

A SYNTACTIC WAY TO SUBJUNCTIVE

1 Introduction

In this paper I'll discuss the syntactic properties of the Italian subjunctive and their relevance at the syntax/semantics interface.

The starting point will be the consideration that the subjunctive plays a characteristic role in sequence of tense phenomena. Languages that show the Double Access Reading – henceforth, DAR – with the indicative, in general do not exhibit it with the subjunctive.¹

In this work I'll discuss the syntax associated with subjunctive – in particular, the syntax of the CP layer – and show that in DAR languages its properties systematically correlate with the temporal interpretation assigned to the embedded clause. I propose, following ideas by Giorgi and Pianesi (1997, 2004a), that this pattern can be explained by means of the following hypothesis: the CP layer, when the embedded clause has a DAR interpretation, contains a projection that is read off at the interface as pointing to the speaker's (temporal and spatial) coordinate. In the other, non-DAR, cases such a projection is absent and therefore the speaker's coordinate doesn't intervene in the temporal interpretation of the embedded clause.

Even if this suggestion cannot explain the whole of the subjunctive phenomena, it nevertheless opens the way to a better understanding of some empirical observations. The following generalizations will be shown to hold: In DAR languages, the contexts where the speaker's coordinate *must always* be represented, are the indicative ones. The contexts where it *must not* be represented, are the contexts where a subjunctive verbal form *must* appear. This proposal is based on the analysis of contexts where the speaker's coordinate *can* be present, but *must not*, which exhibit a peculiar syntax and a corresponding peculiar semantics.

This analysis has the advantage of permitting a natural distinction between the so-called subjunctive in DAR languages and the apparently corresponding mood found in non-DAR languages. The sets of so-called *subjunctive phenomena* in the two language groups present systematic differences, which can appear in a different light, once connected to the syntax and semantics of the CP layer as analyzed here.

2 Complementizer Deletion in Italian and Sequence of Tense

2.1 Complementizer Deletion: a description

Syntactically, one of the most interesting properties of the Italian subjunctive is constituted by the fact that it admits Complementizer Deletion – henceforth, CD – as opposed to the indicative mood, which never allows it. Consider for instance the following sentences:

- (1) Gianni ha detto *(che) ha telefonato Maria
Gianni said that has(IND) called Maria
'Gianni said that Maria called'
- (2) Gianni credeva (che) avesse telefonato Maria
Gianni believed (that) had(SUBJ) called Maria

¹ There are exceptions, however. In some peculiar contexts the subjunctive forms as well exhibit DAR effects. This is a very important point, because it permits to highlight the nature of the DAR, on one side, and the syntactic structure of embedded clauses, on the other. For this reason, Giorgi and Pianesi's (1997, 2004a, 2005) works on subjunctive mostly focused exactly on these cases.

‘Gianni believed that Maria called’

The only relevant difference between (1) and (2) is the subjunctive/indicative alternation in the embedded clause.² In (2) the subjunctive permits CD, whereas this is impossible in (1).³

Italian is quite isolated in the Romance domain in admitting CD. In this, it apparently resembles English, which also permits the complementizer to be omitted in some contexts. The two languages however, appear very different once the question is studied in depth. I’ll not replicate here the discussion of the comparative facts and refer the reader to the relevant literature.⁴

I’ll argue that the study of this property of Italian complement clauses might shed light on the general characteristics of the subjunctive mood in DAR languages. In particular, In this paper I’ll develop a proposal put forth in Giorgi and Piansesi (1997, 2004a) and argue that in Italian the speaker coordinate can be represented in the CP-layer of the embedded clause.

Giorgi and Piansesi’s proposal is the following: the speaker’s coordinate always intervenes in DAR contexts, which typically select the indicative. In general, the subjunctive gives rise to a representation of the embedded clause in which the speaker’s coordinate is not represented. However, even if *most* DAR contexts are with the indicative, *some* subjunctive embedded clauses exhibit the DAR.

The syntax of subjunctive clauses with DAR effects will be shown to parallel the one of embedded indicative clauses. More precisely, DAR sentences are introduced by a complementizer projection – CP – which is not realized when the complement clause does not exhibit DAR effects.

In this section I’m going to illustrate the data concerning the correlation in Italian between the absence of the complementizer – i.e., CD – and the temporal interpretation of the embedded clause. The contexts I’ll consider are mostly the ones where the sentence is a clausal complement of the verb. In Quer’s (1998) and Stowell’s (1993, 1996) terminology this is the so-called *intensional* subjunctive. The basic piece of evidence has already been provided in (1) vs. (2).

Interestingly, for some Italian speakers – but not for me – a verb such as *credere* (believe) can either select for a subjunctive or for an indicative verbal form. However, only the subjunctive admits CD. Consider for instance the following example:

² In this paper I’m using the present perfect form of the indicative, instead of the simple past one, both in main clauses and in subordinate ones. I.e., *ha detto* (lit: has said) instead of *disse* (said) and *ha telefonato* (lit: has called) instead of *telefonò* (called). In Italian in fact, the present perfect, especially in the central and northern varieties, serves – approximately – the same function as the simple past in English. With stative verbs, such as *credere* (believe) and *desiderare* (wish) – i.e., verbs expressing an attitude of the subject toward a certain content – the past form usually chosen is the imperfect of the indicative: *credeva* (believed) and *desiderava* (wished). The present perfect (*ha creduto*, *ha desiderato*) and the simple past (*credette*, *desiderò*) convey the meaning that the psychological state, or attitude, of the subject doesn’t hold anymore. This effect is presumably to be connected with the aspectual and actional properties of the predicates.

Concluding this brief remark, these questions are intriguing and complex ones, but do not have much to do with the issue considered in this paper, therefore I leave them aside. See Giorgi and Piansesi (1997) for a comparative, Romance vs. Germanic, discussion.

³ Notice that though permitted, CD is never *obligatory*, in that the non-CD option is always available. Another important property is constituted by the disjoint reference effect, i.e., *obviation*, with the subjunctive, but not with the indicative, as exemplified by the following examples:

- 1 Gianni_i crede che pro_{j/*i} parta
Gianni believes that he leaves
- 2 Gianni_i ha detto che pro_{ij} partirà
Gianni said that he will leave

A null embedded subject of a subjunctive complement clause cannot be coreferent with the main subject, whereas there is no ban if the embedded clause is an indicative one. For analysis of these facts, as well as of some relevant exceptions to this pattern, see Costantini (2005).

⁴ Giorgi and Piansesi (1997, 2004a) agree with Poletto (1995, 2000, 2001) who argues that Italian and English CDs are different phenomena. She however claims that Italian CD structures have the same properties of embedded V2 in German. On this point Giorgi and Piansesi disagree. See the quoted reference for further discussion.

- (3) (*)Gianni crede *(che) ha telefonato Maria
 Gianni believes that has(IND) called Maria
 ‘Gianni believes that Maria called’

Modulo the marginality of the indicative, in this case CD is impossible, on a par with the verbs of *saying* such as *dire* (say), illustrated in example (1).

From this piece of evidence it follows that CD is not a property of the main verb – or at least *not only* a property of the main verb – but has to do with the indicative/subjunctive divide.

With respect to this last point, consider also that there is a class of verbs requiring the subjunctive, disallowing however CD. This is the class of factive –or better, *factive-emotive/psych* – verbs, as in the following case:

- (4) *Gianni rimpiange che è partita
 Gianni regrets that (she) has (IND) left
 (5) Gianni rimpiange *(che) sia partita
 Gianni regrets that (she) has (SUBJ) left

These verbs select subjunctive in the embedded clause – as can be inferred by the ungrammaticality of example (4) – but do not allow CD – as shown by example (5).

Giorgi and Pianesi (1997, 2004a) analyzed this paradigm and pointed out a correlation with the sequence of tense phenomena, which I’ll briefly discuss in the next section.

2.2 DAR Phenomena

It is a well-known fact that Italian – together with French, Spanish, Catalan, English and many other– is a DAR language. In these languages the embedded indicative form is evaluated twice: once with respect to the utterance time and once with respect to the time of the main event. Consider for instance the following case:

- (6) Gianni ha detto che Maria è incinta
 Gianni said that Maria is pregnant

The pregnancy of *Maria* is taken to hold both at the time the speaker is uttering the sentence and at the time Gianni said it. Namely, if Gianni said *Maria is pregnant* three months ago, the sentence implies that she still is pregnant *now* and therefore that it is not the case that she gave birth in the meanwhile. Analogously, the following sentence is odd:

- (7) #Due anni fa Gianni ha detto che Maria è incinta
 Two years ago Gianni said that Maria is pregnant

The oddity of this sentence is explained in the same way: it cannot be the case, Maria being a human, that she was pregnant two years ago and that she still is. She might be pregnant *again*, but this is not inferable from the sentence in question, in that the meaning of the sentence must be that the *same* event of being pregnant holds at both times.

