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Feature reduplication: perfect or rudimentary?
Inflectional features at the C level

Abstract

In a system in which functional categories are no longer analysed as single projections but as complex spaces comprising a number of semantically and syntactically distinct projections, the clear-cut separation between the two main functional phrases, IP and CP, is called into question, and the issue of whether the two domains are to be conceived as clearly distinct or as a continuum of functional projections arises. Pertinent to this line of inquiry is the locus of expression of syntactic features: features typically associated with one functional space find expression in another (cf. FinP, the lowest of the projections within Rizzi’s (1997) split CP, lexicalise inflectional features). In this article we explore the expression of [mood] and [p] features at the left periphery level, and we aim to ascertain whether this is an instance of feature reduplication, and its extent, or whether it is an example of feature displacement, and its interaction with the canonical place of expression.

1 Introduction

Recent works within the generative tradition, in particular those falling under the so-called ‘Cartographic approach’ (cf. the recent Belletti, 2004; Cinque, 2002; and Rizzi, 2004 cartographic volumes published with OUP, as well as Rizzi 1997 and Cinque 1999), have convincingly argued for a more articulated structure of the clause. Its traditional configuration, organised around the verbal (VP), inflectional (IP) and complementiser (CP) projections, has been refined and further expanded. CP, traditionally thought of as the projection where complementation obtains, and its head C, the merging position for complementisers, are now analysed as a series of functional projections specialised in the expression of information relating to the semantic status of the whole proposition, such as illocutionary force/clause typing, to discourse distinctions (cf. the topic-focus opposition), to syntactic features relating to the propositional
content. FinP (Finiteness Phrase), the lowest of the projections in the split-CP, is the projection that delimits downwards the C domain, remaining sandwiched between the latter and the inflectional space. Rizzi (1997) had already identified in it the locus of inflectional information, e.g. the finite or non-finite status of the clause, reduplicated from the lower IP. Thus, syntactic information traditionally associated with one functional space, in this case the IP, find expression in another, the CP. Interestingly, this feature displacement is not unidirectional: Belletti (2001, 2004a) extends the concept of the left periphery, traditionally only associated with CP, to the edge of the VP, identifying positions within the verbal domain devoted to discourse related properties such as focalisation.

Within a system that does not admit the recursion of identical projections, and hence the exact reduplication of syntactic information, the consequences of this rich structural representation call for an in-depth evaluation of the locus of feature expression.

Focusing on inflectional information expressed at the level of the left periphery, in this paper we investigate the expression of [mood] and [p] features lexicalised through heads within the C domain, drawing on two Northern Italian varieties, Turinese and Marebbano respectively. The research presented here aims to ascertain the extent to which this ‘displacement’ is to be considered an exact reproduction of the array of features expressed in the canonical space, or rather an impoverished version of the same, or even, whether these are instances of feature displacement that prevent the more canonical expression, or, if the latter is retained intact, how the two interact.

2 Mood features in Turinese

The starting point of our investigation is a construction found in a conservative type of Piedmontese spoken in the city of Turin, Italy, in which the finite complementiser che ‘that’ seems to be repeated: there is a first realisation, immediately after the main verb, and a second one, following, in these examples, the subject of the embedded clause (the two che are highlighted in bold).\(^1\)

\(^1\) Throughout the glosses for the examples presented in the paper the following abbreviations are used: scl = subject clitic; pr = present indicative; 1,2,3 = first, second, third person; s/p = singular/plural; rf = reflexive clitic; pt = partitive clitic; loc = locative clitic; neg = negation; S = present subjunctive; cond = conditional; inf = infinitive; fut = future; pple = past participle; SUBJ = subject; OBJ = object.
Unlike the realisation of the first complementiser, *che1*, the realisation of the second, *che2*, is not compulsory: all the above examples are grammatical if *che2* is omitted. This does not amount to saying that the use of *che2* is subject to simple optionality: a clear connection between its ‘preferred’ use and the overt morphological encoding of subjunctive mood on the verb form, together with the licensing conditions that we investigate below, strongly suggest that *che2* is a mood marker. Therefore, *che1* and *che2* are not the same lexical item, and their realisation is not an instance of recursion. While *che1* is the ‘canonical’ complementiser, a subordinating particle introducing the embedded clause, *che2* is not a complementiser in this traditional sense at all, but an element expressing mood.

