? Nessuno!* (Frankly, who was wrong? Nobody!) But if interpreted as a real question, *frankly* necessarily refers to the hearer—namely, the speaker is asking for the hearer's frank opinion: you, the hearer, be frank, and tell me who was wrong. This adverb can therefore shift from the speaker to the hearer, though it cannot shift to the bearer of an attitude. As it seems, the shifting is licensed in (98) because the hearer is supposed to be the performer of the speech act that follows.

To conclude, it is possible to hypothesize the presence of three different groups of adverbs. *Probably* can freely shift, as required by the context. *Credo* never shifts and can only refer to the speaker—as expected, given its first person features. *Frankly* can shift, but only as far as a communicative act is involved.

Speculatively, these facts might be accounted for by claiming that there is a very high left position including the *situation* coordinates where *frankly* ends up.

For completeness, notice that *francamente* (frankly) can precede *credo*, though the latter occupies the left-most position in the C-layer:

- (99) Francamente, credo dicano Maria sia andata a Parigi
Frankly, I believe they say Maria went to Paris

The presence of *dicono* makes sure that *credo* actually moved past it in C-speaker. This piece of evidence might point to the conclusion that there is a root layer connecting the sentence to the actual discourse. Though this consideration is certainly intriguing, I will not pursue this topic any further in this book, because it would lead me too far way from the main topics under discussion.

3.6 Conclusions

Summarizing so far, the presence of a subjunctive in the sentences headed by *credo* and *dicono* is due to a syntactic relation among the main verb, the C-layer, and the embedded verbal form. The superordinate verb selects for a peculiar configuration of the C-layer, which in turn selects the subjunctive form. Therefore, the subjunctive is locally due to a peculiar relation between the C-layer and the projections of the verb. The items in question however are not verbal forms, realizing a syntactic clause, but functional heads, expressing epistemicity—*credo*—and evidentiality—*dicono*.

The properties of the epistemic head *credo* (I believe) and of the evidential one *dicono* provide an argument in favour of the existence of a position dedicated to the representation of the speaker's coordinates. The contrast between the two items can be traced back to the impossibility for *dicono*—a third person plural form—to move to this left-periphery head. *Credo*, by contrast, being first-person, can be hosted there, giving rise to the variety of phenomena just discussed.

Therefore, even if in Italian there is no specific lexical realization of the C-speaker position, it can be concluded that under special conditions a lexical item with first person features can appear there.

This piece of evidence is important because it shows that the Complementizer position hypothesized in this book is relevant both for interpretive purposes, as exemplified in the previous chapter, and also for purely syntactic ones—i.e., for mere word order considerations. In the minimalist perspective, this would be to say that the position is both spelled out when necessary and interpreted when required.