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CHAPTER 6

The Romance *k*- Complementizers

M. RITA MANZINI

In Germanic and Romance, finite complementizers are clearly nominal, belonging to argumental series such as demonstratives or *wh*- elements respectively. Therefore in previous work (Manzini and Savoia 2003, 2005, 2010a) we propose that the complementizer is not a functional category of the embedded verb, but rather an independent nominal head, which satisfies an argument slot of the matrix verb and which takes the embedded sentence as its complement, as briefly summarized in section 1. The aim of the present chapter is to investigate the range of variation that attaches to the lexicalization of complementizers in Romance varieties. We argue that only the treatment of the complementizer sketched above allows a transparent account of the observed variation (sections 2 and 3). First, the overlapping of Romance complementizers with the *wh*-system follows precise patterns, which exclude the possibility that homophony is simply at stake. Second, an account of the variation internal to the complementizer system requires the complementizer to be interpreted as introducing a propositional variable—which is natural only if it is a nominal head. Finally, in section 4, we consider

Note: The analyses presented here are based on a long-term collaboration with Leonardo Savoia. The core analysis was first published in Manzini and Savoia (2003) and corresponds to an invited lecture at the *XIX Incontro di Grammatica Generativa*, Urbino, February 13–15, 2003 (cf. notes 1, 10, 11), reprinted in Manzini and Savoia (2008). The implications of this analysis for the overall structure of the left periphery (cf. notes 3, 5, 6) were at the center of the presentation “The Nature of Complementizers” at the Edges in Syntax Conference, Cyprus College, May 15–17, 2006, and are covered by the discussion in Manzini and Savoia (2005, vol. I) and Manzini and Savoia (2010a, 2011). We are indebted to an anonymous reviewer for pointing us to some relevant recent literature. Tarald’s interest in Romance variation was a source of inspiration for us throughout and it is a particular pleasure to be able to acknowledge it here.

the finiteness restriction that complementizers are subject to, arguing that they do not select for embedded temporal/modal properties (this being a potential argument in favor of their status as a functional projection of the verb); rather they select for the properties of the embedded EPP argument—hence of the proposition as a whole.

1. BACKGROUND

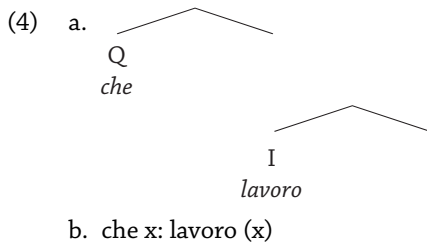
Current theories hold that complementizers are functional projections of the verb, i.e., their position is essentially one that could in other circumstances be filled by a verb (or an auxiliary). This is true independently of whether there is a set of C positions (Rizzi 1997, 2001, 2004a), or a single C position with a rich Spec structure (Chomsky 1995). But if complementizers fit into the same type of position(s) as verbs (or auxiliaries) it is unclear why they so clearly coincide with functional projections of the noun, say with demonstratives in Germanic, or with *wh*-elements in Romance. Even if we were to accept that the relation that complementizers entertain with the *wh*-system in Romance languages, with the demonstrative system in English and so on is only an historical one, the question would arise as to how a nominal, quantificational element could come to fit verbal specifications. Thus the form of the argument would change—but its substance wouldn't.

Consider, for instance, Italian, where *che* introduces finite declaratives as in (1), as does English *that*. The same element also introduces interrogatives with the meaning of 'what' as in (2). Furthermore *che* can appear as the *wh*-determiner of complex interrogative NPs as in (3).

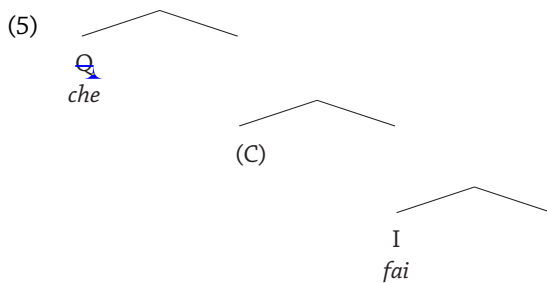
- (1) So *che* *fai* *questo*.
I.know that you.do this
 'I know that you do this'
- (2) *Che* *fai*?
what you.do
 'What are you doing?'
- (3) *Che* *lavoro* *fai*?
which job you.do
 'Which job do you do?'

Let us begin with examples of the type in (3), where *che* appears internally to a noun phrase. The latter can be assigned a structure of the type in (4a), where *che* represents a quantificational position Q within the noun phrase. Assuming that the structure of the noun phrases is entirely parallel to that of

sentences, in (4a) the position of the head noun is indicated as I—to parallel the ordinary position of the verb within the sentence. From an interpretive point of view, it seems reasonable to propose that in (4a) *che* introduces a variable, restricted by *lavoro* ‘job,’ along the lines of (4b).¹



There is also no particular difficulty in unifying the occurrences of *che* in sentences of the type in (2) with those in (4) and the like. Quite simply, we can assume that in sentences like (2) the same quantificational element *che* as in (4) heads its own noun phrase, where it is not restricted by any predicate. Within the sentence the noun phrase *che* will in turn occupy a position in the C field, as indicated in (5). Since the C position is not lexicalized, it is indicated within brackets in (5) as a pure diacritic for the modal domain, implied in reality by the *che* operator. Note that a complete parallelism between sentences and noun phrases would lead us to suppose that the Q element *che* is in the modal C field of the noun phrase in (4) as well.



1. The tree representations in this work are meant to indicate constituency of actually occurring lexical terminals. The labels of predicative heads indicate what domain they instantiate in the sentence/noun phrase that they project (here the predicate *lavoro* instantiates I). The labels of arguments indicate what relation they have to the predicate (here *quanto* introduces a variable corresponding to the internal argument of the predicate). Labeling of phrases is omitted (here the conventional noun phrase would be an IP if *che* is in the Spec of I). We also omit representing abstract structure, in particular empty heads (for which see the discussion of the bracketed C notation in (5) in the text). We further omit representing derivations, i.e., chains in representational terms, since they are largely irrelevant here (but cf. notes 8, 12). In any event, we agree with Chomsky (2000) that there is no syntactic head-movement, hence no head traces.

From an interpretive point of view, *che* in (5) binds the internal argument of the predicate *fare* ‘to do’; thus the structure in (5) corresponds roughly to the Logical Form in (6a). In turn the position of *che lavoro* in a sentence like (3) is the same as the position of *che* in (5)—and the Logical Form in (4b) is to be completed as in (6b). In short the occurrences of *che* in (2) and (3) fairly obviously are a single lexical item, namely a quantifier binding an argumental variable either restricted by a noun as in (6b) or not, as in (6a). The *che* element holds a quantificational position within the noun phrase, as in (4a), while the noun phrase as a whole inserts in a nominal position in the C field of the sentence, as in (5).

- (6) a. *che* *x*, *fai* (*x*)
 b. *che* *x*: *lavoro* (*x*), *fai* (*x*)

Besides its coincidence with the occurrences of *che* just described on the morphophonological form *che*, the complementizer in (1) can also be taken like them to be a quantifier introducing a variable—restricted by the content of the proposition, along the lines of (7). In this perspective, the main interpretive difference between *wh-che* and complementizer *che* is in the nature of the variable they introduce. This ranges over arguments of a predicate for *wh-che* in (6), while for complementizer *che* in (7) it ranges over situations/possible worlds, i.e., propositions.²

- (7) *che* *x*: [*fai* *questo*] (*x*)

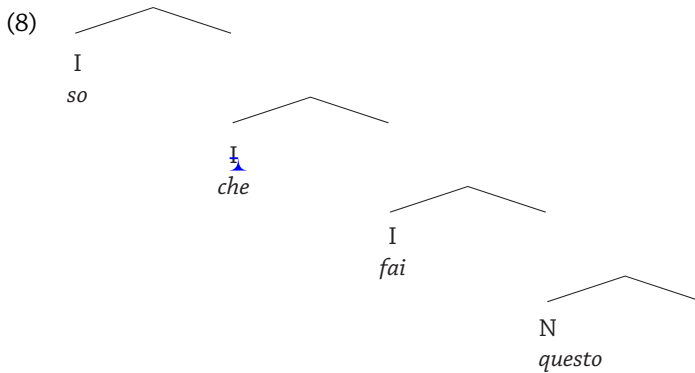
From a syntactic point of view, *wh-che* and complementizer *che* both have a position in the left periphery of the sentence. Specifically, *wh-che* fills a nominal position of the type in (4a) and (5)—while under current theories complementizer *che* lexicalizes the kind of position, namely C, that we questioned at the outset. Recall that C is independently known to be a possible position of the verb in the sentence, and this is at odds with the nominal character of *che* reviewed so far. The model of Manzini and Savoia (2005, 2007) actually restricts every sentence/noun phrase to at most one (predicate) head; therefore auxiliaries, particles, and so on must either be arguments of another head or

2. As already noted, the first published version of this analysis is Manzini and Savoia (2003), where “we propose that the complement sentence in (1a), the question in (1e) and the *wh*-phrase in (1g) are all preceded by the same lexical item in that they have a similar LF with *che* introducing a variable. The different interpretations stem from the fact that in (1e) *che* binds the internal argument of a verbal predicate, as illustrated in (10a); in (1a), *che* binds a variable with sentential content, as in (10b); and in (1g) *che* binds the internal argument of a nominal predicate, as in (10c).

- (10) a. [*che* *x* [*fai* (*x*)]]
 b. [*che* *x* [*x*: *viene domani*]]
 c. [*che* *x* [*camicia* (*x*)]]” (p. 95)

define their own noun phrase-like or sentencelike projection. Such a model provides a principled reason why a sentence cannot include a complementizer head in a potential verb position (namely C) in addition to its verbal head. At the same time, the model also structures the logical space where an alternative to the classical analysis of complementizer *che* can be sought. For, either the so-called complementizer is an argument of the verb—or, given its nominal character, it heads its own noun phrase.

The first logical possibility is exploited by *wh- che* both within the sentence, as in (5), and within the noun phrase, as in (4a). Complementizer *che* then has the second option open, ~~namely that of projecting an altogether separate noun phrase~~. If so, in a sentence like (1) the main verb heading the matrix sentence takes as its object a noun phrase headed by the *che* complementizer, shown in (8) in the usual ~~I position of nominal/verbal heads~~.³ The complementizer head in turn takes the embedded sentence as its complement, yielding a structure of the type in (8). In (8), the trend toward an “exploded” phrase structure—associated in particular with the work of Rizzi (1997 inter alia) and of the so-called cartographic approach (Cinque 2002, Belletti 2004, Rizzi 2004b)—does not translate into the postulation of specialized hierarchies of functional categories. Rather atomization of constituent structure results from the recursion of elementary modules of predicate-argument structure.