Languages that do not exhibit the DAR, such as Russian, Japanese and Romanian, do not evaluate the embedded event twice. The temporal evaluation takes place only once – i.e., with respect to the superordinate event. In these languages therefore, sentence (6) would be equivalent to the following one in Italian, English or French:

- (8) Gianni ha detto che Maria era incinta
 Gianni said that Maria was(IMPERF) pregnant

In example (8) the embedded verbal form in Italian is in the imperfect of the indicative. This sentence implies that Maria's pregnancy was certainly holding at the time Gianni spoke about it, but not necessarily *now*, i.e., at the time of the utterance. Sentences of the type (6) have precisely this meaning in non-DAR languages. Coherently with what said so far, the equivalent of (7) is felicitous:

- (9) Due anni fa Gianni ha detto che Maria era incinta
Two years ago Gianni said that Maria was(IMPERF) pregnant

By means of the imperfect, it becomes possible to properly express the meaning that two years ago Gianni said that *at that time* Maria was pregnant, without simultaneously implying that she still is at utterance time. I'll not consider here the properties of the embedded imperfect, given that they are connected with aspectual properties lying outside the scope of this paper

Many scholars studied these phenomena and proposed several accounts for them. Here I'll rely on the theoretical proposal elaborated by Giorgi and Pianesi (1997, 2000, 2004b).⁵

Giorgi and Pianesi argued that the DAR is not a property peculiar of the present tense, but that it must be considered as a general property of embedded indicative forms. Consider the following example, with a past indicative embedded under a past:⁶

- (10) Gianni ha detto che Maria ha comprato una casa
Gianni said that Maria bought a house

According to this sentence, the buying of the house by Maria must have occurred before Gianni uttered the sentence. In this case, therefore, the requirement of a double evaluation is trivially met: the embedded event *is* evaluated as past, *both* with respect to the superordinate one *and* with respect to the event of the utterance. It is not the case in fact, that it could ever be considered as past with respect to the utterance event alone, and therefore placed *after* the saying. On the other hand, since it is placed before the saying, the buying event precedes the time of the utterance, the main event being past.⁷

The main property of Sequence of Tense is exactly this: temporal anchoring of an event embedded in a complement clause to the superordinate event is obligatory – as shown also by the languages which lack the DAR. On the contrary, the anchoring of an embedded eventuality to the utterance time – which gives rise to the DAR – is not a universal property.

Consider now what happens if the embedded event appears with future verbal morphology. Let me point out that the verbal form in Italian is a typical morphological ending, etymologically derived by means of incorporation of auxiliary *have* into the verb. This is the unmarked historical evolution of most cases of temporal morphological endings in Italian.

In this sense, the Italian future tense differs from the English one and from the Germanic future tense in general. In Germanic languages, in fact, the future is always periphrastic and in particular in English it is obtained by means of the modal verbs *will* and *shall*.

Concluding this brief remark, one could claim that even if it might be legitimate to consider the future tense as a modal expressing futurity in English – and perhaps in other Germanic languages as

⁵ Among the others, see Abush (1997), Ogihara (1996), Higginbotham (1995, 2001). See also Schlenker (2005) for a discussion of related topics.

⁶ As exemplified by the examples (8) and (9), the indicative imperfect is exempt from DAR effects, due to independent, presumably aspectual properties.

⁷ In principle, it could be the case that the embedded event is evaluated only with respect to the utterance time, i.e., indexically. This does not happen, however, this is a universal property, as pointed out by the studies on sequence of tense phenomena, as the main *tenet*. See for instance the seminal work by Enç (1987).

well – it also seems legitimate to consider it a well-behaved *tense* in Italian. Consider now the following example:

- (11) Gianni ha detto che Maria comprerà una casa
Gianni said that Maria will buy a house

In this sentence, the embedded event must be located in the future *both* with respect to the saying of Gianni and also with respect to the utterance event.⁸

For to a (too) simple theory of sequence of tense, this fact constitutes a challenge. Let us consider it in detail.

Let's imagine the following theoretical account: the main event must be anchored to the utterance event, and the embedded one must be anchored to the superordinate one. According to this theory, the double evaluation of the embedded present tense illustrated by the examples above is a property of the present tense by itself. Furthermore, this theory would be able to predict the interpretation of the embedded past, as illustrated by the examples in (10) above. It would run into trouble, however, with respect to the interpretation of an embedded future in (11).⁹

The embedded event in fact cannot be anchored exclusively to the superordinate one, because this would leave open the possibility of a temporal interpretation under which the buying of the house follows the saying of Gianni, but *precedes* the utterance event, contrary to facts.

Notice also that this peculiar temporal relation can be expressed by languages, by means of the so-called future-in-the-past. This verbal form expresses futurity with respect to the superordinate event, but does not (necessarily) imply futurity with respect to the utterance time. Consider for instance the following example:

- (12) Gianni ha detto che Maria avrebbe comprato una casa
Gianni said that Maria would buy a house

The building of the house is posterior to Gianni saying it, but may or may not be future with respect to the utterance event.¹⁰

Therefore, it is reasonable to conclude that the DAR is actually enforced in all cases where an indicative appears. It is empirically detectable with the present tense and the future, whereas it is not visible with an embedded past form – under the assumption that anchoring to the superordinate event is in any case obligatory. Giorgi and Pianesi (2001) labeled this pattern *Generalized DAR*. The intent was to make explicit the observation that in Italian-like languages the double temporal evaluation of the embedded event must be conceived of as a general property of (indicative) complement clauses.

2.3 The subjunctive and the DAR

Let's consider now the complement clauses with a subjunctive verbal form. In these cases, the Latin-like *consecutio temporum et modorum* (sequence of tense and mood) is at work, which gives rise to the following pattern:

⁸ Notice that interestingly this is also true in English, even if the future is expressed by means of a modal.

⁹ The properties of the embedded future have often been disregarded in the literature about the topic. On the contrary, however they seem to be able to shed light on these questions.

¹⁰ Interestingly, a Romance language such as Romanian – a non-DAR language on a par with Russian and Japanese – has only one type of future, lacking the so-called future-in-the-past. This is actually expected under the present proposal, and constitutes additional evidence in its favor. A non-DAR language in fact, would never require an evaluation of the embedded event with respect to the speaker's coordinate, the evaluation with respect to the superordinate subject's coordinate being all that is required. Consequently, the language doesn't *need* another future form and, coherently, didn't develop it.

- (13) Gianni crede che Maria sia/*fosse incinta
Gianni believes that Maria is(PRES SUBJ)/*was(PAST SUBJ) pregnant
- (14) Gianni credeva che Maria fosse/*sia incinta
Gianni believed that Maria was(PRES SUBJ)/*is(PAST SUBJ) pregnant

It is a well-known fact that with subjunctive temporal agreement is enforced. I.e., the embedded form must appear in the past or in present form, depending upon the form of the superordinate verb: present under present and past under past. The temporal interpretation assigned to the event of the embedded clause is simultaneity with the main predicate – i.e., the pregnancy holds at the time Gianni believed it.¹¹ Anteriority can be expressed by means of the periphrastic perfective form, as in the following cases:

- (15) Gianni crede che Maria abbia telefonato
Gianni believes that Maria has(PRES SUBJ) called
- (16) Gianni credeva che Maria avesse telefonato
Gianni believed that Maria had(PAST SUBJ) called

In this case, the leaving event might be prior to the utterance time. Therefore all possible temporal relations seem to be available in this case.

In these cases, the appropriate morphology appears on the auxiliary, followed in turn by the past participle. In this case, therefore, anteriority is derivative on aspectual properties (perfectivity), and not directly obtained by means of a *temporal* morpheme.

These considerations point to the conclusion that subjunctive morphology does not instantiate a relational tense – i.e., a temporal relation between two events – but only a sort of *temporal agreement* with the superordinate verbal form.