2.1 Licensing conditions

In spite of not being obligatory in those cases in which it is allowed, *che2* is excluded from sentences in which the embedded verb is not in the subjunctive mood. As the following examples show, *che2* is not compatible with present and future indicative (cf. (2) a and b respectively), nor with the conditional (cf. (2) c):

(2) a. A dis *che* Maria e Gioann (*ch’*)a mangio nen’d rane
    scl say.pr.3s that Mary and John   scl eat.pr.3p neg of frogs
    ‘S/He says that Mary and John do not eat frogs’

b. Giòrs a spera *che* Majo (*ch’*)as n’ andarà tòst
    George scl hope.pr.3s that Mario scl+rf pt go.fut.3s soon
    ‘George hopes that Mario goes away soon’

c. Majo a pensa *che* Franchin (*ch’*)as n’ arcòrzeria
    Mario scl think.pr.3s that Frank scl+rf pt realise.cond.3s
    ‘d sòn
    of this
    ‘Mario thinks that Frank would realise it’
As for its apparent optionality, there is a strikingly almost 100% correspondence between the poor morphological distinction between indicative and subjunctive present tense forms and the occurrence of che₂. The paradigms of the two present tenses are very similar, with many syncretic forms: the following table gives an example of a first conjugation verb, and it highlights in bold that the only two forms morphologically distinct are the first person singular and plural.

(3)  
parlé ‘to speak’

<table>
<thead>
<tr>
<th></th>
<th>Pres. Indicative</th>
<th>Pres. Subjunctive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 s</td>
<td><em>mi i parlo</em></td>
<td><em>che mi i parla</em></td>
</tr>
<tr>
<td>2 s</td>
<td><em>ti it parle</em></td>
<td><em>che ti it parle</em></td>
</tr>
<tr>
<td>3 s</td>
<td><em>chiel a parla</em></td>
<td><em>che chiel a parla</em></td>
</tr>
<tr>
<td>1 p</td>
<td><em>noi i parloma</em></td>
<td><em>che noi i parlo</em></td>
</tr>
<tr>
<td>2 p</td>
<td><em>voi i parle</em></td>
<td><em>che voi i parle</em></td>
</tr>
<tr>
<td>3 p</td>
<td><em>lor a parlo</em></td>
<td><em>che lor a parlo</em></td>
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It has been argued in the literature (cf. Giorgi and Pianesi, 1997; von Stechow, 1995, among others) that the subjunctive is a deficient tense. The term ‘deficient’ could be interpreted both semantically and morphologically. Semantically, on its own the subjunctive does not give rise to any real temporal interpretation; morphologically, there is lack of morphological differentiation between some forms of the present indicative and the subjunctive, just as we see here for Turinese. Interestingly, *che₂* is more ‘readily’ produced precisely in those cases in which the verb does not overtly express morphologically the mood distinction. For example, just like in the paradigm illustrated in (3), *che₂* is ‘preferred’ with the second and third person singular and plural. Conversely, it is felt to be less ‘needed’ with the first person singular and plural.

These considerations suggest that *che₂* is licensed by the lack of morphological expression of the subjunctive mood on the embedded verb; the conclusion that can be reached is, then, that *che₂* is a subjunctive
mood marker. Worth mentioning is that the presence of che2 does not obviate to the semantic deficiency of the subjunctive, but only to its morphological one.

This analysis, which disregards the role played by the matrix verb, is further strengthened by the following data, in which the subjunctive, and consequently che2, is not selected by a verb. A conjunction (cf. (4) a), a clause-type operator for imperative clauses (cf. (4) b), and a relative operator (cf. (4) c) are the selecting elements in the following examples:

(4) a. I veno volonté, basta mach che Gioannon a staga
scl come.pr.1s willingly as long as that John
scl stay.S.3s
nen solo
neg alone
‘I will come willingly as long as John is not left on his own’

b. Che iì cit ch’ a vado a pluché sùbit!
that the children that scl go.S.3p to sleep.inf immediately
‘The children should go to sleep immediately’

c. Giòrs a veul parlé con un dotor che, ant la
George scl want.pr.3s speak.inf with a doctor who in the
meisin-a autërnativa, ch’ a j chërda
medicine alternative that scl-loc believe.S.3s
‘George wants to speak to a doctor who believes in alternative medicine’