3. Going back to (5), one may wonder what the C head corresponds to under the new conceptualization of the complementizer in (8). Recall that one of the reasons for our original puzzlement at the currently standard analysis of complementizers was the fact that such clearly nominal elements would occur in positions otherwise taken by verbal (modal) heads. The present view, despite reforming the conception of complementizers, does not touch current analyses of verb placement. Thus interrogative inversion is still construed as the occurrence of the verb in a higher position than I, i.e., C in (5). In this sense if there are several positions of the verb higher than I, there will be a recursive C field in the sense of Rizzi (1997). These points are developed in Manzini and Savoia (2005, 2010a, 2011).

The syntactic structure for complementizers in (8) and the semantic analysis we have provided in the discussion that precedes are logically independent. A good example of this is provided by the discussion of the English complementizer *that* by Roberts and Roussou (2003), according to whom “we are dealing with one and the same lexical item which can surface as either D or C” (115). This analysis is compared to Davidson’s suggestion ([1968]1997: 828–829) that “sentences in indirect discourse, as it happens, wear their logical form on their sleeves. . . . They consist of an expression referring to a speaker, the two place predicate ‘said,’ and a demonstrative referring to an utterance.” According to Roberts and Roussou (2003: 113–114) in Davidson’s analysis complementizer *that* “is actually the demonstrative”; by contrast “it is possible to argue that *that* in terms of its position in the sentence has been grammaticalized as a C element.”

What an analysis like that of Roberts and Roussou (2003) implies is the possible acceptance of a semantic treatment of the complementizer along the lines adopted here, explicitly connecting it to other nominal, quantificational series in the language—while maintaining the conventional “grammaticalized” role of the complementizer as a functional projection of the verb within the sentence. A straightforward argument in favor of (8) is then that it provides a transparent link with the semantics, while the alternative, more conventional syntax makes this connection opaque.⁴

It should be noted that the theoretical literature does contain treatments where sentential introducers are rescinded from the C projection(s) of the embedded sentence and are made to depend directly from the main sentential tree. Notably Kayne (1994), in analyzing the infinitival introducers of Romance languages, such as Italian *di* ‘of’ and the like, does not treat them as

4. The work of Arsenijević (2009), which appeared only after this text was presented at the Tromsø Workshop is a more relevant case in point. Thus according to Arsenijević (2009: 47) “the variable denoted by a *wh*-element gets bound by a question operator in questions or by an appropriate head in relatives. Its presence in FCCs in a significant number of languages signals that the denotation of these clauses involves a variable, as postulated in the present analysis.” Despite the convergence of this conclusion with those in the text, the syntax proposed by Arsenijević (2009) for English markedly differs from ours. Thus *that*, which semantically introduces a lambda operator, syntactically occupies the conventional C position. The variable the lambda operator abstracts on corresponds to the Spec of a Force head generated immediately under the C head. This position is occupied either by a nominal expression with Force content such as *claim* or by its abstract incorporated counterpart for verbs such as *to claim* (analyzed as *make claim*). In these terms the overall structure assigned to (*claim*) *that John kissed Mary* is a relativization headed by *claim*, roughly as in (i):

(i) [_N (*claim*)] [_C *that* [*claim*] [Force [John kissed Mary]

It seems to us that this syntactic derivation contains ad hoc assumptions, concerning in particular the existence of a Force phrase, which are unnecessary—since both the semantics for propositional embedding and the identity of so-called complementizers and *wh*-phrases follow from the simpler syntax proposed here. In fact, if one likes, the structure embedded in (8), and given the interpretation in (7), can be construed as a relative of sorts, but a free rather than a headed relative. We will return to this point in connection with conditionals, in note 12.

complementizers, but as functional projections of the main verb, triggering movement of the embedded sentence to their Spec position. What we propose here is different, in that we are rejecting entirely the idea that complementizers are functional heads (of the embedded or of the main sentence) and we are arguing that they are true arguments and complements of the main verb—taking the embedded sentence as their argument. For reasons of space we cannot deal with *di*-type introducers here; Manzini and Savoia (2005) treat them as prepositions proper (Manzini 1982).

Given the structure in (8), a question immediately arises as to its compatibility with known evidence concerning the left periphery of the sentence. The presence of material related to the quantificational and informational structure of the sentence (topic, focus, etc.) after the complementizer is familiar from English as well as from Romance languages; in (9) we provide some examples from Italian, where (9a) illustrates a topic and (9b) a focus. Within the present model such material can be hosted by the left-periphery of the embedded sentence, as discussed in more detail by Manzini and Savoia (2005, 2010a, 2011).

- (9) a. So che quello non l'hanno preso.
 I.know that that not it they.have taken
 'I know that they haven't taken that one'
- b. So che questo hanno preso (non quello).
 I.know that this they.have taken not that
 'I know that they have taken this one, not that one'

Since the complementizer heads its own noun phraselike or sentencelike constituent, a left periphery can be postulated for it as well. For instance the left periphery of the complementizer must host at least *wh*-elements (presumably foci) in Romance varieties in which *wh*-interrogatives are introduced by a cluster of *wh*-quantifier and *che*-type complementizer, as in (10). More evidence, regarding in particular topicalized material, is provided by Manzini and Savoia (2005, 2010a, 2011).⁵

- (10) Zoldo Alto (Veneto)
 a. di- me ki ke verj
 tell me who that comes
 'Tell me who comes'

5. This proposal, though adequate to cover the facts at hand, raises questions concerning the left periphery of nominal elements other than *che*, i.e., ordinary noun phrases. Manzini and Savoia (2010a, 2011) articulate their answer in two parts. First, that noun phrases do in fact have a left periphery is independently argued in the literature (Szabolcsi 1994). Second, the asymmetries between the left periphery of ordinary noun phrases and that of so-called complementizers depend on the individual versus propositional denotation of the two. On other asymmetries between noun phrases and complementizer phrases (i.e., sentences), cf. note 6.

- b. di- me ke ke te feze
tell me what that you do
 ‘Tell me what you are doing’

In short, our structural hypothesis accounts both for data where the complementizer has topic and focus material to its right and for data where it has topic and focus material to its left—matching the descriptive power of an articulated C field theory of the type in Rizzi (1997 and later).⁶ Another important

6. The distribution of focus and topic material both after and before the so-called complementizer is only one of many syntactic questions raised by the proposal in (8). To begin with, left peripheral material embedded under the complementizer includes instances of embedded verb second; in present terms these involve the C position of the embedded sentence, now construed as an exclusively verbal position in the terms of note 3. Note that embedded verb second, examples of which are provided for Romance by Manzini and Savoia (2005, 2010a, 2011), eliminates one of the strongest potential arguments in favor of verbs and complementizers occupying the same position, namely their complementary distribution in verb second environments. As is well known, the latter is a strictly language-specific phenomenon.

Less straightforwardly, suppose that some notion of phase holds; then, as an anonymous reviewer asks, is C (now an exclusively verbal head, cf. note 3) the phase head, or is that role taken over by the Nominal complementizer head? Suppose we take the most reductive construal for phases, as the locality domains for movement. A structuring of the sentence along the lines of (8) yields a straightforward reason the bounding nodes for Subjacency (Chomsky 1973) were originally taken to be the IP (S) and the CP (S'), namely because the CP is in reality an independent noun phrase. This suggests that (at least) the so-called complementizer is a phase head in current terminology—assuming that phases are indeed relevant for locality.

Mention of phases inevitably leads to questions about islandhood, e.g., why isn't the sentence in (8) an island, given that it is embedded under a noun phrase? The answer must be the same provided in note 5 as to the different nature of the left peripheries of ordinary noun phrases and of complementizer noun phrases, namely their individual and propositional denotation respectively—and is again discussed in more detail by Manzini and Savoia (2010a, 2011). In the same vein, one may wonder what the difference is between a nonfactive embedding like (8) and a factive embedding. The answer of Manzini and Savoia (2010a, 2011), following Roussou (1994), is that factive complements have a definiteness property, which yields a weak island.

In a separate development of the theory, phases have become responsible for the distribution of features in phasal domains (Chomsky 2008). It is presumably in the spirit of these proposals that an anonymous reviewer asks us in general about the distribution of features in the C-T domain, and more specifically about complementizer agreement phenomena. As for C-T agreement generally, expressing it in terms of phases and of operations on features is certainly possible—but so is expressing it in terms of properties selected by a head on another head; we are not aware of any piece of evidence that would make this choice anything but a theory-internal matter. Complementizer agreement in Germanic languages cannot be construed as such a piece of evidence. It certainly admits of an agreement analysis, but it can also be analyzed as depending on an enclitic subject appearing on the complementizer (Shlonsky 1994). Under this latter analysis there is no C-T agreement, but simply an agreement between different copies of the EPP argument in different structural domains. Multiple copies of subject clitics are independently attested in Romance, where the borders between what are traditionally called agreement inflections and clitics are also quite labile (Manzini and Savoia 2005, 2007).

point is that, though we argued that the nominal, *wh*- nature of Romance complementizers requires the structure in (8), vice versa nothing in the structure we propose requires nominal, let alone *wh*-, properties in the complementizer. We know from Germanic languages that complementizers can belong to a non-*wh*- nominal series, for instance that of demonstratives like English *that*. For these languages we would still hold to the idea that the complementizer introduces a propositional variable, whose value is restricted by the complement sentence; in other words, the same analysis as we offered for Italian *che*, eventually modifying the nature of the quantification involved. There are also Romance languages where, though the complementizer shares the same *k*-basis as the *wh*-operator series, they have a distinct lexical entry—which we fully expect on the basis of the fact that, despite their common core properties, they ultimately have different interpretations (i.e., they introduce different types of variables). One such system, among many, is illustrated in (11).

(11) Calascibetta (Sicily)

- a. mi ðissirũ ka vɛni ðũmani
to.me they.said that he.comes tomorrow
 ‘They told me that he shall come tomorrow’
- b. ku vɛni
who comes
 ‘Who comes?’
- c. ki sta fatʃinnu
what you.are doing
 ‘What are you doing?’
- d. ki llibbru sta liddʃinnu
what book you.are reading
 ‘Which book are you reading?’