The temporal vacuity of the embedded form is also confirmed by the following piece of evidence:¹²

- (17) Gianni credeva che Maria partisse ieri/ adesso/ domani
Gianni believed that Maria left(PAST SUBJ) yesterday/ now/ tomorrow

Analogously, it is possible to have the sentence with the anaphoric temporal modifier:

- (18) Gianni credeva che Maria partisse il giorno dopo
Gianni thought that Maria left(PAST SUBJ) the next day

In this example, the same verbal form *partisse* (left-PAST SUBJ) is compatible with temporal modifiers indicating past, present, or future. Sentence (17) means that Gianni had a belief concerning a past, present, or future event. Notice that the temporal adverbs are indexical ones – i.e., they identify a certain time with respect to the *speaker*. This shows that the time of the speaker and the temporal morphology on the verb are not related to each other, as is the case with the indicative. Consider in fact that the equivalent of (17) and (18) are not possible with an indicative verbal form:¹³

¹¹ The simultaneous interpretation can be said to be the *default* one, given that it is the one obtained in absence of any further specification. If temporal adverbs intervene, the interpretation will vary according to the temporal specification carried by the adverbial modifier. I'll discuss this point below.

¹² On anaphoric temporal adverbs, see Giorgi and Pianesi (2003).

¹³ The sentence with *adesso* (now) is acceptable:

i. Gianni ha detto che Maria è partita adesso
Gianni said that Maria left now

The temporal value, however, is still past-ness with respect to the utterance event. In this case *now* actually means *a moment ago*. The sentence cannot mean *Gianni said that Maria is leaving*. Analogously with a future:

ii. Gianni ha detto che Maria partirà adesso

- (19) Gianni ha detto che Maria è partita ieri/*domani/ *il giorno dopo
Gianni said that Maria left(IND) yesterday/*tomorrow/ *the next day
- (20) Gianni ha detto che Maria partirà domani/ *ieri
Gianni said that Maria will leave tomorrow/ yesterday

With the indicative, the temporal adverb and the verbal form must be coherent: if one expresses past-ness, the other one has to express it as well, and analogously with respect to futurity.

Going back to the DAR, it might be concluded that there is no *a priori* possibility for it to arise in embedded subjunctive complements, given that the embedded event does not undergo an independent temporal evaluation at all.

As a consequence of this analysis, one might be tempted to conclude that the DAR is, for some unclear reason, a property of the indicative and not of the subjunctive. In what follows I'll try to show that this is not the case and that there is some deeper property of embedded contexts, which has among its side effects the DAR, and that the property in question has to do with the syntax of the CP layer.

These observations might seem trivial, but actually they are far from being so, once we try to find an answer to the following question. How come that the location of the utterance event, as exemplified by the compatibility with the temporal adverbs, is relevant for the selection of the embedded verbal forms? After all, the compatibility of a subjunctive form with all kinds of modifiers points to the conclusion that this is not an *a priori* necessary property of the embedded verb.

Recall also that the speaker is not endorsing the truth of the embedded clause. Both sentences can be continued with a disclaimer of the truth. Consider for instance the following examples:

- (21) Gianni ha detto che Maria ha telefonato, ma non è vero
Gianni said that Maria called(IND), but it is not true
- (22) Gianni crede che Maria abbia telefonato, ma non è vero
Gianni believes that Maria has (SUBJ) called, but it is not true

Furthermore, as shown above in examples (4) and (5), some factive verbs select the subjunctive mood. In these cases, contrary to (21) and (22), the truth of the embedded clauses is presupposed. These facts point to the conclusion that the truth of a certain proposition is independent from the morphology on its predicate and it is not connected with the presence of a certain mood – i.e., indicative vs. subjunctive.¹⁴

Concluding, let me capitalize on the following observations: a) The truth of an embedded clause is not at stake here and does not distinguish between the indicative and the subjunctive. b) The location in time of the speaker is relevant for the indicative verbal morphology, but not for the subjunctive one, as shown by the compatibility with time modifiers illustrated above.

Notice also that, coherently with the observations discussed so far, even in the case of factive complements, the subjunctive exhibits no compatibility requirement with respect to indexical time modifiers:

- (23) A Gianni dispiaceva che Maria partisse ieri/ oggi/ domani
Gianni was sorry that Maria left(PAST SUBJ) yesterday/ today/ tomorrow

Gianni said that Maria will leave now

The sentence means that the leaving will take *in a moment*. These considerations however, can be attributed to the semantic properties of *adesso* and *now*, combined with the aspectual properties of the predicate, and not to the verbal temporal morphology in itself.

¹⁴In this sense, the notion of *realis* vs. *irrealis*, often adopted to describe the properties of the indicative vs. the subjunctive mood, seems to be incoherent.

The truth of the embedded clause is presupposed, but the location in time of the event with respect to the speaker – as specified by the indexical adverbs – doesn't have any relevance.

Let me now illustrate a last point. The so-called *past subjunctive* is also triggered by present tense verbs, which however appear with a non-indicative morphology, such as the conditional one. Consider the following pattern:

- (24) Gianni vuole che Maria parta/*partis
Gianni wants(PRES) that Maria leaves(PRES SUBJ)/ *left (PAST SUBJ)
- (25) Gianni vorrebbe che Maria partis/*parta
Gianni would like(PRES COND) that Maria left(PAST SUBJ)/ *leaves (PRES SUBJ)

The main verbal form *vorrebbe* in example (25) is a present one, in the sense that the *wanting* is present with respect to the utterance event, but it is a modal form – i.e., a conditional – meaning that the wish is *removed* with respect to the real world. This provides additional evidence in favor of the idea that the past morphology on the subjunctive does not mark any past-ness of the embedded event.

The following paradigm however contrasts with the previous one:

- (26) Il testimone crede che *ieri alle 5* l'imputato fosse/*sia a casa
The witness believes that *yesterday at five* the defendant was(PAST SUBJ)/ *is(PRES SUBJ) at home

In this case the embedded verbal form must be a past subjunctive, and cannot be a present, even if the superordinate verb is a present verbal form.

Notice however that an explicit, or implicit, past time reference must be provided – i.e., in (26) the temporal locution *yesterday at five* cannot be omitted, or, if omitted, something of the same kind must be understood. If omitted the only available form is the present subjunctive *sia* (is) and the past one, *fosse* (was), is ungrammatical¹⁵

Concluding this section, on the one hand, it can be claimed that sequence of tense for the indicative verbal forms follows rules which are totally different with respect to those holding for subjunctive. On the other hand, the evidence discussed in (26) seems to show that the subjunctive can to a certain extent have an autonomous temporal status. Moreover, the rule governing the appearance of the past or present subjunctive cannot be a simple agreement rule, given the evidence discussed in (24) and (25).

In previous work, Giorgi and Pianesi (1997, 2004a) noticed that in spite of the fact that in most cases the subjunctive does not have an *independent* temporal interpretation of its own, it is not true that it is always immune from DAR effects. Consider the following cases:

- (27) Gianni ha ipotizzato che Maria fosse incinta
Gianni hypothesized that Maria was(PAST SUBJ) pregnant
- (28) Gianni ha ipotizzato che Maria sia incinta
Gianni hypothesized that Maria is(PRES SUBJ) pregnant

¹⁵ Consider the following sentence:

- i. Gianni credeva che Maria abitasse/ *abiti a Roma
Gianni believed that Maria lived(PAST SUBJ)/ *leaves(PRES SUBJ) in Rome
- ii. Gianni credeva che Maria fosse/ *sia incinta
Gianni believed that Maria was(PAST SUBJ)/ is(PRES SUBJ) pregnant

The embedded present subjunctive is ungrammatical. However, as far as its interpretation goes, it exhibits DAR effects. This might mean that, in order to interpret the embedded verbal form, the *wrong* CP structure must be projected in the embedded clause, yielding ungrammaticality. On similar cases, which on the contrary turn out to be grammatical, see section 2.2 below.

The main verbal form is past in both cases, but in the complement clause the past and the present subjunctive are both available. Interestingly, the interpretation of the embedded clause in (28) a DAR one. The following example is accordingly odd:

- (29) #Due anni fa, Gianni ha ipotizzato che Maria sia incinta
Two years ago, Gianni hypothesized that Maria is(PRES SUBJ) pregnant

This piece of evidence therefore closely parallels the phenomena discussed in section XX above. Concluding the discussion of this section: on one hand, subjunctive verbal forms seem to be *inert* from the temporal point of view. At a closer look, however, the subjunctive morphology does not seem totally devoid of temporal content – even if it *looks* like that in most cases – and the subjunctive sometimes undergoes the same SOT rules which govern the indicative.

In what follows, I'll try to answer the following questions: what triggers subjunctive morphology? What is the relation between subjunctive and the DAR? The answers to these questions will prove to be relevant not only with respect to a better characterization of the subjunctive in itself, but also to clarify what exactly determines the indicative/ subjunctive distinction.