2.2 Position filled by lower complementiser

After having ascertained the function of che2, we need to establish the position it fills within the clause. Cinque (1999) posits several heads with modal content at the edge of his extended IP; as already mentioned, Rizzi (1997) assumes the lower of the heads in the CP, Fin°, to encode modality. Deciding whether mood is lexicalised in the IP or the CP spaces is not a straightforward issue, further complicated by the high degree of decomposition of the two functional domains. Additionally, there seems to be a certain degree of overlap in the information expressed by the two spaces, which contributes to the blurring of the boundaries between them. Furthermore, the lexicalisation of mood features in I or in C is not necessarily mutually exclusive: it has already been proposed (cf. Rizzi, 1997) that some inflectional features are encoded at both levels, the CP containing an impoverished version of those expressed in the IP.

In order to identify the position occupied by che2 we exploit the relative order of elements. An analysis of the particles that are cliticised
onto it suggests that che2 belongs to the left periphery of the clause. Throughout all the examples, che2 forms a cluster with what has been glossed as ‘scl’, ‘subject clitics’. Poletto (2000) proposes a categorisation of these elements in four different types, two placed in the IP and two in the CP. This categorisation is based on a number of properties that each particular type displays, and in turn each type can be recognised by the way it interacts with specific elements or constructions. Applying Poletto’s diagnostics to Turinese scls we reach the conclusion that they belong to the Deictic type, one of the two hosted in the CP. The fact that che2 precedes them, leaves us with the undisputable conclusion that che2, too, is in the left periphery. Considering its mood content, it is reasonable to conclude that che2 lexicalises Fin°. Incidentally, although Fin° has been typically associated with finiteness, it can also be viewed as encoding mood: Vincent (1998) claims that finiteness and mood are equivalent and they are to be viewed as two sides of the same coin.

2.2 Mood in C

The fact that mood is expressed at the C level is not a new idea, and it goes back to at least Stowell (1982) and den Besten (1983). In Enç (1987) the link between T and C is expressed in terms of semantic anchoring: the specifier of tense, or in other words, the source of its value, is located in COMP. This relation is interpreted syntactically through a binding relation between T and C which holds across categories. How can the expression of mood in C through che2 in Turinese be quantified?

The correlation could be of a semantic or syntactic nature; we now look at them in turn. The value of the mood features expressed by che2 is not wholly identifiable with any specific semantics related to the subjunctive. For example, referring to the very coarse-grained (and controversial) distinction assumed by some linguists between indicative and subjunctive moods in terms of a realis / irrealis opposition, it is immediately evident that che2 cannot be an expression of it. As well as not being licensed by future indicative and conditional (cf. examples (2) b and c), forms expressing an event that has not yet taken place, or may take place, and therefore fall within the sphere of irrealis, che2 is found in embedded clauses selected by a factive verb such as ‘to regret’, a predicate that implies the truth value of its complement clause:

(5) Maria a regreta che Giòrs ch’ a sia désmentiass-ne
Mary regrets the fact that George forgot about it.

Furthermore, example (4) b, in which the subjunctive is used as a suppletive form for the imperative, demonstrates how che2 is also compatible with deontic mood, as well as with no specific mood at all, in (4) a and c, concluding once again that che2 is dependent only on the subjunctive, irrespectively of the element that selects it.

This lack of association with a clear semantic content is expected if what we are dealing with is a functional element, an element that encodes information relating to non-lexical properties of the verb. And this is exactly what che2 does. Assuming that positive morphological evidence for features motivates movement, the deficiency of the subjunctive means that the verb form is unable to reach Fin°. We claim that these mood features originate as a distinct head from the verb, in a modal X° within the high IP, as che2, and then raise via head-to-head movement to Fin°, where they are checked. In those cases in which che2 is licensed but can be omitted, we assume that the modal head is filled by a null operator that moves to Fin° as a bundle of silent features (cf. Chomsky, 1995).

Analysing che2 as a head raising into Fin° finds theory-internal support in the fact that the relative order of che2 and the scl with which it forms a cluster can only be treated as a result of che2 having raised to that position by a system that does not admit right adjunction.