What is more, in some languages so-called complementizers are verbal, rather than nominal in nature (Roberts and Roussou 2003 and references quoted there). Under the present approach, these can be treated again as the I head of their own projection—in this case not a noun phrase-like projection, but a verb phrase-like or sentencelike projection.⁷

2. SYSTEMS WITH TWO *K*-COMPLEMENTIZERS

Having briefly established the basic compatibility of the present hypothesis with distributional evidence, as well as typological variation, we now turn to

7. The combination of a complementizer verbal head with another verb recalls serial verb constructions. For Manzini and Savoia (2005) these constructions involve complex predicate formation, typically resulting in the lack of inflection on one of the two verbs. The so-called complementizer status of a verbal head can then be described in terms of serial verbs/complex predicate formation (Manzini and Savoia 2010a, 2011).

[156] *Functional Structure from Top to Toe*

arguments that support it. What all of these arguments have in common is that they depend on the (micro-) variation in complementizer systems observed in Romance languages and specifically in Italian varieties.

The system of standard Italian, which we have considered so far, is characterized by a single complementizer introducing all finite declarative clauses—which is also the distribution familiar for English *that*. However, there are many Central and Southern Italian varieties that have two finite declarative complementizers, as in (12). One of the two complementizers, generally *ka*, is systematically found to introduce complements to verbs of ‘saying’ or ‘knowing.’ The other complementizer, generally *ke/ki* (*kə*), is found to introduce complements to verbs of ‘believing’ or ‘wanting,’ though in some varieties (Guglionesi) some predicates alternate between the two complementizers. In other varieties, where all these predicates select the same complementizer *ka*, a second complementizer is found to introduce complements to ‘before,’ ‘after’ (Montenerodomo). Another important common property of these systems is that they present some overlapping between the complementizer system just described and the *wh*-quantifier system. Crucially, this overlap never affects the *ka* complementizer; instead it is the *kə* complementizer that quite generally overlaps with the *wh*-quantifier for ‘what.’

(12) Montenerodomo (Abruzzi)

- a. i. m omə dittə ka vi dumə:nə
to.me they.have said that you.come tomorrow
‘They told me that you will come tomorrow’
- a. ii. pəndzə ka issə ve dumə:nə
I.think that he comes tomorrow
‘I think that he will come tomorrow’
- a. iii. vulessə ka məniffə
I.would.want that he.would.come
‘I would want him to come’
- b. i. so ʃʃeutə preimə kə mənəivə
I.am gone.out before that he.came
‘I went before he came’
- b. ii. so ʃʃeutə dopə kə tu avi mənəutə
I.am gone.out after that you had come
‘I went after you came’
- c. kə ffi
what you.do
‘What are you doing?’

Guglionesi (Molise)

- a. i. m ənnə dəttə ka vɛ krɛ
to.me they.have said that he.comes tomorrow
‘They told me that he will come tomorrow’

- a. ii. pentsə ka vɛ krɛ
I think that he.comes tomorrow
 'I think that he will come tomorrow'
- b. i. vujjə kə vi krɛ
I want that you.come tomorrow
 'I want you to come tomorrow'
- b. ii. pɛndzə kə vve krɛ
I think that he.comes tomorrow
 'I think that he will come tomorrow'
- b. iii. sɔŋg aʃʃeutə prəməkə tteu mənəssə
I.am gone.out before that you would.come
 'I went before you came'
- b. iv. sɔŋg aʃʃeutə dɔppə kə ssi mənəutə
I.am gone.out after that you.are come
 'I went after you came'
- c. kə ffi
what you.do
 'What are you doing?'

The double complementizer systems just described should not be confused with another form of split lexicalization for sentential introducers, found in so-called Balkan languages as well as in some Southern Italian and Sicilian varieties. The relevant systems are characterized either by the lack of morphological infinitives (for instance in Albanian; Manzini and Savoia 2007), or by the very reduced use of them. What in languages like English (or Italian, French, etc.) are embedded infinitival clauses associated with control and raising interpretations are rendered in Balkan(-like) languages by the embedding of finite clauses introduced by a specialized particle. In Calabrian varieties, including Arena in (13d), the relevant particle is *mu*. The independence of this phenomenon from the one we are concerned with here can be seen from the fact that they actually combine. Thus Arena, which has control and raising complements introduced by *mu*, also independently presents two complementizers of the *k*-series, roughly with the distribution described above for Montenerodomo, as in (12a)–(12b). Of the two complementizers, it is the *ki* one, selected notably by 'before' and 'after' that coincides with the *wh*-quantifier for 'what,' as in (13c).

(13) Arena (Calabria)

- a. i. mi 'ðissiru ka vɛni dɔmani
to.me they.said that he.comes tomorrow
 'They told me that he will come tomorrow'
- a. ii. krijū ka vɛni
I.believe that he.comes
 'I think that he will come'

- a. iii. ε mmieɟɟu ka vieni
it.is better that you.come
 'It is better for you to come'
- b. neʃʃivi dueppu ki vinni
I.went.out after that he.came
 'I went after he came'
- c. ki ffatʃi ijju
what does he
 'What is he doing?'
- d. vuɛɟɟu mu niʒʃʃu
I.want Prt I.go.out
 'I want to go out'

We assume that introducers of the type of *mu* in Calabrian (or *të* in Albanian) are not complementizers in the sense defined in the preceding paragraph, i.e., they are not (nominal) heads taking the embedded proposition as their (sentential) complement. Rather they are internal to the embedded clause, to which they contribute modal properties (Rivero 1994, Roberts and Roussou 2003) and/or EPP properties involved in control and raising interpretations (Manzini and Savoia 2005, 2007; Manzini 2009). Thus we shall put *mu* and the like aside without further discussion.

Let us then go back to (12). The distribution of *ka* and *kə* in varieties such as Guglionesi is reminiscent of the fact that standard Italian employs the indicative as a complement of 'to say' and the subjunctive as a complement of 'to think' or 'to want,' with regional variants allowing the indicative at least under 'to think,' as in (14).

- (14) a. Dico che viene.
I.say that he.comes
 'I say that he will come'
- b. Penso che venga/ viene.
I.think that he.come/ he.comes
 'I think that he will come'
- c. Voglio che venga.
I.want that he.come
 'I want him to come'

The similar distribution (and the somewhat similar one of indicatives vs. infinitives in the English translations) seems to suggest that some common property lies at the core of the complementizer split and the modality split. However it should be stressed that one phenomenon does not depend on the other. In particular, in the examples in (12) the two complementizers can embed the same indicative verbal forms, while *ka* in Montenerodomo's

(12a.iii) can embed the one form of subjunctive that appears to be present in the language, roughly the counterfactual. In other words, there is no obligatory selection of the verb modality by the complementizer or vice versa.

On the other hand, it is perfectly possible for a full-blown indicative—subjunctive system of the standard Italian type to combine with a double complementizer system of the type exemplified in (12) with Abruzzese varieties. A case in point is represented by Sardinian varieties such as Paulilätino in (15). It will be noted that the *ka* complementizer combines with morphological indicatives in (15a) while the *ki* complementizer combines with morphological subjunctives. This excludes the possibility that the complementizer split can be linked to the relatively impoverished modal system of varieties like (12); in other words over the spread of *grammar* at our disposal not only is it the case that there is no selection relation between complementizers and subjunctives but furthermore there is no complementary distribution (functional equivalence) either.

(15) Paulilätino (Sardinia)

- a. i. m anta nau ka bbeni kkraza
to.me they.have said that he.comes tomorrow
'They told me that he will come tomorrow'
- a. ii. pentsə ka 'bbenizi
I.think that you.come
'I think that you will come'
- b. i. pentsə ki 'bbəndzəðə
I.think that he.come
'I think he will come'
- b. ii. kərdzə ki 'bbəndzəzə
I.want that you.come
'I want you to come'
- b. iii. sɛə bis'siu appustis ki ze ßenniu
I.am gone.out after that you.are come
'I went after you came'
- b. iv. sɛə bis'sia primma ki ɛsse ßenniu ðue
I.am gone.out before that be come you
'I went before you came'
- c. ittɛ fa'ɛzɛ
what you.do
'What are you doing?'

It is worth pointing out that the correlation between complementizer and verb modality breaks down in an otherwise highly consistent language like (15) in connection with complements to 'before' and 'after' in (15b.iii) and (15b.iv) respectively. Following the pattern of standard Italian the complement of

'before' is a subjunctive (a counterfactual) while the complement of 'after' is an indicative. Nevertheless in both cases the complement is introduced by the "modal" complementizer *ki*. This should be taken together with the existence of languages, like Montenerodomo in (12) or Arena in (13), where complements to 'before' and 'after' maintain a specialized complementizer while other declarative sentential complements are uniformly introduced by *ka*. The two facts strongly suggest that at least two parameters are at stake, one having to do with the distribution of complementizers according to the indicative-subjunctive split and the other one having to do with their occurrence in the 'before' and 'after' contexts.

Let us begin by considering the first of these parameters. By the conclusions of section 1, the finite *k*-type complementizer in Romance languages is an independent nominal head introducing a propositional variable, whose content is restricted by the embedded sentence, while the complementizer itself acts as its quantificational binder. This suggests that the difference between the two complementizers in (12) or in (15) is simply the difference between two types of quantification—their characterization depending on the characterization we give of the indicative-subjunctive divide. We could assume for instance that the *ka* nonmodal complementizer is a definiteness operator, effectively the counterpart to a definite determiner, so that the LF of Guglionesi's (12a.ii) would be along the lines of (16a). By contrast, the LF of a sentence like Guglionesi's (12b.ii) could introduce an indefinite quantification of sorts, perhaps just a free variable bound by existential closure, as sketched in (16b).

- (16) a. I think this *x*: *x* he comes tomorrow
 b. I think for some *x*: *x* he comes tomorrow

If we take seriously the parallelism between the complementizer system just described and the indicative-subjunctive system of languages like Paulilätino in (15), or standard Italian, we expect that the indicative-subjunctive divide is also connected with the definite or indefinite binding of the situation or possible worlds denoted by the proposition. In particular, Manzini (2000) notices that mood selection is not exclusively determined by the matrix predicate. Thus 'to know' in (17a) normally requires the indicative; the latter remains possible when the matrix predicate is questioned, as in (17b), where the reading is still a factive one, in which the truth of the embedded proposition is presupposed. However if the sentence is questioned, the subjunctive also becomes possible; if so, the embedded proposition is in the scope of the question operator, yielding a nonpresuppositional reading, which is apparently equivalent to that obtained by embedding it under an 'if' complementizer. Alternations like (17b)–(17c) can be described by saying while the indicative introduces a definite description, the subjunctive introduces an indefinite

propositional variable, which can be interpreted in the scope of polarity operators such as the question one. We shall return to the significance of the possible alternation with ‘if’ in (17c) in section 3.