3 The left periphery of subjunctive clauses

3.1 The representation of the speaker's coordinate in subjunctive clauses

In this section I'm going to propose an account for the facts observed in the previous section. Let me begin with considering the distribution of CD in the *ipotizzare* (hypothesize) cases, repeating here the relevant examples given above:¹⁶

- (30) Gianni ha ipotizzato (che) fosse incinta
Gianni hypothesized (that) (she) was(PAST SUBJ) pregnant
(31) Gianni ha ipotizzato *(che) sia incinta
Gianni hypothesized (that) she is(PRES SUBJ) pregnant

In the first case, where the embedded verbal form appears with the past subjunctive morphology – i.e., where the sequence of tenses is the *normal* one – CD is optional, as usual. In the other case, when the embedded verbal form is a present subjunctive – i.e., the sequence of tenses is anomalous with respect to the normal subjunctive distribution – CD is impossible. In sentence (31) The DAR is enforced, so that the sentence means that the pregnancy of Maria – as hypothesized by Gianni – holds both at the time of the hypothesis and at the utterance time. It clearly cannot be due to the presence of a present tense vs. a past *per se*, given that the following sentence is perfectly possible with CD:

- (32) Gianni ipotizza (che) sia incinta
Gianni hypothesizes (that) (she) is (PRES SUBJ) pregnant

Notice also that there is a slight but systematic interpretive difference between sentence (31) and (30) on the one hand and (32) on the other. The speaker might decide to use the verb *hypothesize* to describe two different things. He might be talking about Gianni's *mental* processes – in which case, the sentence concerns a particular thought which appeared in Gianni's mind in a hypothetical form

¹⁶ For a detailed discussion of the topic, see Giorgi and Pianesi (1997 and 2004a).

– or about Gianni’s *behavior*. In this case, the speaker is reporting a *communication* of some sort made by Gianni in a hypothetical way.¹⁷

In sentence (31) only the latter possibility is available, whereas in the other cases it is left unspecified. The verbs of communication in Italian are exactly those verbs that select the indicative. This does not seem to be a universal property, given that in many languages – as French and Spanish, among the others – verbs of *believing* select the indicative as well. However, as I’ll discuss in section 4.6, this distinction, which is relevant in Italian, seems to be relevant in German as well.¹⁸ Consider now briefly the distribution of indicative/subjunctive with this class of verbs. I already showed above that CD is impossible with the indicative, and therefore sentence (1) given above – repeated here for simplicity – cannot undergo CD:

- (33) Gianni ha detto *(che) ha telefonato Maria
Gianni said that has(IND) called Maria
‘Gianni said that Maria called’

When these verbs convey a *iussive* meaning they select subjunctive:

- (34) Gianni ha detto *(che) partissero al più presto
Gianni said that they leave(PAST SUBJ) as soon as possible
‘Gianni ordered that they leave as soon as possible’
(35) Gianni ha detto *(che) partano al più presto
Gianni said that they leave (PRES SUBJ) as soon as possible
‘Gianni ordered that they leave as soon as possible’

When conveying this meaning, *dire* (say) behaves like the verb *ordinare* (order):

- (36) Quel miliardario ha ordinato *(che) si comprasse quella villa
That billionaire ordered that *si*-impersonal buy(PAST SUBJ) that villa
‘That billionaire ordered that they buy that villa’
(37) Quel miliardario ha ordinato *(che) si compri quella villa
That billionaire ordered that *si*-impersonal buy(Pres SUBJ) that villa
‘That billionaire ordered that they buy that villa’

In the embedded clauses in these cases, the verb can either be realized as a past subjunctive or as a present one and CD is always ungrammatical. The two verbal forms, however, correspond to different temporal interpretations.¹⁹

Let me try to explain the peculiar temporal interpretation of these sentences. In the examples given above the order concerns an event which, as natural, is supposed to take place in the future with respect to its issuing. However, in sentences (34) and (36) – where the past subjunctive appears – the buying of the house must be future only with respect to the issuing of the order itself. Therefore, in this sentence the buying of the house might already have taken place at utterance time and the speaker might simply be reporting the issuing of the order, without any implication concerning the time of the buying.

¹⁷ The verb *guess* in English seems to be sensitive to the same distinction. I thank J. Higginbotham for this observation.

¹⁸ A semantic parameter might perhaps be hypothesized to account for this point: some languages might be more sensitive to the speech act/ mental state distinction – as Italian. Other ones might be more sensitive to the peculiar modal properties of the contexts, as hypothesized in Giorgi and Pianesi (1997).

¹⁹ Both verbs can also select the infinitive. In this paper however, I’ll disregard the relationships between infinitival clauses and subjunctive ones.

In the other examples – sentences (35) and (37) – when a present subjunctive is realized, the buying of the house must follow the ordering but *also* the utterance time, i.e., it must be in the future with respect to the speech event itself.

The difference between the two cases can be considered as parallel to the one just described with respect to *ipotizzare* (hypothesize). The differences between (34)-(36) and (35)-(37) can be accounted for as a DAR effect. The nature of the predicate requires that the embedded event be interpreted as the content of the order, and therefore derivatively located in the *future* with respect to it. In other words, we can conceive of the *content* of the order as simultaneous with respect to the *issuing* of the order. The *carrying out* of the order, due to the semantic and pragmatic properties of ordering, must lie in the future with respect to it.

According to this view, a double evaluation applied to the content of the order predicts exactly the judgements illustrated above. In these cases, the content of the order is simultaneous both with respect to the event of issuing the order, and with respect to the utterance time; the carrying out of the order lies in the future with respect to both.

The conclusions that can be reached on the basis of the previous analysis seem therefore to be the following ones: a) A present subjunctive under a past superordinate verbal form is admitted as far as the higher verb can be interpreted as a predicate of communication. b) In this case, the DAR is enforced; c) The complementizer cannot be omitted. Therefore, iussive verbs constitute another case in which the subjunctive shows the existence of DAR effects.²⁰

At this point the question to be answered is the following one: What is the relation between the complementizer and the DAR?

Giorgi and Pianesi investigated this question in detail. They proposed that the complementizer introducing subjunctive clauses is not the same as the one introducing the indicative clauses. In some languages the two are lexically distinct. For instance, Balkan languages a different complementizer, and not a different inflectional morphology, signals the difference between indicative and subjunctive. I'll not discuss again this point in this work – given that it is a widely known fact – and refer the reader to the cited references.

The starting point is therefore that, even if in standard Italian the complementizers are both realized by means of the word *che*, the indicative one and the subjunctive one fulfill different roles and occupy different positions in the syntactic tree – i.e., *che* (that) can head two different projections. Giorgi and Pianesi (1997, 2004a) addressed this question, and I'll briefly summarize the issue here. They proposed that the subjunctive verbal form is not a relational tense, in the sense indicative tenses are. As I showed above, the past or present forms of the subjunctive do not instantiate a simultaneous or a precedence relation between two events. The morphological appearance of the inflection is due to an *agreement* process between the superordinate and the embedded verbs.²¹

The bulk of the hypothesis concerning the complementizer in this case is that it is *part of* the subjunctive inflection. In other words, the Italian subjunctive exhibits a sort of *discontinuous morphology*, including both the verbal ending *and* the complementizer. The two can either be realized together – i.e., *sincretically*, adopting Giorgi and Pianesi's terminology – or *scattered*, in which case the word *che* appears in the embedded clause.

Let's consider first the *scattered* realization. Giorgi and Pianesi claimed that the subjunctive verb carries both mood and tense-agreement features. In non-CD clauses, the features force movement of the verb at LF to the complementizer layer. The complementizer in this case, as argued by Giorgi

²⁰ The opposite generalization however does not hold. That is, there are some contexts in which the complementizer cannot be omitted and there is no DAR, for instance in sentences with left, or right, dislocation:

- i. *(che) Gianni fosse partito, Maria lo credeva
 That Gianni had left, Mary it-believed
- ii. Maria lo credeva, *(che) Gianni fosse partito
 Maria it-believed, that Gianni had left

This topic is discussed in Giorgi and Pianesi (1997, 2004a), and I'll not consider the issue here.

²¹ The question concerning *the reason why* such an agreement between the verbs is needed is to a certain extent a different one, and I'll address it in section 4 below.

and Pianesi, lexicalizes the Mood features. Abstracting away from the distribution of embedded topic and focus, the structure of the embedded clause can be represented as follows:

- (38) Gianni credeva che Maria dormisse
Gianni believed that Maria slept(PAST SUBJ)

- (39) [.....[_V credeva [_{MOOD-P}che [_{TP} ... dormisse_{+mood; +past}...]]]]