Summarising our discussion, we have concluded that che2 is a functional element carrying those morpho-syntactic features encoding [mood] that are not expressed on the embedded verb. It forms a cluster with scls and occupies a position within the left periphery, the result of its movement into it from a lower position. Being generated in a modal head in the high IP and raising into Fin° it creates a syntactic, formal link between T and the C space.

The mood features lexicalised by che2 are solely related to the presence of the subjunctive: che2 is licensed when the subjunctive is selected, it is not when the subjunctive is not. In other words, the content of the features ranges over a binary [±] value: [+subjunctive] and [-subjunctive], yielding, respectively, the presence or absence of che2. What bearings does this have on the theoretical question of feature reduplication that we are addressing in this paper?

Turinese does not display any of the typical features associated with V2 languages. Furthermore, the morphological syncretism of forms is evident only in the present tense paradigms of the indicative and the
subjunctive: all other forms carry the overt morphological realisation of tense, aspect and mood features. It is therefore plausible to assume that all finite verbs in declarative clauses remain within the IP domain, which satisfies all their feature checking. This amounts to saying that IP hosts the complete, fully-fledged range of inflectional features, whose specifications stretch across the whole set of possible values.

From the limited information gathered so far, it seems that the inflectional features expressed at the C level are a drastically reduced version of those encoded at the I level. First, although we have loosely referred to che2 as a mood marker, the particle only expresses mood features relating to the subjunctive. Secondly, rather than encoding the whole array of possible semantic values attached to the subjunctive, che2 is a functional element that lexicalises purely those morpho-syntactic features lacking on the verb.

The mood features of the embedded verb in these sentences are not originated in the verbal domain as such, but in the high IP, and then need to raise to the left periphery to get checked. Rather than feature reduplication, we are here faced with feature displacement, albeit of a very rudimentary degree: rather than ranging over the whole array of mood specifications found in the IP, the mood features lexicalised by che2 only have a binary \([\pm]\) value and only range over the subjunctive. Furthermore, it is the absence of morphologically overt mood features on the verb licenses che2, and not the other way round. Hence we can conclude that the expression of mood features at the C level does not prevent its featuring at the verbal level, rather it is the inability of the verbal domain to express it that allows the information to be expressed in an alternative location.

In the following section we find further support for the idea that features expressed in their non-canonical location can only vary across a drastically reduced range of values.

3 \([q]\) features in Marebbano

The second area of our investigation focuses on the alternation in the choice of the relative pronoun displayed by a variety of Ladin (a member of the Rhaeto-Romance family), Marebbano, spoken in the Dolomitic area of Italy. In this section we focus on establishing the position filled by the relative pronouns and on explaining the person asymmetry displayed by their distribution.
3.1 Data

Marebbano has two relative pronouns, che and co, used for relativised objects and subjects respectively, and they are not interchangeable, as the ungrammaticality of (6) b and d shows:

(6) a. La éra co puzenëias stighes è püra
    the lady thatSUBJ clean.pr.3s the stairs be.pr.3s ill
    ‘The lady who cleans the staircase is ill’

b. *La éra che puzenëias stighes è püra

c. La éra che teás encunté ennier è mia mëda
    the lady thatOBJ scl have.pr.2s meet.pple yesterday be.pr.3s my aunt
    ‘The lady you met yesterday is my aunt’

d. *La éra co teás encunté ennier è mia mëda

Adopting the ‘null operator’ analysis for relative clauses (cf. Chomsky 1980; 1981) according to which a null operator (Op henceforth) is merged in the argument position and then fronted, we claim that the relative pronouns fill the head of Force in the split-CP system, and that both co and che are merged as the same element \([k]\) whose final form is determined through [Spec, Head] agreement with the Op raising into [Spec, Force]. Further considering the subject/object asymmetry, we assume that the two Ops, subject and object, undergo different checking operations, and this ‘checking history’ is interpreted accordingly by the computational system. This guarantees that the corresponding features are matched by the agreement process, triggering the appearance of co or che3.

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2 There is no indication that the two pronouns fill a different position, i.e. their position with respect to other elements in the clause is the same.