- (17) a. So che è/ *sia venuto.
 I.know that he.is/ he.be come
 ‘I know he came’
 b. Sai che è venuto?
 you.know that he.is come
 ‘Do you know that he came?’
 c. Sai che/se sia venuto?
 you.know that/if he.is come
 ‘Do you know if he came?’

Because the evidence and the results discussed in this paper are mostly syntactic in nature, we must content ourselves with a sketchy account of the interpretation. What precedes is, however, sufficient to yield the generalization that of the two complementizers in languages like Guglionesi in (12), it is always the modal complementizer that overlaps with a *wh*-quantifier. For the nonmodal complementizer effectively introduces a definite description, hardly compatible with *wh*-quantification, while the modal complementizer introduces a propositional variable subject to quantificational binding, exactly like the argumental *wh*-variable. Manzini and Savoia (2005) exemplify a considerable number of languages like Guglionesi and in all cases the same generalization holds, as evidenced by their summary table, reproduced in (A) in the Appendix. Needless to say, there will also be systems in which no overlapping is found (cf. table A' in the Appendix, again from Manzini and Savoia 2005), and Paulilätino in (15) is an example of them.

The results that precede are important for the present discussion for more than one reason. A preliminary point is that the coincidence of complementizers and *wh*-elements covers grammars that are not just different in general terms, but specifically different in what concerns the finite complementizer system—presenting either a single complementizer or split modal versus nonmodal complementizers. In other words, it cannot be objected that the coincidence of the complementizer with the *wh*-system is in a sense the property of just one grammar—and therefore treatable as accidental. More importantly, the fact that in two complementizer systems it is the modal complementizer that coincides with the *wh*-system supports the semantics for complementizers sketched in section 1 and here, and indirectly the syntax in (8). Under the alternative view, which has complementizers as C functional heads, one could probably link them to the modal

or nonmodal nature of the embedded event; but the overlap with *wh*-quantifiers could not (directly) be captured.

The two complementizer systems of languages like those in (12) or (15) may have a reflex even in the complementizer system of a language like Italian. In fact there appears to be a good match between matrix predicates that require the modal complementizer in (12) or (15) and those that, according to the literature, allow the deletion of the *che* complementizer; and vice versa, contexts that require the nonmodal complementizer seem to coincide with those that do not admit the deletion of complementizer, as illustrated in (18). The issue is made more complex by the existence of at least one variety where effectively any matrix predicate admits of complementizer deletion. The latter is identified by Cocchi and Poletto (2002) with the variety spoken in Florence; as in many cases involving Italian, the question can legitimately be asked whether on the contrary the judgments attributed to the standard are not unduly constrained by normative considerations (in fact the judgments in Cocchi and Poletto 2002 appear to be unnecessarily restrictive even for the Italian spoken in Florence). Be it as it may, the reason to address the (potential) pattern in (18) here is that although we do not know of other systematic discussions of two complementizer systems in the generative (or even descriptive) literature, phenomena of complementizer drop have been prominent in the theoretical literature since the study of the *that*-t filter in English (Chomsky and Lasnik 1977). Therefore distributions of the type in (18) have been discussed more than once (Poletto 2001, Giorgi and Pianesi 2004), providing us with possible alternatives to the analysis advocated here.

- (18) a. So *(che) viene.
 I.know that he.comes
 ‘I know that he is coming’
 b. Penso (che) venga.
 I.think that he.come
 ‘I think that is coming’
 c. Vorrei (che) venisse.
 I.would.want that he.came
 ‘I would like him to come’
 d. E’ meglio (che) venga.
 it.is.better that he.come
 ‘It is better for him to come’

On the basis of the discussion of double complementizer systems that precedes, we would be led to characterize the alternation in (18) by saying that in order to introduce a propositional definite description the complementizer is necessary, as in (18a); other types of propositional complementation

admit the bare embedding of a sentence under the matrix verb, as in (18b–c). Having established that there is a good correspondence between the complementizer split and the indicative-subjunctive one, it comes as no surprise that contexts obligatorily introduced by the complementizer have the indicative, while subjunctive contexts admit complementizer drop.

Giorgi and Pianesi (2004) and Poletto (2001) similarly assume that so-called complementizer deletion does not correspond to the deletion of lexical material nor to the zero instantiation of the C position. For Giorgi and Pianesi (2004), whereas the sequence of *che* and a subjunctive provides separate instantiations for modality (through the *che* complementizer) and for agreement (through the I position of the verb), in complementizer deletion contexts the Mood and Agr properties are conflated in the I head, and simply lexicalized by the verb. The reason *che* cannot delete in indicative contexts has to do with the fact that in indicative contexts T and Agr properties cannot conflate, but must be independently lexicalized. To be more precise, “the T-features are duplicated in *che*/C in such a way that the indexical component can be evaluated outside the clause” (200). According to Giorgi and Pianesi (2004) the satisfaction of this latter condition is independently required in order to obtain the so-called Double Access Reading, under which the situation denoted by the embedded sentence is taken to hold both at the time of the matrix event and at the time of utterance.

What is relevant here is that Giorgi and Pianesi’s (2004) framework could certainly be extended to account for double complementizer systems, as the result of a split between exponents of C endowed with Tense (*ka*) and exponents of C endowed with Mood (*ke/ki*). But since there is no (direct) connection between the *wh*-system and subjunctive Mood (e.g., *wh*-questions do not necessarily select the subjunctive) the overlapping of modal complementizers and the *wh*-system would not be predicted. The present discussion provides the missing link; but crucially it does so by extricating the complementizer from the Mood and Tense system to which Giorgi and Pianesi (2004) confine it—and by assuming that it is an argumental, quantificational element. Correspondingly it is rescinded from the C position and construed as an independent (nominal) head.

Let us then turn to Poletto (2001), who draws a parallel between complementizer deletion and Germanic V-to-C movement; the latter, at least in some languages, is in complementary distribution with the lexicalization of the complementizer (and thus seems to result in its deletion). The idea is that “the class of verbs selecting C[omplementizer] D[ele]tion complements is exactly the same as in Germanic embedded V2 contexts” (267). Thus both phenomena can be captured by the movement of the verb to the C position. On the assumption that “CD is possible only when the embedded verb is a subjunctive, a future or a conditional form” and that “these forms all have a modal quality” Poletto (2001: 278) proposes that “a [–realis] feature . . . is

realized on the head of the complement and attracts the verb into the CP domain.”

The first point to be made concerning Poletto’s (2001) theory is that movement of the verb to the C position in Italian complementizer deletion contexts may or may not hold for independent reasons (that we shall not enter into); but it is logically independent of the characterization of complementizer deletion contexts. For Poletto (2001), the latter reduces to the presence of a [–irrealis] feature in C inducing the lack of a complementizer—eventually via V-movement. It is not difficult to recognize the common core that Poletto’s (2001) theory shares with that of Giorgi and Pianesi (2004), namely that complementizer deletion involves modal properties absent from indicative contexts. The point on which we differ from both is once again made clearer if we try to extend Poletto’s (2001) account to the double complementizer systems considered here. One could assume, for instance, that what we have called the modal complementizer lexicalizes the –realis feature, while the other complementizer satisfies the +realis feature in C. But if so, there is no reason the modal complementizer overlaps with the *wh*-system, since *wh*-questions do not appear to have any (immediate) connection with –realis (not being restricted, say, to the subjunctive). As before, the present theory has the advantage that it can make direct predictions on this point; but these crucially depend on complementizers being extricated from the C position, and treated as argumental, quantificational heads.

Returning now to the languages originally presented in (12), recall that they exemplify two quite distinct grammars. One is the grammar analyzed so far, with a split between modal and nonmodal complementizers. In the other grammar, exemplified by Montenerodomo in (12) but also by Arena in (13), what we shall call the *wh*-complementizer (i.e., the complementizer overlapping with a *wh*-question word) introduces essentially complements to ‘after’ and ‘before.’ As we noted in connection with Paulilätino in (15), these contexts do not correlate with the verb modality—which can be subjunctive under ‘before’ but is consistently indicative under ‘after.’ A further element that differentiates the two grammars has to do with languages where no complementizer overlaps with a *wh*-argument, as tabulated in (A’) in the Appendix. From the data of Manzini and Savoia (2005) it can be seen that all of the languages in (A’), like Paulilätino in (15), present the modal versus nonmodal complementizer distribution. In other words, in (A’) there are no languages with the distribution of complementizers of Arena or Montenerodomo in (A); hence selection by ‘before’ and ‘after’ is specifically connected with the *wh*-nature of the complementizer.

The key to this distribution resides in the fact that prepositions like ‘before’ or ‘after’ can easily embed complements introduced by *wh*-arguments/adjuncts, as in Italian (19). Thus (19) corresponds to an LF

roughly of the form 'I arrived (at a time *t*) earlier than (a time *t'*) he thought I would arrive (at *t'*).'⁸

- (19) Sono arrivato prima di quando pensava che arrivassi.
I.am arrived before of when I.thought that I.would.arrive
 'I arrived earlier than he thought I would arrive'

On the basis of evidence like (19), we propose that languages that embed a specialized complementizer under 'after' and 'before' effectively select a *wh*-structure. More precisely, the lexicalization of the *ki/ke* type complementizer, as opposed to the *ka* complementizer in these contexts, responds to the presence of a temporal variable. A formal implementation of this observation can be achieved by assuming that the *ki/ke* complementizer acts in this case as a sort of generalized quantifier, binding the propositional variable, restricted by the following sentence, and at the same time the temporal variable. As noted before, the evidence we are considering is essentially syntactic in nature and therefore hardly insightful when it comes to the semantics; hence this implementation is suggested here essentially for the sake of falsifiability. In these terms, we nevertheless expect that the generalized quantifier that we have hypothesized also turns up as a *wh*-binder of arguments; in other words, it is not specialized as a propositional introducer, but will overlap with a *wh*-argument—as is indeed the case.