Simplifying the discussion, in this case the modal and temporal features of the subjunctive verb are realized on two independent projections, one headed by the verb *dormisse* and the other headed by the complementizer *che*. At LF, movement of the verb to Mood, triggered by the mood feature on the verb, locates the verb in the correct configuration for tense agreement with the main verb. The result will be that Gianni has a belief, located in the past, given the past morphology on *credere*, concerning a calling by Maria, which *morphologically* agrees with it. Given that in this case the temporal location of the calling is not specified, the interpretation will be *simultaneity*. Recall also that, as illustrated above, temporal modifiers, either anaphoric or indexical, can variously determine the relation between the events. They can locate the embedded event in the past or in the future with respect to the main one.

Lei's consider now the other option – i.e., the *sincretic* one – Giorgi and Pianesi crucially suggested, in order to account for the word order properties of the embedded clause, that when the complementizer is not realized – i.e., in CD clauses – the temporal and modal features are sincretically realized on the same verbal head. The structure obtained in this way is therefore the following one:²²

- (40) Gianni credeva dormisse
Gianni believed she slept(PAST SUBJ)

- (41) [.....[_V credeva [_{MOOD/TP} dormisse_{+mood; +past}...]]]

In this case, there is no complementizer in the head of the Mood projection. The verb itself occupies the MOOD/TP position and verbal agreement with the superordinate verb *credeva* (believed) works as in the case illustrated above.

Therefore, in both cases, we can say that the morphology of the subjunctive form—past or present – is determined by a head-head relation holding between the main verb and the embedded one.

The indicative complementizer, on the contrary, plays a totally different role and can never be deleted. Moreover, the indicative is always a relational tense, so that it must be interpreted accordingly, giving rise to the DAR in Italian-like languages. Finally, according to Giorgi and Pianesi, a relational tense has to move to C at LF.

The indicative configuration is therefore the following one:²³

- (42) Gianni ha detto che Maria ha telefonato
Gianni said that Maria has(IND) called

- (43) [.....[_V detto [_{CP} ... che_□ [_{TP} ... T_□ ... [... ha telefonato_{□; □}...]]]]]

²² The data accounted for by this hypothesis concern the impossibility of a focus phrase in CD embedded clauses, the marginality of topic ones, and the peculiar distribution of the embedded subject. See Giorgi and Pianesi (2004a).

²³ I put aside the questions arising with the indicative imperfect, as in the following sentence:

i. Gianni ha detto che Maria dormiva
Gianni said that Maria slept(IMP IND)

This question has been considered in Giorgi and Pianesi (2004b). I'll not take it into account here, given that it seems quite marginal for the present analysis.

The embedded past verbal form, *called*, is a relational tense: $e > e'$. The event e is constituted by the calling event itself and bears a pair of features: $\langle \text{PRES}, \text{SUBJ} \rangle$ and $\langle \text{MOOD-P}, \text{SUBJ} \rangle$. In Italian, the verb moves overtly to T. Here the feature $\langle \text{MOOD-P}, \text{SUBJ} \rangle$ is interpreted at the interface as referring to the bearer-of-attitude's – i.e., the main subject – temporal coordinate. At this point, the embedded event is interpreted as past with respect to the temporal location of *Gianni*.²⁴

Movement of the verb to C is forced by the presence of the feature $\langle \text{MOOD-P}, \text{SUBJ} \rangle$. Let's consider now the role of this feature. The idea is that it is a pointer to the context, interpreted at the interface as the speaker's temporal coordinate – i.e., the utterance time *now*. At this point in the derivation, the embedded event is also interpreted as past with respect to the temporal location of the speaker, i.e. past with respect to the utterance time.

Given this role of the indicative complementizer, it is possible to understand how it could not be syncretic on anything. It is not part of the *morphology* of the verb, but a linguistic formative with an interpretive function. It is responsible for the DAR arising in Italian indicative embedded contexts.

Let's approach now the core hypothesis of this paper. I illustrated two contexts in which the DAR arises with the subjunctive: with verbs of cognition, working as verbs of communication – such as *ipotizzare* (hypothesize) – and with the iussive subjunctive – a communication context as well. In both cases the complementizer cannot be deleted. Moreover, the verb appears in a verbal form not predicted by the Latin-like *consecutio*, which would allow only a temporal agreeing form to be realized. In these sentences in fact a present subjunctive appears under a past verbal form, which should be in principle disallowed.

The question arising in this connection is how the present morphology is licensed in these configurations. Consider again the example given above:

- (44) Gianni ha ipotizzato che Maria sia incinta
Gianni hypothesized that Maria is(PRES SUBJ) pregnant

The hypothesis discussed by Giorgi and Pianesi (1997, 2004a) is that Mood-P and CP in this case co-occur, giving rise to the following structure:

- (45) [.....[_V hypothesized [_{CP} che [_{MOOD-P} sia_{+mood; +pres}....]]]]

Let's propose that the verb moves – either overtly or covertly, it does not matter for the purposes of this argument – to MOOD-P, given that it is a subjunctive form. The complementizer *che*, occupying the head position of CP, bears the feature $\langle \text{MOOD-P}, \text{SUBJ} \rangle$, which points to the speaker's temporal coordinate. As a consequence, the utterance time licenses the present form of the subjunctive. Tense agreement is instantiated exactly as in the cases given above, the only difference being that in this case the head-head configuration does not involve the main verb, but the complementizer in C.

Let's consider now the temporal interpretation of the clause. The embedded subjunctive is anchored to the superordinate verb – as obligatory in all languages – and is, by default, interpreted as simultaneous with the main eventuality, even in absence of temporal agreement. The presence of the feature $\langle \text{MOOD-P}, \text{SUBJ} \rangle$ in C also forces the interpretation in which the embedded event is located with respect to the speaker's coordinate. Therefore, a (default) simultaneous interpretation with respect to the utterance event is assigned.

Concluding this section, a subjunctive verbal form embedded under communication verbs will give rise to the DAR by means of the same mechanism determining this reading in the indicative cases – i.e., by virtue of a double interpretation. The difference between the indicative and the subjunctive concerns the fact that the interpretation of the indicative is derived via the interpretation of a

²⁴ On the reason why the notion *bearer-of-attitude* is more appropriate than the notion of superordinate *subject*, see Giorgi and Pianesi (2001) and Giorgi (2004, 2005). See also Costantini (2005).

relational tense, locating two events one with respect to the other. The temporal interpretation of the subjunctive is always a simultaneous one, by default. However, the necessity of assigning this simultaneous interpretation twice, leads to the DAR.

3.2 Temporal topics and other issues

Let's consider now the case in which the past subjunctive seems to have an independent temporal reading. I repeat the relevant example here for simplicity:

- (46) Il testimone crede che ieri alle 5 l'imputato fosse/*sia a casa
The witness believes that yesterday at five the defendant was(PAST SUBJ)/ *is(PRES SUBJ) at home

To license an embedded past subjunctive, a temporal topic is necessary. Such a topic can either be provided overtly, or by the context. It can then license the temporal morphology of the embedded verb in a way analogous to the cases seen above:

- (47) [.....[_V crede [_{MOOD-P}che [_{TOP-P} ieri alle 5 [_{TP} ... fosse_{+mood; +past}...]]]]]

Ieri alle 5 (yesterday at five) is interpreted as a past temporal reference – by virtue of the meaning of *ieri* (yesterday) – and therefore licenses the past feature on the verb. The default interpretation locates the embedded event at the time specified by the topic. Further movement of the verb to Mood, required by the presence of feature [+mood], does not modify this interpretation. Differently from the cases seen above in fact, the speaker's coordinate is not represented in C. *Credere* (believe) is not a communication verb and, accordingly, it does not require the high C projection to be realized. Given that the past form on the embedded verb is licensed by the temporal topic, the temporal interpretation is completed prior to the movement of the verb to Mood, and the sleeping event is correctly located in the past, as specified by the time adverb.²⁵

Consider now the licensing of a past verbal form in sentence (25), repeated here:

- (48) Gianni vorrebbe che Maria partisse/*parta
Gianni would like that Maria left(PAST SUBJ)/*leaves (PRES SUBJ)

The main verb is the present form of the so-called *conditional mood*. It is not therefore a past form and does not express a *past* meaning – i.e., Gianni's wish is located in the present, even if removed to a possible world. In the embedded clause, the subjunctive mood is licensed by virtue of being a complement of a volitional predicate, but in this case, the *modality* of the main verb, and not its tense, licenses the embedded past. Consider also that an embedded present subjunctive – cf. the ungrammaticality of *parta* (leaves) – is ungrammatical.