3 With respect to the subject/object asymmetry, the fact that it is not the initial merging position of the argument with which the Op is co-indexed the trigger for the che/co alternation but purely its logical function, is clearly supported by the relativisation of subjects of unaccusative, reflexive, ergative and passive verbs, all assumed to be merged post-verbally, which trigger co rather than che.
3.2 Person asymmetry

What we have described so far, resembles very closely the alternation exhibited by French, which uses qui for a relativised subject and que for a relativised object:

(7) a. Le garçon qui (*que) mange la pomme est très beau. The boy who is eating the apple is very handsome
    the boy that.SUBJ (*that.OBJ) eat.pr.3s the apple be.pr.3s very handsome
    très beau

b. La voiture que (*qui) j’ai acheté va très vite. The car that I bought is very fast
    the car that.OBJ (*that.SUBJ) I have.pr.1s buy.pple go.pr.3s very fast
    très vite

In spite of this superficial similarity, the two relative pronouns in Marebbano do not correspond tout court with their French counterparts, as their availability is subject to person constraints. More specifically, co is only available to third person subjects, both singular and plural: the relative pronoun for first and second relativised subjects can only be che. This is particularly evident morphologically with the second person singular: in all the other cases the presence of a SCL and the elision of the ‘e’ in che makes it less transparent that it is really che rather than a reduced version of co. Crucially, though, co makes the sentence ungrammatical. Although the examples are for the singular persons only, the situation is also true for the plural ones, with the first/second versus third asymmetry:

(8) a. Iu ch’i mangi dagnora plü de düc á ciamò fan
    I who am always eating more than everybody, am still hungry
    Iu who am always eat.pr.1s more of all have.pr.1s still hunger

b. Tö che te lies le foliet vignedé sas dagnora döt
    You who read the newspaper everyday know.pr.2s all
    Tö who read the newspaper every day always know everything
It could be argued that what we witness here is not an alternation between *co* and *che*, but simply a reduced realisation of *co* as [k]. What we find, though, is that while *che* can be affected by apocope and its final vowel drops, *co* cannot, and it retains its final vowel even when it occurs in a vowel cluster, e.g. when it is followed by a word with an initial vowel:

(9) a. Îl c*(o) è n bel è tresplèn d’ères
   he thatSUBJ be.pr.3s a handsome man be.pr.3s very full of women
   ‘He who is a good looking man is very popular with the ladies’

b. Al è stè propì la móta con les trèces c*(o)
   have.pr.3s just the girl with the plates thatSUBJ
   ‘It was exactly the girl with plates who wanted to leave’

The opposition first/second versus third is not an unusual one, and it is active in a number of hierarchies (animacy, referentiality, focus: cf. Siewierska, 2004, among others for a typological investigation). On a semantic level, first and second person are distinct from third as they are specified for [+deictic] features: being directly involved in the discourse and being the parties present in the conversation, their reference is clearly and unequivocally identified. The referent of third person, on the other hand, by definition needs further information to be recognised.

This distinction resembles the opposition between two types of relative clauses, restrictive and non-restrictive (or appositive), with the latter purely adding information to an already established referent and the former actually identifying it. Turning to the person asymmetry in Marebbiano, it could be argued that when a first or second person are relativised they can only appear in non-restrictive relatives, since their referent, being already unequivocally identified, does not need any further specification. Consequently, *co* could be analysed as being the relative pronoun specified for some [restrictive] feature, only realised
when introducing restrictive relative clauses. The following examples falsify this hypothesis: although the referent of the relativised element is uncontroversial and therefore the relative is of the non-restrictive type, the relative pronoun can only be co:

(10) a. La Talia, co à les leges dër rigoroses, prodüj le miù ere d'ori
   the Italy thatSUBJ have.pr.3s the laws very rigorous produce.pr.3s the best oil of olive
   'Italy, which has rigorous laws, produces the best olive oil'

   a'. *La Talia, ch(e) à les leges dër rigoroses, prodüj le miù ere d'ori

b. La löna, co lomina ensnet dër sterscia, rôda encërr la tera
   the moon thatSUBJ shine.pr.3s tonight very bright circle.pr.3s around the Earth
   'The moon, which tonight shines brightly, revolves around the Earth'

   b'. *La löna, che lomina ensnet dër sterscia, rôda encërr la tera

Syntactically, the first/second versus third opposition can be interpreted exploiting the traditional distinction (dating back to Benveniste, 1966) between third and first and second pronouns: third person pronouns are 'determiner pronouns', in other words, they lack person features and are only specified for [number], while first and second person pronouns are 'fully fledged' pronouns and are specified for both [person, number] features. Extending this feature specification to third person DPs, too, we claim that co is triggered when an Op not specified for [person] reaches [Spec, Force]; che, on the other hand, surfaces in the other cases. Thus, we could view co as a 'non-person' relative pronoun. Recall that the subject/object alternation is encoded in the checking history of the Op and taken care of by the computational system: the specification for [person] features overrides the functional role played by the Op. This distinction is an important one, as it allows us to distinguish between Marebbano and French: while Marebbano co is sensitive to -[person] specification, where -[person] is to be interpreted as absence of features rather than a negative specification for them, French qui is not, and it is purely dependent on checking operations undergone by the relativised phrase.

Summarising, we have seen that the relative pronoun alternation in Marebbano displays a person asymmetry: co is only available to third person while che is the pronoun selected in all other cases. There is no
convincing evidence that the two occupy different positions: we have claimed that they are both merged in Force° as the underspecified form
[k], turning into che or co through a [Spec, Head] relation with an Op moving into its Specifier. More specifically, co is triggered by an Op not specified for [person] features, in other words carrying no [person] features, and che is triggered by an Op encoding [number] features.

Referring back to the fundamental question we set off to investigate, reduplication of inflectional features, in Marebbano, too, we witness a rudimentary expression of them at the C level. Rather than presenting the whole variation given by all the possible combinations of [q] features, which is what we see at the I level, the encoding of these features at the C level varies only over a binary [a] value: the two relative pronouns are sensitive to the presence or lack of [person] features.

A final remark before concluding. Marebbano, like German and other Germanic languages, is a V2 language: in main clauses the verb occupies the second position:

(11) a. Francësch bâia gonot con Maria
    Francesco talk.pr.3s often with Mary
    ‘Francesco often talks with Mary’

b. Gonot bai-al Francësch con Maria
    often talk.pr.3s-scl Francesco with Mary

c. *Francësch gonot bâia con Mâria

d. *Bâia gonot Francësch con Maria

The traditional analysis for V2 is that the finite verb raises from T to C: the predicate, carrying the full specification of its inflectional features, is hosted in C. This fact may at first sight quash what we have claimed so far about the nature of the inflectional features that find an expression at the C level. C hosting a fully inflected verb does not amount to saying that C is, in these cases, inflectionally richer: the inflectional features carried by the verb form have already been checked and licensed in T, and the fact that the verb reaches C depends purely on the V2 constraint, in whatever way we want to formulate it.

In relative clauses, though, V2 does not apply, and we find the embedded verb in first (cf. 12 a) position. When there is another element in that position the sentence in ungrammatical, with or without subject-verb inversion (cf. 12 b and c):

(12) a. I à odû l’ël co porta Maria gonot
In these examples the embedded verb does not raise to C, and the position is occupied by the relative pronoun. The inflectional features of the raised verb in main clauses have already been checked by the time they reach the C level, and the driving force for this movement is independent of them. The relative pronouns, on the other hand, generated in Force as [k] need a suitably specified phrasal element, encoding a [±person] feature, to raise into their Specifier position to create the che or co forms. It therefore seems that it is the checking ability of inflectional features that is rudimentary at the C level, so that only a reduced version of it is overtly expressed.

4 Conclusions

Basing our observations on the limited evidence investigated here, we have suggested that the inflectional information that find expression at the C level is a rudimentary version of what is encoded within the IP. Specifically, there seems to be a tendency for the values of the feature specification to be of a binary nature, [±a], and to range over a restricted inventory: [±subjunctive] in Turinese and [±person] in Marebano.

The question addressed in this paper is a complex one, and clearly, more data is needed to investigate in depth the claim made here, and to evaluate the full extent of its consequences. We also leave for future research the investigation of the interaction between the two sets of inflectional features, the fully fledged and the reduced ones, and the consequences this has for syntactic theory.

5 References