If the discussion that precedes is on the right track, we should be able to account for the fact that in all languages having what we call a modal complementizer, for instance Guglionesi in (12) or Paulilätino in (15), the latter also turns up in the environments where what we have called the *wh*-complementizer is lexicalized. Now, if a *wh*-complementizer in languages like Arena in (13) or Montenerodomo in (12) is to be able to function as some sort of

8. The analysis of temporal clauses as involving a *wh*-like temporal operator goes back at least to Larson (1987), who in turn quotes Geis (1970). Apart from the fact that temporal subordinators can overtly correspond to *wh*-phrases (e.g., *when* in English, *quando* 'when' in Italian, etc.), the classical argument in favor of this conclusion is that temporal sentences can display ambiguities corresponding to what the base generated position (or the reconstruction position) of the temporal operator is taken to be. Thus *John left after Mary told him that he should leave* can be interpreted as John leaving after he should have left (according to Mary) or as John leaving after Mary told him something (namely that he should leave).

Recent work by Haegeman (2007) takes up this evidence again arguing that operator movement accounts for an altogether different set of data, namely for the impossibility of embedding left periphery material under temporal adjuncts. However, as noted by Haegeman, Romance clitic left dislocation is possible under temporal adjuncts. Embedding of foci in Italian in turn is taken to be ungrammatical by Haegeman (2007: 316); but it can be quite acceptable in my judgment, as in (i)

- (i) Quando UN DIECI prenderà, sarò contento
when a ten he.will.get, I.will.be happy
 'I will be happy when he gets an A'

We return to this matter in connection with conditionals, where it is more directly relevant for our discussion; cf. note 12.

generalized binder of propositional and *wh*-variables, it cannot be definite (which would exclude *wh*-quantification). Therefore we expect the contexts relevant for its lexicalization to be picked up by the modal (more properly indefinite) complementizer. This furthermore will hold whether this coincides with a *wh*-argument, as in Guglionesi in (12), or it does not, as in Paulilätino in (15). It is perhaps worth pointing out that a treatment of the modal complementizer in terms of the Mood/irrealis system of the sentence could not extend to these cases at all, at least not in any direct way.

The final fact worth bringing up is that in all of the languages tabulated in (A)–(A') in the appendix and exemplified in Manzini and Savoia (2005), what we have called the modal or *wh*-complementizer also introduces relative clauses. Relevant examples are given in (20). These involve *that*-relatives, and not *wh*- ('who') relatives, since, although the relevant complementizers overlap with 'what,' as illustrated in (12), (13) and (15), 'who' has a distinct lexicalization, as illustrated in (20c). We can extend to (20–23) the analysis that we have already proposed for (19), treating *ki/kə* as some sort of generalized binder for the propositional variable and the argumental one (actually a pronominal variable in the (b) examples). Similarly, we find the modal/*wh*-complementizer to introduce comparatives, as shown in Paulilätino (23d).

(20) Montenerodomo

- a. e kkwillä kə vve:tə sɛmbɾə
it.is that that I.see always
 'It is the one I see all the time'
- b. e kkwillä kə i so datə lə soldə
it.is that that to.him I.am given the money
 'It is the one I gave the money to'
- c. ki ve
who comes
 'Who comes?'

(21) Guglionesi

- a. ɛ kkullə kə vvadə sɛmbɾə
he.is that that I.see always
 'He is the one that I see all the time'
- c. ki vɛ
who comes
 'Who comes?'

(22) Arena

- a. su kkijji ki vviju sɛmpɾi
they.are those that I.see always
 'They are the ones that I see all the time'

- b. su kkijji ki ntʃi dɛttsi li sordi
they.are those that there I.gave the money
 ‘They are the ones I gave the money to’
- c. ku vɛni
who comes
 ‘Who comes?’

(23) Paulilätino

- a. ɛs kussu ki bbiɔ 'zɛmpɛɛ
he.is that that I.see always
 ‘He is the one that I see all the time’
- b. ɛs kussu ki dɔd appɔ jau z inari
he.is that that him I.have given the money
 ‘He is the one that I gave the money to’
- a'. juanni ki ɛst ammiɣu meu
John that is friend mine
 ‘John, who is my friend . . .’
- c. kiɛ b'beniði
who comes
 ‘Who comes?’
- d. tɛndzɔ pru llibrɔs ki (nɔ) inarɛ
I.have more books than not money
 ‘I have more books than money’

According to the data of Manzini and Savoia (2005) tabulated in (A), a few varieties actually present free alternation between the *ka* and the modal complementizer, namely Guardiaregia and Gizzeria, which are both of the Montenerodomo/Arena type. If free alternation is interpreted essentially as the alternation of two different grammars, then these varieties provide some evidence as to the compatibility of systems with a declarative and a *wh*-complementizer (or in fact a modal complementizer subsuming the latter) with a purely declarative treatment of relative clauses. More interesting is a case like that of Ardaùli in (24), otherwise similar to Paulilätino, where the alternation between the *ka* and the *ki* complementizer appears to be governed by the distinction between restrictive and nonrestrictive relatives. In this case the modal complementizer introduces the restrictive relative and the *ka* nonmodal complementizer introduces the appositive one.

(24) Ardaùli (Sardinia)

- a. ɛs kussu ki bbi sɛmpɛɛ
he.is that that I.see always
 ‘He is the one that I see all the time’
- b. ɛs kussu ki dɔd appɔ jau zu inarɛ
he.is that that him I.have given the money
 ‘He is the one that I gave the money to’

- a'. dzuanni ka ɛsti ammiyu meu
 John that is friend mine
 ‘John, who is my friend . . .’
- c. kiɛ 'eniði
 who comes
 ‘Who comes?’
- d. tɛndzɔ pru llibrɔs ki (nɔ) inarɛ
 I.have more books than not money
 ‘I have more books than money’

We suggest that in a language like Ardaùli the choice of the modal complementizer is sensitive to the nature of the embedded variable. Thus appositive relatives, which contain an individual variable, are incompatible with it and present the ordinary declarative complementizer *ka*. Once again, the present approach could not be translated into a model where the modal complementizer is tied directly to Mood/irrealis properties of the verb—providing another potential argument in favor of the view advocated here.⁹

9. We may wonder how theories of complementation as relativization fare with respect to the languages in (20) and (21). We have already noted one of these theories in note 4, namely that of Arsenijević (2009). Another such theory is Kayne’s (Chapter 7 in this volume), which again became available to us only after our text was prepared. The gist of Kayne’s proposal represents a striking revision of the idea in Kayne (1976) that the relative *que* of French is really the *que* complementizer, in a direction broadly compatible with the present analysis. Thus “*that* isn’t [a complementizer]. The *that* introducing sentential complements is really a relative pronoun” (p. 227). “The claim that English sentential *that* is a relative pronoun must be taken to extend . . . for example, to Italian *che*, to French *que*, . . . From the present perspective *that* is not a Force⁰ in Rizzi’s (1997) sense nor the head of a CP phase in Chomsky’s (2001) sense” (p. 217, n. 55). At the same time, the actual implementation that Kayne (Chapter 7) provides for these ideas differs substantially from the proposals put forth here. In particular for Kayne (in this volume) “factive sentences . . . have a deleted or silent FACT. If so, . . . factives too must involve relative clause structures” (p. 216). “Assume, then, that sentential complements and sentential subjects are always accompanied by a head noun, even if they are not factive. . . . Either *it* will be raised from within the relative in a way largely parallel to what happens with overt *fact* . . . or a silent noun will be so raised” (p. 217).

We have insisted more than once on the empirical reasons, but also on the general theoretical problems that lead us to reject the silent categories approach of Kayne, for instance in the domain of clitic phenomena (Manzini and Savoia 2008; 2010a, b; Savoia and Manzini 2010). In the case at hand, an obvious empirical problem for Kayne (Chapter 7) is raised by languages like Paulilätino, i.e., languages that have a two complementizer system, but where relative clauses are formed without exception by the modal complementizer. If the nonmodal *ka* complementizer is nothing but a relative pronoun itself, why doesn’t it ever overtly appear in relatives? In fact, the same question can be asked of Arsenijević (2009), except that in his case, because of the rather more explicit nature of the relative head involved, it is easier to envisage an answer. Roughly speaking, different complementizers could select for different types of “Force” arguments. Even so, there is no explanation as to why what we have characterized as the modal complementizer comes to coincide with the relative complementizer to the exclusion of the nonmodal one. For it does not seem possible to say that relative clauses associate with a particular type of Force. It seems to us, furthermore, that to the extent that the proposal of Kayne’s (in this volume) is spelled out, it must turn out to be similar to Arsenijević’s (2009); therefore the same discussion applies (cf. also note 12 on conditionals).

3. SYSTEMS WITH TWO K- COMPLEMENTIZERS, INCLUDING 'IF'

The complementizer system of Italian, as discussed in section 1, and that of the varieties considered so far, have a specialized lexicalization for the interrogative/hypothetical complementizer *se* in Italian, corresponding (more or less) to English *if*. Thus the Italian data in (1–3) are to be completed as in (25).

- (25) a. Se piove, (spesso) esco
 if it.rains often I.go.out
 ‘If it rains I (often) go out’
 b. Non so se viene
 not I.know if he.comes
 ‘I don’t know if he’ll come’

As it turns out, this state of affairs does not hold of necessity, but only as one of several possible parametric options. In some Sardinian varieties with a double declarative complementizer system, the modal complementizer also lexicalizes hypothetical and interrogative ‘if,’ as exemplified by Làconi in (26). Note that the modal complementizer *tʃi* belongs to the *wh*- lexical series, exemplified by *tʃinni* ‘who’ in (26c.i). Note that the distinction between the complementizer for restrictive and appositive relatives that we discussed for Ardauli in (24) also characterizes Làconi. As expected, it is the complementizer introducing restrictive relatives that overlaps with the modal/‘if’ complementizer.

- (26) Làconi (Sardinia)
- a. m anti nau ka ennis kraza
 to.me they.have said that you.come tomorrow
 ‘They told me that you come tomorrow’
- b. i. bɔʒɔ tʃi ɛndʒas kraza
 I.want that you.come tomorrow
 ‘I want you to come tomorrow’
- b. ii. ɛ m'meɲdʒuzu tʃi b'bɛndʒaza
 it.is better that you.come
 ‘It is better for you to come’
- b. iii. sɛɔ es'sia prima ʒi frssaz arribbau
 I.am gone.out before that you.were come
 ‘I went out before you came’
- c. i. a ttʃinni 'tserriaza
 to whom you.call
 ‘Who are you calling?’
- c. ii. itta faizi
 what you.do
 ‘What are you doing?’