The question is therefore how the past form is licensed in this context, given that no agreement process seems to be available, if we consider the feature as somehow connected to *past*. Several options come to mind. For instance, one might suggest that the feature on the past subjunctive has to be conceived of as [-actual], instead as [+past]. Another possibility would be to encode the difference between the present subjunctive and the past subjunctive as a binary feature [±present]. In this paper, I'll leave the question open. What is important to stress here is that this observation constitutes additional evidence in favor of the absence of temporal specification in the subjunctive and therefore in favor of the theory according to which the subjunctive is a non-relation form.

²⁵ Aspectual questions are put aside in this paper, even if they are obviously relevant with respect to the final interpretation of the embedded verbal form. In the case of the example (46), for instance, the interpretation of the embedded event is a continuous one, in that the being at home is supposed to have begun *before* and to be continuing *after* the temporal interval specified by the topic.

There is another context where the past tense is available in absence of a visible licenser. The context in question is the so-called independent subjunctive expressing wishes by the speaker:

- (49) (Che) ti pigliasse un colpo!
That a stroke take(PAST SUBJ) you!

In this case, however, the past form alternates with the present one, quite freely, without giving rise to differences in meaning:

- (50) (Che) ti pigli un colpo!
That a stroke take(PRES SUBJ) you!

Notice also that CD is optional in this case, as in ordinary subordinate contexts. From these data, one might conclude therefore that the sentences in (49) and (50) are MOOD-Ps, and not CPs, where an *extra*-feature for modality – the one licensing the past subjunctive – can optionally be available. In this respect, these examples would be analogous to the one in (48) above.²⁶

At his point it might be relevant to say a few words on the relationship between the analysis of the CP proposed here and Rizzi's (1997, 2001, 2002) one. In particular, the relation between the high C projection hypothesized here and Rizzi's *force*.

Conceptually, they do not correspond to each other, in that Rizzi's *force* is presumed to mark the *assertive force* and similar properties of the embedded clause. In the cases considered here, on the contrary, the high CP projection is to be understood as a pointer to the speaker, independently of the nature of the clause – i.e., independently of its being an assertion, a question, etc. The role of C at the interface is to relate the content of the embedded clause – in particular the temporal interpretation of the event – with the speaker's *hic et nunc*. It doesn't seem to me however, that the two approaches cannot be made compatible, given that empirically I didn't find so far counter-arguments to this proposal in Rizzi's work. Further inquiry is however required.

4 Answering some questions about the distribution and interpretation of indicative and subjunctive

By means of the hypothesis I just sketched, some guidelines can be drawn about how to account for the interpretation and distribution of the embedded subjunctive.

According to the view I proposed, the indicative/subjunctive divide would not have to rely on an a priori *realis/irrealis* distinction, but on the properties arising from the presence vs. absence of the representation of the speaker's coordinate.

In *most* subjunctive contexts, the speaker's coordinate is not represented – cf. for instance, the clauses under desiderative verbs – whereas this is an obligatory property of the indicative clauses – as for instance the verbs of *saying*.

Incidentally, notice that this distinction is visible only in DAR languages. In languages such as Rumanian, which do not enforce any DAR reading, there is no way of detecting the presence of the speaker's coordinate in the embedded clause. Recall also that, coherently with the remarks discussed above, in Balkan languages, which usually exhibit no DAR, the distribution of the indicative and subjunctive mood exhibits different properties with respect to the one found in Italian and Italian-like languages. This is actually expected under the present account.

Putting aside non-DAR languages, Giorgi and Pianesi's (1997) generalization concerning Italian complement clauses can be restated in the terms of this paper more or less in the following way: on one extreme, verbs of communication always require the representation of the speaker and feature the indicative. On the other one, verbs concerning cognitive states do not require the speaker's

²⁶ For an analysis of exclamative contexts, see Zanuttini and Portner (2000, 2003).

coordinate and select the subjunctive. In the middle, there are some verbs – like *ipotizzare* (hypothesize) – which can be at the same time both verbs of communication *and* of cognitive states. Consequently, they might require the speaker’s coordinate to be represented *and* select the subjunctive. Some verbs, furthermore, might shift from one class to the other. This might be the case with the Italian *credere* (believe), which varies with respect to the form selected in the embedded clause, and admits – even if not equally well for all speakers – both the indicative and the subjunctive.²⁷

In this section, I’m going to work out this hypothesis and see how far it can go to provide an explanation for the basic questions concerning subjunctive contexts.

4.1 A *proviso* about main first person verbs

A crucial *proviso* is in order at this point. It is very important not to have first person features on the main verb, given that this might give rise to a peculiar syntactic structure. As discussed by Giorgi and Pianesi (2005), in fact, the subordinate clause *sia partita* (she left) in the following example exhibits properties that are not typical of embedded contexts, but pattern together with main clauses:

- (51) Credo *sia partita*
I believe she left

As a first consideration, observe that the meaning of this sentence is not: *I have a belief concerning the leaving of Maria*, but rather: *I assert that Maria left, and my degree of certainty about this fact is less than 100 %*. This is because the speaker is talking about herself, and not about another person whose thoughts, to be known, must be either communicated or inferred on the basis of various evidence. One’s own thoughts are immediately accessible.

From the syntactic point of view, several properties strengthen this perspective. For instance, some speakers – more or less the half of the Italian speakers, myself included – do not admit a preverbal subject with CD clauses:²⁸

- (52) Gianni crede *(che) Maria *sia partita*
Gianni believes that Maria has(SUBJ) left
(53) Gianni crede (che) *sia partita* Maria
Gianni believes that has left Maria
(54) Gianni crede (che) *sia partita*
Gianni believes that (she) left

For some speakers, the presence of a preverbal lexical subject inhibits CD, as opposed to a postverbal or a null one, which are acceptable for everybody. This is not the case with a main first person verb:

- (55) Credo (che) Maria *sia partita*
I believe that Maria has left

The preverbal subject is acceptable in this case even for those speakers who reject it in (52). The explanation provided by Giorgi and Pianesi (2005) for this – and several other related phenomena – is that the form *credo* is only apparently a main clause, but it actually is an epistemic adverb, bearing first person features.

²⁷ In my Italian, an indicative embedded under *credere* (believe) is usually not a possible option.

²⁸ For a discussion of the preverbal subject with CD, see Giorgi and Pianesi (1997, 2004a).

I'm not going to reproduce here the discussion and the evidence by Giorgi and Pianesi. I only would like to stress that expressions such as *I think, I hope, I admit, I confess*, etc. might often be amenable to the analysis just sketched and therefore should *not* be used as evidence concerning the relation main/ subordinate clause.

4.2 A discussion of some relevant facts

4.2.1 Emotional factive verbs

I already discussed above what the differences between *dire* (say), *credere/ desiderare* (believe/ wish) and *ipotizzare* (hypothesize) amount to – i.e., presence vs. absence of the speaker's coordinate.

One might speculate why it should be like that. It can be said that in DAR languages the verbal morphology – i.e., the indicative mood – has the role of placing the event with respect to the *real* world, which doesn't (necessarily) mean that the speaker believes that the propositional content of the clause is true. The truth of the embedded clause can be presupposed in some cases, as in factive sentences, but otherwise this is not the case. Yet, the indicative forces the embedded event to be located with respect to the speaker's temporal, and spatial, coordinates, which pertain to the *actual* world, as perceived and interpreted by the speaker.²⁹

One might think that this is what happens when the speaker is describing a behavior of some sort, as for instance a communicative act by a subject. On the contrary, there is no event to be placed according to the actual temporal and spatial speaker's coordinates, if what is described by the speaker is a purely cognitive and emotional state pertaining to the subject. Notice that the subtle, but systematic, difference between the DAR and non-DAR interpretation of *ipotizzare* (hypothesize) in Italian goes exactly in this direction.

Let me consider now an apparently anomalous case – namely, complement clauses of emotional factive verbs, which select the subjunctive, which I already mentioned in sec. 2 above.