[170] *Functional Structure from Top to Toe*

- d. i. funti 'gussuzu tʃi tserriu zɛmpɾɛ
they.were those that I.call always
 'They were the ones that I always call'
- d. ii sɔɾɾɛ ðua ka ɛstɛ ammiya mia
sister yours that is friend mine
 'Your sister, who is a friend of mine . . .'
- e. i tʃi 'ɔllɛzɛ βɛɲdʒɔ
that you.want I.come
 'If you want, I will come'
- e. ii tʃi 'βɾɔɛðɛ nɔ bbɛssɔ
that it.rains not I.go.out
 'If it rains, I won't go out'
- f. nɔ iʃʃiu tʃi ɖɖu tserriu
not I.know that him I.call
 'I don't know if I shall call him'

Another major pattern of lexicalization of 'that' and 'if' is exemplified in (27) with Miglionico. This has a single declarative complementizer and a separate complementizer for hypotheticals and questions—reproducing the conditions of a language like Italian. However the hypothetical/question complementizer *actually* belongs to the *wh*-system, overlapping in fact with the *wh*-element for 'who,' namely *tʃi*. Because of this, the embedded sentence in (27e) is ambiguous between the *wh*-question reading 'who' and the yes-no question reading 'if.'

(27) Miglionico (Lucania)

- a. mə vɔnnə dittə ka viənə kra
to.me they.have said that he.comes tomorrow
 'They told me that he comes tomorrow'
- b. sɔ assutə primə ka tu və'niəssə
I.am gone.out before that you came
 'I went out before you came'
- c. i. tʃi ve:nə
who comes
 'Who is coming?'
- c. ii. tʃɛ f'faʃənə
what they.do
 'What are they doing?'
- d. tʃi v'vuo vejɲə
if you.want I.come
 'If you want, I come'
- e. nan sattʃə tʃi venə
not I.know who/if he.comes
 'I don't know who comes' or 'I don't know if he comes'

In short, in Làconi in (26) there is a single lexicalization for the modal declarative complementizer and for the question/hypothetical one. From the data summarized in table (B), and reported in detail in Manzini and Savoia (2005), it can be seen that the hypothetical/interrogative complementizer never coincides with the *ka* nonmodal complementizer; as in Sardinian varieties in general, there is no overlapping between the complementizer and the *wh*-system. In turn, a language like Miglionico in (27) has the same lexicalization for the *wh*-element and the hypothetical/interrogative complementizer; the declarative complementizer has a different specialized lexicalization. The data summarized in table (C), from Manzini and Savoia (2005), show that it is always the hypothetical complementizer that coincides with the *wh*-system.

The complementizer systems of languages like (26)–(27) close a potential gap in the discussion so far, concerning those languages where the complementizer system overlaps with the *wh*-system. We know that *wh*-items are not intrinsically interrogative. In Italian, for instance, argument *che* can head a free relative, as in (28a) or an exclamative as in (28b). The most natural interpretation of this type of data is that question, declarative (relative), or exclamative values are not intrinsic to the *wh*-quantifier, but are rather contributed by contextual operators. This situation is far from isolated in natural languages. For instance, so-called N-words in Romance are not intrinsically negative, but rather introduce a variable that can receive negative interpretation in the scope of a negative operator—but can equally well be licensed in nonnegative contexts (Manzini and Savoia 2005 and references quoted there). Thus we fully expect that the complementizer does not require a question interpretation, even when it belongs to the *wh*-series.

- (28) a. Faccio *che* mi pare.
 I.do what me likes
 ‘I’ll do as I like’
 b. *Che non farebbe!*
 what not he.would.do
 ‘What wouldn’t he do!’

What ~~does however represent~~ a potential problem for the present theory is that none of the complementizers considered in the previous sections actually allows an interrogative interpretation. Nothing in what we have said so far blocks the possibility that in the scope of an appropriate question operator a *k*-complementizer could be interpreted as interrogative, along the lines of a specialized interrogative *wh*-complementizer like English *whether*. In this perspective, systems like (26)–(27) are interesting in the first instance because they instantiate this possibility.

Let us then consider what the characterization of the hypothetical/interrogative complementizer may be, beginning with a language like Italian (or indeed English) where it has a specialized lexicalization. Hypothetical sentences are interpreted much in the same way proposed before for complement sentences, i.e., as the restriction of a propositional variable. According to Lewis' (1975) classical treatment, the latter is bound by an adverb of quantification, or by a generic quantifier in the absence of other overt quantifications. Thus the sentence in (25a) has an LF of the type in (29a), if the adverb of quantification is computed. Otherwise the propositional variable is closed by a universal quantification, as in (29b).

- (29) a. For many situations/possible worlds x : it rains, I go out (in x)
 b. For all situations/possible worlds x : it rains, I go out (in x)

An element that introduces a propositional variable (restricted by the embedded propositional content) is associated in the present grammar with structures of the type in (8), which we will then extend from k -type complementizers to Italian *se* 'if'.¹⁰ The latter can in turn be interpreted not only in a hypothetical context as in (29), but also in an interrogative context—exactly as with English *if*. The embedded interrogative interpretation simply follows if the variable introduced by *se* and the like (and restricted by the following proposition) can be licensed in the scope of a question operator. Indeed we assume that this is what the interpretation of an interrogative complementizer amounts to, as in (30).¹¹

- (30) I wonder for which situations/possible worlds x : John comes

At this point the characterization of the *se* complementizer is fundamentally the same as for the *che* complementizer and more specifically for the modal complementizer in (16b), where the variable that the complementizer

10. This account of the *se* complementizer is already found in Manzini and Savoia (2003) essentially in the same terms as here. Thus "in the tradition of Lewis (1975) the sentence introduced by *se* is interpreted as the restriction of a propositional variable, bound in particular by adverbs of quantification. . . . In the absence of an overt quantification, the operator that binds the quantificational variable can be the generic/universal one. . . . Given these interpretive properties of hypotheticals, it is natural to assume that *se* 'if' introduces an indefinite propositional variable. As such we expect its syntax to parallel that of the propositional *che*" (p. 105).

11. Again the account of interrogative *se* goes back to Manzini and Savoia (2003): "For embedded yes-no questions we can again assume that *se* introduces an indefinite propositional variable and this in fact establishes a *wh*-question ranging over the proposition" (p. 106).

introduces is closed quantificationally. Therefore we fully expect that ‘if’ and the modal complementizer can be lexicalized by the same lexical item, yielding the Làconi system.¹²

If anything, the problem is providing some sharper characterization for languages like Italian or, say, Paulilätino in section 2 that have two distinct complementizers—or three, respectively. Consider a language with three distinct forms, including the modal and nonmodal complementizer, as well as the hypothetical/interrogative one, as exemplified for Paulilätino in (15) and in (31). By the discussion of section 2, the nonmodal complementizer introduces a propositional complement akin to a definite description, while the modal complementizer introduces an indefinite variable. The latter is also true

12. In view of the proposals reviewed in notes 4 and 9 to the effect that complement sentences are relatives, it is particularly worth remarking on the independent literature treating conditionals as relatives—specifically as free relatives. Thus for Bhatt and Pancheva (2006) “turning to conditionals, our proposal that they are interpreted as free relatives amounts to the claim that they are definite descriptions of possible worlds.” As for the syntax “the null operator in Spec, CP of *if*-clauses and likely the *when* itself in e.g. German conditionals, is a definite binder of the possible world variable.” As Bhatt and Pancheva note, the proposal that there is a covert operator in the specifier of CP of conditional *if* clauses goes back to Larson (1985), where the focus of the discussion is interrogative *if* clauses. For the latter, Larson posits the presence of a covert *whether*, which he extends to conditional *if* clauses. For Bhatt and Pancheva “the fact that *if* functions in many languages as both a conditional and an interrogative complementizer makes sense within the general proposal that conditionals are free relative clauses. In English and in many other languages, this syncretism would be part of a more general structural parallelism between questions and free relatives.”

Note that if “free relatives are interpreted as definite descriptions, i.e., with the variable abstracted over being bound by a definite operator” (Bhatt and Pancheva 2006), the lexicalization patterns observed in Làconi, where ‘if’ overlaps with the modal complementizer, not with the “definite” one, seem to be difficult to account for. More generally, the present account dispenses us from postulating zero world operators in the syntax. Quite simply the so-called complementizer is itself the element that introduces a (situation/possible world) variable in the syntax of LF; indeed we already remarked in note 4 that if desired, our syntactic analysis can be paraphrased by saying that complement sentences (and now conditionals) are free relatives. Given the structure in (8), this would imply an analysis of free relatives in which they are externally headed by the *wh*-element itself (cf. van Riemsdijk 2006 for a review, and Donati 2006 for a recent implementation).

Haegeman (2010) adopts the Larson/Bhatt-Pancheva syntax for conditionals with a view to accounting for restrictions on the left peripheral material they embed similar to those discussed in note 8 for temporal clauses—despite the fact the classical argument in favor of temporal subordinators being *wh*-operators, namely the possibility of matrix or embedded construals, does not apply to conditionals. The issue is largely orthogonal to those debated here. In any event our own judgments on conditionals are that left peripheral material does not create intervention effects—providing an unsurprising parallel to temporal clauses in note 8.

- (i) Se UN SEI prendi, sono contento.
 if a six you.get I.am happy
 ‘I am happy if you get even a D’

of the proposition introduced by 'if,' which therefore requires to be further differentiated from at least the modal complementizer.

- (31) Paulilätino
 Si 'proēðε nō εss
if it.rains not I.go.out
 'If it rains, I won't go out'

In introducing the contexts triggering subjunctive in Italian in section 2, it was mentioned that they are not necessarily lexically selected for; rather, subjunctive can be triggered in the scope of the question operator in (17). In the scope of the question operator furthermore the declarative complementizer, ordinarily embedded by a verb like *to know*, alternates with the 'if' complementizer, as in (17c). As shown in (32) very much the same is true in the scope of the negation, with respect to both the triggering of the subjunctive and the possibility of the 'if' complementizer.

- (32) a. So che è guarito.
I.know that he.is healed
 'I know he is healthy again'
- b. Non sa che sono guarito.
not he.knows that I.am healed
 'He doesn't know that I am healthy again'
- c. Non so che/se sia guarito.
not I.know that/if he.be healed
 'I don't know if he is healthy again'

The fact that 'if' is triggered in the scope of a matrix question or negative operator, as in (17) and (32), with an otherwise declarative (factive) verb, points toward a solution for the problem we are concerned with, i.e., the characterization of the contexts specialized for 'if.' Negations and questions are two of the fundamental contexts triggering (negative) polarity items, the third being the hypothetical one. Thus for instance in Italian *nessuno* 'anybody,' *niente* 'anything,' etc., are licensed in the scope of a negation (yielding the equivalent of negative quantifiers *nobody*, *nothing*, etc., in English), as well as in the scope of a question or of an hypothetical. We suggest that the complementizer system of languages like Italian or Paulilätino (or for that matter English) is sensitive to polarity, so that complementizers, i.e., nominal heads responsible for introducing propositional variables, are lexicalized by two different items in nonpolarity and polarity contexts, surfacing in the latter as *se* in Italian, *if* in English etc. Correspondingly, we shall refer to these as the polarity complementizers.