According to the hypothesis I just sketched, emotional factive verbs, by virtue of being *emotional* ones, therefore describing cognitive states, select the subjunctive. I reproduce here the relevant example:

- (56) Gianni rimpiange *(che) sia/ *fosse partita
Gianni regrets that (she) has (PRES SUBJ/ *PAST SUBJ) left
- (57) Gianni rimpiangeva *(che) fosse/ *sia partita
Gianni regretted that (she) had (PAST SUBJ/ *PRES SUBJ) left

In this case the Latin-like *consecutio* is strictly enforced and the complementizer cannot be omitted. These facts in the present hypothesis mean that this case does not pattern with of the ones we saw above. If the structure were like the one embedded under *credere/ desiderare*, the complementizer would be deletable. On the other hand, if the structure were like the one under *ipotizzare*, a present-under-past configuration should be possible, contrary to facts. Giorgi and Pianesi (2004a) propose that in this case the structure is basically the one instantiated with *credere/ desiderare* – i.e., a MOOD-P projected by (subjunctive) *che*. The peculiar property of these verbs is constituted by the presence of an extra-feature, +F, in the head position of MOOD, marking the factive status, which cannot be lexicalized sincretically by the subjunctive verb. As a consequence therefore, the complementizer must appear. I endorse here this view, which also seems to correspond to most theories and intuitions concerning factive verbs – i.e., to the fact that there is an additional property/

²⁹ See Giorgi (2004, 2005) for an analysis of long distance anaphors along these lines. The main hypothesis in that case, is that the presence of the speaker's coordinate blocks the long distance anaphor from looking further up for an antecedent. It is a well-know fact that indicative contexts contrast with subjunctive ones with respect to long distance binding. Giorgi (2004) also sketches an analysis along these lines for long distance anaphors in non-DAR languages, such as Chinese.

position that renders factive predicates exceptional from a syntactic point of view.³⁰ The structure in these cases should therefore be the following one:

- (58) [....[_V rimpiangeva [_{MOOD-P} che_{+mood;+F} [_{TP} ... fosse_{+mood;+past}...]]]]

4.2.2 Conditionals

In this section I'm not going to enter in all the very complex details concerning the syntax and semantics of conditionals. I would only point out what the contribution of this hypothesis might be to the general picture.

This proposal applied to conditionals makes the correct prediction: in indicative conditionals the protasis is evaluated with respect to the speaker's coordinate.³¹ In subjunctive ones, this is not the case. Again, this is what gives the *realis/irrealis* flavor.

Therefore in the following case, the events of both protasis and apodosis are located with respect to the speaker's coordinate, given that an indicative appears:

- (59) Se Gianni ha comprato quella casa ieri, Maria l'ha venduta l'altroieri
If Gianni bought that house yesterday, Maria sold it the day before yesterday

Interestingly, in this case the protasis, though syntactically a subordinate clause, is not temporally anchored to the main clause, as shown by the temporal modifiers. The time of the event of the protasis in fact, follows the time of the event of the apodosis. As discussed in section 2 above, this cannot happen in complement clauses, given that in that case, anchoring is obligatory. For completeness, notice that also the reverse possibility is available:³²

- (60) Se Gianni ha comprato quella casa l'altroieri, Maria l'ha venduta ieri
If Gianni bought that house the day before yesterday, Maria sold it yesterday

Consider now the so-called subjunctive conditionals. In this case, according to our hypothesis the speaker's coordinate is not represented. Consider the following example:

- (61) Se Gianni comprasse quella casa, Maria sarebbe felice
If Gianni buy(PAST SUBJ) that house, Maria would be(PRES COND) happy

Notice that in Italian the present subjunctive would be ungrammatical in this case:

- (62) *Se Gianni compri quella casa, Maria sarebbe felice
If Gianni buy(PRES SUBJ), Maria would be happy

Nor would a non-conditional be grammatical in the apodosis:

- (63) *Se Gianni comprasse quella casa, Maria è felice
If Gianni buy(PAST SUBJ), Maria is(IND) be happy

In this case, the offending form is the indicative present on the verb of the apodosis, è (is).

³⁰ For instance, they are islands for extraction. See Cinque (1991) and Rizzi (1991).

³¹ See also Schlenker (2005).

³² I'm intentionally leaving out any consideration concerning the imperfect of the indicative. It raises problems of its own, which lie outside the scope of this work.

A way of looking at these cases can be the following one. The conditional mood appears on the apodosis – the syntactic main clause – to express the peculiar semantics of the conditional. Let's suppose that the conditional mood syntactically inhibits the presence of the complementizer *C*, which bears the speaker's coordinate. This makes sense, because in these cases the event of the protasis should *not* be located with respect to the speaker's coordinate, i.e., with respect to the actual world.

As a consequence, the subjunctive appears in the protasis. Analogously to the example (25), rediscussed in (48), moreover, the modality of the main clause licenses the feature [-present] – or [-actual] – on the subordinate verbal form, which therefore must surface as a past subjunctive. Finally, an indicative in the apodosis cannot co-occur with a subjunctive in the protasis, as shown in example (63). The subjunctive cannot be licensed in this case, yielding ungrammaticality.³³

4.2.3 On *polarity* subjunctive

Let's consider now the optative and dubitative subjunctive – i.e., *polarity* subjunctive – as for instance the one appearing in examples (49)-(50) above.

Even in these cases, the choice of the subjunctive is coherent with the fact that the event should *not* be located with respect to the speaker's coordinate – i.e., with respect to the actual world. Compare the following sentences:

- (64) Ti prende un colpo!
A stroke gets(PRES IND) you!
- (65) Ti prenda un colpo!
A stroke get(PRES SUBJ) you!

Neither sentence is an assertion. The first one is an exclamatory structure, and the second one is an optative one. For the native speaker of Italian, it is clear that the first sentence is appropriate in a context where there is a *real* situation of alarm. For instance, a context in which the speaker wants to warn the hearer with respect to some danger in the environment that might cause him a damage. The second one, is the expression of a wish, uttered for instance by an angry speaker, but not (necessary) in relation to any actual situation in which a damage might occur to the hearer.

In this perspective, the subjunctive is not *vacuous* from a semantic point of view, in that it excludes the speaker and her coordinate from the structure of the sentence, and consequently from its interpretation.

Both for the indicative and the subjunctive, the interpretive characteristics – at least the ones I'm discussing here – are just a function of the syntactic structure and the way it is read off at the interface. With an indicative verbal form, the speaker's coordinate is obligatorily represented in *C*,

³³ For completeness, notice that even a present subjunctive in the protasis would not be grammatical with an indicative apodosis:

i. *Se Gianni compri una casa, Maria è felice

If Gianni buy(PRES SUBJ) a house, Maria is(PRES IND) happy

Moreover, contrary to French (Schlenker 2003), in Italian the second conjunct of a conditional cannot be in the subjunctive, if the first conjunct is not, independently of the mood – indicative vs. conditional – of the apodosis:

ii. Se Gianni venisse e fosse malato, lo cureremmo

If Gianni comes(PAST SUBJ) and were(PAST SUBJ) sick, we would take(PRES COND) care of him

iii. Se Gianni viene e è/ *sia/ *fosse malato, lo curiamo

If Gianni comes and is(IND/PRES SUBJ/ PAST SUBJ) sick, we take(PRES IND) care of him

iv. Se Gianni viene e *è/ *sia/ fosse malato, lo cureremmo

If Gianni comes and is(IND/PRES SUBJ/ PAST SUBJ) sick, we take(PRES COND) care of him

I.e., in Italian, an apodosis with a conditional verbal form only licenses a past subjunctive protasis.

with the subjunctive it is represented only when the higher predicate is headed by a communication verb.

Consider in this respect the alternation between indicative and subjunctive with *saying* verbs:

- (66) Gianni ha detto *(che) Maria è partita
Gianni said that Maria left(IND)
(67) Gianni ha detto *(che) partissero al più presto
Gianni said that they leave(PAST SUBJ) as soon as possible
'Gianni ordered that they leave as soon as possible'

In this case, the embedded verb determines a different semantic interpretation of the whole sentence, by virtue of the fact that it is a subjunctive. As I pointed out above, however, CD in this case is not available and DAR effects seem to be detectable. Consequently, it looks likely that the high complementizer C is realized in (67) as well, analogously to (66).