In section 2 we concluded that it was only to be expected that the complementizer system, i.e., the system of propositional variable introducers, and the *wh*-system could coincide; more to the point, in cases of split complementizer systems the coincidence was predicted to involve the modal complementizer, i.e., the one introducing a quantified variable, rather than the nonmodal complementizer, introducing a propositional definite description. This prediction could now be extended to the ‘if’ complementizer. In languages of the type of Làconi, tabulated in (B) in the Appendix, there is no overlapping of the complementizer and the *wh*-systems. However, languages like Miglionico, tabulated in (C) in the Appendix, verify this prediction for the systems with a polarity complementizer ‘if’ and a nonpolarity one ‘that.’ For in Miglionico it is the ‘if’ complementizer that belongs to the *wh*-system.

Despite the elementary nature of the tables in (A)–(C), it is possible to see that several independent parameters intersect. A parameter that is brought to the fore by varieties like Miglionico, but that is independent of the properties reviewed so far, has to do with which element of the *wh*-system the complementizer identifies with. In Italian, as reviewed in section 1, the overlap is between the declarative complementizer and the *wh*-element for ‘what’—and the same holds for all other systems reviewed so far. By contrast, in Miglionico the overlap is between the ‘if’ complementizer and the *wh*-item for ‘who.’ Even a cursory inspection of the tables in (A)–(C) reveals that this parameter is independent of the others considered. Thus in at least one of the varieties in (C) of the Appendix (Ruvo di Puglia) the ‘if’ complementizer coincides with ‘what’ and not with ‘who.’ By contrast, in a variety like Secinaro in table (A), otherwise entirely comparable to Guglionesi, the modal complementizer coincides with ‘who,’ and not with ‘what.’ This is illustrated in (33–34).

- (33) Secinaro (Abruzzi)
- a. vujjə kə vvi
I.want that you.come
 ‘I want you to come’
 - b. kə vɛ
who comes
 ‘Who comes?’
 - c. ku ffɛ
what you.do
 ‘What are you doing?’
- (34) Ruvo di Puglia (Apulia)
- a. tʃə cɔ:və nən iəssə
that it.rains not I.go.out
 ‘If it rains I won’t go out’

- a'. nən tsattʃə tʃə frattə mə ɔmə
not I.know if brother-yours me calls
 'I don't know if your brother is calling me'
- b. tʃi vɛnə
who comes
 'Who comes?'
- c. tʃe ffɔʃə
what you.do
 'What are you doing?'

In terms of the discussion of section 1, the *wh*-quantifier for 'what,' such as Italian *che*, is characterized by the absence of any lexical restriction. Thus *che* questions can be answered by an animate or inanimate noun phrase or by a proposition, as in (35). Of course a lexical restriction can be added by a noun phrase, when *che* 'what' appears as its specifier—or by a sentence, when *che* appears as the 'that' complementizer.

- (35) a. Che c' è?
what there is
 'What is it?'
- b. Il telefono.
the phone
- b'. Il postino.
the mailman
- b". Suona il postino.
rings the mailman
 'The mailman is ringing'

By contrast the *wh*-quantifier for 'who' is characterized by a restriction to humans, which poses an interesting question as to its ability to appear as a complementizer at all. In fact, the occurrence of, say, *tʃi* of Miglionico as a complementizer excludes the possibility that the restriction to humans is encoded in the lexicon. What we suggest instead is that it is a lexical property of *tʃi* that it requires a restriction. In complementizer contexts the latter is provided by the proposition that *tʃi* introduces. In *wh*-contexts, on the other hand, the restriction to humans may be inferred. If this line of reasoning is on the right track, we should be able to find languages where the *wh*-quantifier for 'who' also appears as the *wh*-determiner, restricted by a following noun phrase.

A case in point is Fontanigorda, in (36), which has a single declarative complementizer overlapping with a *wh*-quantifier—exactly like standard Italian, except that the overlap involves 'who,' rather than 'what.' That the same element also appears as the *wh*-determiner (again as in Italian) is shown in

(36d). Incidentally, data like (36) confirm that there is complete independence between the other parameters reviewed here and the parameter as to whether the complementizer coincides with ‘what’ or ‘who,’ though most languages with the complementizer system of standard Italian eventually have it overlap with ‘what’ (Manzini and Savoia 2005).

(36) Fontanigorda (Liguria)

- a. m aŋ ittu ke te vie dɔpu
to.me they.have said that you come afterwards
 ‘They told me that you are coming afterwards’
- b. ke te tʃammi
who you call
 ‘Who do you call?’
- c. kuɔse te fɛ
what you do
 ‘What are you doing?’
- d. ke kamiza te te bɛtti
which shirt you yourself put.on
 ‘Which shirt are you putting on?’

4. THE INTERACTION WITH (NON-)FINITENESS

The last question we shall consider concerns yet another asymmetry between *wh*-quantifiers and complementizers, observed even in languages where they have the same lexicalization. Thus in standard Italian *che* ‘what’ introduces both finite and infinitival questions, as in (2) above and in (37a). On the contrary, complementizer *che* is restricted to finite contexts, and the infinitival counterpart to (1) involves the prepositional complementizer *di* ‘of’ as in (37b).

- (37) a. Che fare?
what to.do
 ‘What should one do?’
- b. Mi hanno detto di/*che essere venuti.
to.me they.have said to/that be come
 ‘They told me that they had come’

The problem is not descriptive, since complementizer *che* can be distinguished from *wh*-*che* on the basis of both syntactic context of insertions and semantic characterization. From an explanatory point of view, however, the objection may legitimately be raised that the connection between

the complementizer and finiteness crucially links it to the functional projections of the verb. Now, finiteness has two components: a tense one, but also an agreement one. As is well known, some Romance languages offer an experiment in discriminating between these two components, since they present so-called inflected infinitives. A case in point is provided by Sardinian varieties, including Paulilätino in (38). Both inflected and noninflected infinitives can be introduced by a prepositional complementizer, as in (38b); but inflected infinitives also allow the finite complementizer, as independently observed by Jones (1993). The finite complementizer, then, is sensitive not to the temporal/modal/aspectual properties of the verb, but to the presence of an agreement inflection. As we saw, Paulilätino like many Sardinian varieties has two declarative complementizers, a modal and a nonmodal one—and as we may expect, it is the modal complementizer that co-occurs with inflected infinitives. However the two parameters are independent, since Manzini and Savoia (2005) also exemplify varieties that have only one declarative complementizer and where this also appears in front of the inflected infinitive (for instance Siniscola).

(38) Paulilätino

- a. l appu attu innantis dε/ki θərrarε-s tuε
it I.have done before to/that come.back-2SG you
 'I did it before you came back'
- b. l an fattu innantis dε 'ennεrε-(nε)/ki 'ennεrε-nε 'iεεəεə
it they.have done before to come-3PL that come-3PL they
 'They did it before they came'

In the theory of Manzini and Savoia (2005, 2007), Manzini (2009), the so-called agreement inflection is a lexicalization of the EPP argument of the sentence internal to the verb. If no lexicalization of the EPP argument is present, either by an inflection or by a lexical subject, as is the case for non-inflected infinitives, we may assume that the EPP argument is introduced as a variable at the interpretive interface. This variable can then be given a bound reading (control/raising) or a generic reading (arbitrary control). In such terms, the restriction of the *che*-type complementizer to finite sentences—including inflected infinitivals—can be restated as an incompatibility between it and the EPP variable. The question then becomes why the finite complementizers would have this crucial property. We may surmise that the presence of an EPP variable within the sentence defines an open predicate, rather than a proposition. Since we have proposed that the finite complementizer of Romance, and presumably of English as well, takes a proposition as its complement, we may conclude that what the complementizer is actually incompatible with is the open expression resulting from the presence of the EPP variable.

It is interesting that for Roussou (2010) the fact that English *that* requires a propositional complement ultimately yields the *that*-t filter, under the assumption that the propositionality requirement excludes again a variable EPP argument. For Roussou (2010), if *that* and the EPP argument are both absent, this configures a case of predicate embedding (restructuring)—allowing *wh*-extraction presumably in that the ~~base-generated~~ *wh*-phrase binds a variable directly into the ~~argument structure~~. In fact, Roussou (2010) explicitly makes the link between COMP-t and the finiteness requirement for English *for*, analyzing both the **for*-t and the **for*-to filters as the results of the same restriction (to the effect that *for* again embeds a proposition, barring EPP variables). Needless to say, the connection between the finiteness restriction on complementizers and the COMP-t filter, if correct, requires ~~exactly~~ the notion of finiteness argued for here.

Though a discussion of the *that*-t filter is beyond the scope of the present chapter, it is worth recalling that according to the classical conclusion of Taraldsen (1980) languages like Italian lack *that*-t filter effects (whence the apparent lack of correlation with the finiteness constraint on the complementizer) in that they are null subject languages, however the latter property may be defined. For Manzini and Savoia (2005, 2007), what is at stake is simply the fact that although in non-null subject languages the EPP must be satisfied by a syntactic-level argument (the subject), in null subject languages a morphological-level one (the inflection) suffices. The latter therefore closes off the proposition even in the case of *wh*-extraction (effectively acting as a resumptive pronoun). Similarly, non-null subject Romance languages, contrary to English, generally have subject clitics and resolve the propositionality requirement on *che*-type complementizers by lexicalizing one of them. On the basis of a comparison with Romansch varieties, Taraldsen (2002), Manzini and Savoia (2005) in particular conclude that the *-i* of French *qui* is such a subject clitic.

A further twist on the finiteness problem is introduced by the ‘if’ complementizer. In a language like standard Italian, hypothetical *se* ‘if’ is restricted to finite sentences, as in (39a), while interrogative *se* normally occurs in front of infinitival questions, as in (39b). Recall next that in Làconi in (26) the same *tî* form lexicalizes both the modal declarative complementizer and the polarity (i.e., hypothetical/question) one. As it turns out, while declarative (and hypothetical) *tî* is restricted to finite sentences, interrogative *tî* actually combines with infinitivals, as in (40).