The only difference between the two sentences, therefore, seems to be that the verbal form in (66) instantiates a relational tense, whereas this is not the case in (67). In the present analysis, this might be the reason for the shifting of the meaning in the latter case. The embedded event must not be located with respect to other ones – i.e. the superordinate event and the utterance event – but only *interpreted* according to the subject's perspective and the speaker's perspective, following the syntactic procedure described in section 3. As a matter of fact, the same interpretation obtains with an embedded infinitive:

- (68) Gianni ha detto di partire
Gianni said to leave
'Gianni order that people leave'

In this respect, therefore, the interpretation of an embedded subjunctive parallels the one assigned to the infinitive, in that the infinitive as well is not instantiating a temporal relation.³⁴

4.2.4 Mood attraction

Let's consider now a last set of phenomena having to do with multiple embedding of the complement clause. Interestingly, in this case, both an indicative and a subjunctive are available:

- (69) Gianni crede che Maria abbia detto che Paolo è/ ?sia intelligente
Gianni believes that Maria said (SUBJ) that Paolo is(IND/?SUBJ) intelligent

This phenomenon might be called *mood-attraction*, given that the mood of the deepest embedded clause is not determined by the immediately superordinate verb – *saying* verbs in Italian trigger the indicative – but by the verb higher up in the structure, *crede* (believes).³⁵

The embedded subjunctive *sia* might be judged more marginal with respect to the indicative. It is beyond doubt, however, that it is much better in that context, than in simple embedded structures, where the superordinate verb appears in the indicative:

- (70) Gianni ha detto che Maria è /*sia intelligente
Gianni said(IND) that Maria is(IND/ *SUBJ) intelligent

Consider that CD is impossible and that the DAR is enforced:

³⁴ For a further analysis of these contexts, I refer the reader to Portner and Zanuttini (2004, 2005).

³⁵ On mood attraction phenomena and the distribution of long distance anaphors, see Giorgi (1983).

- (71) Gianni crede che Paolo abbia detto *(che) sia incinta
 Gianni believes that Paolo said (SUBJ) that she is (SUBJ) pregnant

The pregnancy must hold both at the time of Paolo saying that P and at the time of the utterance. Therefore, it must be concluded that the speaker's coordinate is represented in the most embedded clause. The subjunctive is licensed by virtue of the fact that the most embedded clause can be considered as part of the content of a cognitive state. This way a MOOD-P can be projected in the embedded clause. The licensing of the subjunctive tense occurs as in the *ipotizzare* cases discussed in section 2 above. Consequently, in this case, both the subject's coordinate and the speaker's one are represented in the embedded clause, even when the verb appears in the subjunctive. The presence of the subjunctive is therefore licensed by a specific configuration, arising as an effect of the movement of (features of) the verb.

More significantly, it seems to me that mood attraction might also work in the opposite direction – namely, permitting an indicative where usually a subjunctive would appear. Consider for instance the following example:

- (72)?Gianni ha detto che Paolo credeva *(che) Maria è incinta
 Gianni said that Paolo believed that Maria is (PRES IND) pregnant

The interpretation of (72) is a DAR one and CD is impossible. Marginally, therefore, the high CP projection can appear in this case, licensing an indicative and the speaker's coordinate.

4.2.5 Embedded interrogatives

Consider also the following distribution in Italian if the indicative and the subjunctive in indirect interrogative clauses:

- (73) Gianni mi ha domandato se Maria è incinta
 Gianni asked me if Maria is (IND) pregnant
 (74) Gianni si domandava se Maria fosse/ *sia incinta
 Lit: Gianni asked himself if Maria was (PAST SUBJ)/ *is (PRES SUBJ) pregnant
 'Gianni wondered whether Maria was pregnant'

Interestingly, the indicative is permitted when there is a communicative act and the interpretation is accordingly a DAR one. Consider in fact the following example:

- (75)#Due anni fa Gianni mi ha domandato se Maria è incinta
 Two years ago, Gianni asked me if Maria is pregnant

The reasons of the oddness of (75) are the same ones discussed in section 2 with respect to sentences embedded under *dire* (say).

On the contrary, sentence (74) does not need to be a communicative act and therefore the subjunctive is licensed, following the Latin-like *consecutio*. Coherently with this choice, no DAR effect arises.

4.2.6 Further evidence: the case of German

In German there are two forms of subjunctive: Konjunktiv I and Konjunktiv II. The distinction between the two forms, contrary to Italian, does not seem to be expressible in terms of tense agreement. Consider for instance the following examples:³⁶

- (76) Thomas has gesagt, dass Sabine krank sei
Thomas said that Sabine be-KonjI sick
(77) Thomas hat gesagt, dass Sabine krank wäre
Thomas said that Sabine be-KonjII sick

According to native informants, the embedded state must be interpreted in both sentences as simultaneous with the event of saying of the main clause. Note also that in this case there is a subjunctive under a verb of saying. The indicative is also possible, as shown by the following example:

- (78) Thomas hat gesagt, dass Sabine krank ist
Thomas said that Sabine is(ind) sick

In (78) the DAR is enforced, analogously to Italian. Furthermore, with verbs of *belief* – German *glauben* – the subjunctive is also admitted:

- (79) Thomas glaubt, dass Sabine krank sei
Thomas believed that Sabine is(subj) sick

Schlenker (2004) also observes that Konjunktiv I cannot be used when the thought is attributed to the speaker:

- (80)*Ich glaube, dass Sabine krank sei
I believe that Sabine is(subj) sick

He proposes an analysis of the German subjunctive system. Capitalizing on the observation that Konjunktive I clauses appear as asserted by someone, he suggests that this form is actually an *indicative in disguise*, exhibiting the additional requirement that in the contexts where it appears the speaker must be excluded from the Context set.

I fully agree with the conclusions Schlenker draws with respect to the description of the phenomenon. However, it seems to me that the approach illustrated here might provide an advantage: according to my analysis there is no need to claim that Konjunktiv I is an *indicative*, though disguised. If Schlenker's conclusions are correct, in fact, from the hypothesis I discussed that the speaker's coordinate *must not* be represented it follows that a *subjunctive* verbal form will be required, and therefore that German is not anomalous in this respect. This is a welcome conclusion, given that Konjunktiv I does not share with the indicative other relevant properties. Recall for instance, that differently from the indicative, it does not enforce the DAR, and does not convey any independent temporal value, as illustrated by the examples above. Consider also the following sentence:

- (81) Thomas hat vor zwei Jahren gesagt, Sabine sei/wäre schwanger
Thomas said two years ago that Sabine is pregnant

³⁶ I thank Walter Schweikert for these data. All misusages or misunderstandings of this evidence are uniquely my own fault.

Both *sei* (K-I) and *wäre* (K-II) are available, and no DAR effect is detected.

The difference between Konjunktiv I and Konjunktiv II might be that the former is (preferably) used in case there is a communicative act involved, whereas the second is (preferably) used in contexts which exclude the speaker's coordinate, but are not necessarily communication ones. The distinction however between these forms is not clear-cut and judgments vary considerably from speaker to speaker, but it seems to me that the proposal I'm arguing for opens a way for a better understanding of these phenomena.³⁷

5 Some conclusive remarks

The point argued for in this paper can be summarized as follows: in DAR languages the main semantic and syntactic difference between indicative and subjunctive is constituted by the fact that in the former both the speaker's coordinate and the subject's – bearer-of-attitude – ones are represented. In the latter, on the contrary, the speaker's coordinate is not necessarily represented. In Italian complement clauses, the distribution of the two moods seems to correlate with communicative/ non-communicative meaning of the superordinate verb. Let me add a few remarks on this point.

A relevant question concerns non-DAR languages. If the proposal advanced in this paper is at least partially correct, what can be said about them? It cannot be claimed that the indicative/ subjunctive divide is to serve the DAR/ non-DAR interpretation of embedded clauses, given that such distinction is not relevant in these languages. This question is too wide to be exhaustively answered in a single paper. A couple of considerations are in order, however.

The first one is that in these languages there is a verbal form which goes under the *name* of subjunctive, but which might actually be *something else* with respect to the form appearing in DAR languages, or at least it might have another set of properties. As a matter of fact, it is typologically different. In Greek, Romanian and Russian, for instance, it is marked only by means of a special complementizer and lacks a characteristic verbal inflection. Moreover, these languages do not have an independent infinitival form. Consequently, the functional partitioning among the subordinate moods *cannot* be the same in DAR and non-DAR languages, given that a single form must play the role that in DAR languages is played by two distinct ones.

Secondly, and perhaps more importantly, it might be claimed that in non-DAR languages the speaker's coordinate is indeed represented in the embedded clause, even if it does not serve the function it does in DAR languages – namely, the temporal interpretation. This point is discussed extensively in Giorgi (2005) with respect to the interpretation of long distance anaphor in Chinese – a language lacking DAR effects, but showing the intervention of the speaker's coordinate in another domain.

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³⁷ Beside Konjunktiv I and II, there is also a subjunctive compound form – *würden* + *infinitive* – which replaces the other subjunctive forms when they morphologically overlap with the indicative.

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