- (39) a. **Se piovere, . . .*
 if to.rain
 b. *Non so se uscire*
 not I.know if to.go.out
 ‘I don't know whether to go out’

[180] *Functional Structure from Top to Toe*

- (40) Làconi
 nɔ ɪʃʃiu tʃi dɔu tʃɛrri'ai
 not I.know *if* him to.call
 'I don't know whether to call him'

In the discussion that precedes, we attributed to the interrogative complementizer the interpretation of a *wh*-element ranging over propositions in the scope of a question operator. We must conclude that this interpretation makes it compatible with embedded EPP variables—i.e., insensitive to the completeness of the embedded proposition defined in terms of the embedded EPP argument—on a par with other *wh*-elements, including the English *wh*-complementizer *whether*. The issue is further complicated by the fact that, as is well known from Kayne's (1991) discussion, whereas Italian *se* or Làconi *tʃi* can indeed introduce infinitival questions, as in (39–40), not only English *if* but also French *si* are incompatible with them. In present terms, this means that French *si* and English *if* behave in the ordinary complementizer way.

For Kayne (1991), the finiteness constraint on complementizers reflects their incompatibility with the PRO subject of infinitivals; in other words, there is substantial agreement with the view advocated here that the finiteness requirement relates to the EPP rather than to the temporal properties of the sentence. However, for Kayne (1991) what is responsible for it is the structural government relation holding between the complementizer and PRO. The lack of the relevant constraint on Italian *se* correlates with a further structural property, i.e., with the relatively high position of the infinitive, which protects PRO from government by the complementizer. That the position of the infinitive is higher in Italian than in French can be seen, according to Kayne (1991), from the fact that the clitic precedes the infinitive in French while it follows the infinitive in Italian. Even leaving aside other potential issues with Kayne's (1991) theory, it seems to us that a language like Làconi provides an argument in favor of a theory of the type proposed here, where the finiteness restriction on the complementizer is expressed in interpretive rather than structural terms.

Thus Kayne (1991: 95) acknowledges that his theory ends up not accounting for the incompatibility of Italian *che* with the infinitive, since on the evidence of cliticization the infinitive must be in the same high position in declaratives as in questions. In Làconi the problem is even starker, since the same *tʃi* complementizer cannot combine with infinitival declaratives—as predicted by Kayne (1991) on the basis of the preverbal position of the clitic seen in (26)—and can combine with infinitival questions.

Furthermore, in the account of Kayne (1991), *whether* is oblivious to the finiteness of the sentence it embeds because it is not a complementizer at all, but a *wh*-phrase, where these two notions are given a structural characterization once more, as a C head and a C specifier respectively. But a

structural characterization as a C specifier cannot be applied to *tʃi* of Làconi, on pains of not being able to predict that (as a C head) it excludes nonfinite sentences in declarative contexts. The alternative is the one that we argued against at the outset, i.e., to introduce two different *tʃi*'s.¹³

Other relevant evidence concerning definiteness restrictions on complementizers of the *k*-series comes from Northern Italian varieties (including some that display the standard Italian coincidence between the *wh*-quantifier for 'what' and the complementizer), which form questions as shown in (10) above, by combining *wh*-quantifier and complementizer. Most of the relevant languages alternate between *wh*-*che* in finite sentences and the *wh*-element alone in infinitivals, as shown by the comparison between (10) and (41) for Zoldo Alto. However there are (a few) otherwise entirely comparable languages where the *wh*-*che* cluster introduces both finite and infinitival questions, such as Civate in (42), though the *che*-type complementizer is otherwise restricted to finite complements.

(41) Zoldo Alto (Veneto)

- a. no sai ki kla'ma
 not I.know who to.call
 'I don't know who to call'
- a'. no sai ke fa
 not I.know what to.do
 'I don't know what to do'

(42) Civate (Lombardy)

- a. so mia tʃe ke tʃa'ma
 I.know not who that to.call
 'I don't know who to call'

13. Bhatt and Pancheva (2006) note another problem for Kayne's (1991) proposal that *if* is excluded from finite sentences because it governs PRO, namely the fact that conditional *if* can select participial predicates like (i), whose only argument is controlled by the matrix argument. One of our anonymous reviewers further notices that there is no interrogative analogue to this pattern, as in (ii).

- (i) If elected, he has said that . . .
 (ii) *By now he will be wondering if elected.

Sentences like (i) are problematic for the present account as well, since they appear to include a variable EPP argument controlled by a matrix argument. But maybe they don't. Note that any nominal predicate can be embedded under *if*, as in (iii), making it far from obvious that (i) involves a sentential embedding. To the contrary, (ii) could be automatically excluded if interrogatives require a sentential embedding.

- (iii) If beautiful, a woman has many chances.

What kind of embedding (i) represents, if not a sentential embedding, remains an open question; but notice that temporal operators equally allow it, as in (iv).

- (iv) When still a child, he met his future wife.

- b. tʃe ke te tʃamet
who that you call
 'Who are you calling?'

The pattern of Zoldo Alto is what we expect on the basis of the assumption that in the *wh-che* sequence, the *che*-type element is the ordinary complementizer; as such we predict it to be sensitive to the finiteness of the embedded clause and to exclude in particular an infinitival sentence, whose EPP argument is a variable under present assumptions. Let us then consider the more problematic case of Civate. Evidently the presence of the *wh*-quantifier in the left periphery of the *ke* complementizer is sufficient for the latter to be also interpreted in the scope of a question operator, i.e., as a *wh*-element of sorts ranging over propositions. If so, we expect it to have the property that we have independently reviewed for such elements above, that of being insensitive to the finiteness restriction.

4.1 SUMMARY AND CONCLUSIONS

The discussion that precedes is aimed both at accounting for subtle parameterization data characterizing the complementizer systems of Romance and at establishing a number of general conclusions on complementizers. The main conclusion is that C, as currently conceived in generative grammar, i.e., as a conflation of complementizer properties and verbal properties, is a spurious category. So-called complementizers are best analyzed as nominal constituents, selected by the predicate that embeds them and selecting a sentence in turn. This conclusion leads to a consistent semantics for complementation, as conveying quantifications over situations/possible worlds. Strikingly, even theorists maintaining the conventional C syntax for complementizers resort to empty operators/nouns (Larson 1985, Bhatt and Pancheva 2006, Arsenijević 2009) to capture such a semantics. Our argument is not simply that our syntax is the most economical one off which such a semantics can be read. The argument is also that legibility conditions at the other interface, the morpholexical interface, favor the present treatment. This is not just a matter of generically acknowledging the coincidence between complementizer and *wh*- morphology in, say, Romance languages, but rather of accounting for the detailed microvariation patterns observed in such languages. If we are correct, the postulation of abstract structure (as in the references quoted, or in Kayne's Chapter 7 in this volume) obscures, rather than revealing, the relevant generalizations.

APPENDIX

(A)	<i>comp</i>	<i>comp modal/wh-</i>	<i>rel</i>	<i>who</i>	<i>what</i>
Sonnino	ka	ke	ke	ki	ke
Pontecorvo	ka	kə	kə	ki	kə
Colledimacine	ka	kə	kə	ki	kə
Montenerodomo	ka	kə	kə	ki	kə
Torricella Peligna	ka	kə	kə	kə	kə
Secinaro	ka	kə	kə	kə	ku
Civitaluparella	ka	kə	kə	ki	kə
Vastogirardi	ka	kə	kə	kia	kə
Capracotta	ka	kə	kə	kia	kə
Guardiaregia	ka	kə	kə/ka	ki	kə
Guglionesi	ka	kə	kə	ki	kə
Frigento	ka	ke	ki	ki	kə
Nocera	ka	kə	kə	kə	kə
Albidona	ka	kə	kə	kwe	kə
Terranova Pollino	ka	kə	kə	ku	kə
Morano	ka	ki	ki	ku	ki
Orsomarso	ka	ki	ki	ku	ki
Conflenti	ka	ki	ki	kinε	ki
Platania	ka	ki	ki	kinε	ki
Gizzeria	ka	ki	ki/ka	kina	ki
Sorbo S.Basile	ka	ki	ki	kinε	ki
S.Pietro a Maida	ka	ki	ki	ku	ki
Iacurso	ka	ki	ki	ku	ki
Arena	ka	ki	ki	ku	ki
Umbriatico	ka	ki	ki	kini	ki
Gerace	ka	ki	ki	ku	ki
S.Agata del Bianco	ka	ki	ki	ku	ki
(A')					
Dorgali	ka	ki	ki	kie	itte
Aritzo	ka	tʃi	tʃi	(e)tʃinε	itte
Ardaùli	ka	ki	ki-ka	kie	(e)itte
Paulilatino	ka	ki	ki	kie	itte
Gallo	ka	ku	ku	ki	kwe
Tuffillo	ka	kə	kə	kia	(kə)dekkə
Canosa Sannita	ka	kə	kə	ki	ki
(B)	<i>Comp</i>	<i>comp/ if</i>	<i>rel</i>	<i>who</i>	<i>what</i>
Làconi	ka	tʃi	tʃi-ka	tʃinni	itta
Orroli	ka	ki	ki- ka	(e)kini	itta
Settimo S.Pietro	ka	ki	ki	kini	itta
Siliqua	ka	ki	ki	(ak)kini	itta

(C)	comp	If	rel	who	what
Miglionico	ka	tʃi	ka	tʃi	tʃe
Minervino Murge	ka	tʃə	ka	tʃə	tʃəkə
Gravina in Puglia	ka	tʃi	ka	tʃi	attʃokə
Bitetto	ka	tʃə	ka	tʃə	tʃə
Ruvo di Puglia	ka	tʃə	ka	tʃi	tʃə
Canosa	ka	tʃə	ka	tʃə	tʃe
Bisceglie	kɛ	tʃə	kɛ	tʃə	tʃə
Martina Fr.	ka	tʃə	ka	tʃə	tʃə
Molfetta	ka	tʃi	ka	tʃi	tʃe
Mesagne	ka	tʃi	Ka	tʃi	tʃe
Putignano	ka	tʃə	ka	tʃə	tʃe
Brindisi	ka	tʃi	ka	tʃi	tʃe
Grottaglie	ka	tʃi	ka	tʃi	tʃe
Carmiano	ka	ʃi	ka	ʃi	tʃe
Uggiano	ka	tʃi	ka	tʃi	tʃe
Copertino	ka	tʃi	ka	tʃi	tʃe
Melissano	ka	tʃi	ka	tʃi	tʃi

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