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Discourse, sentence grammar and the left periphery of the clause

Abstract

The term *left periphery* refers to that area on the left of the subject, in the syntactic representation of a clause, where the relationships with the context are encoded. In this work I propose a syntactic analysis that goes beyond mere sentence grammar and integrates prosodic and discourse features as well. On the one hand, this move accounts for some observations previously not fully understood, such as the anomalous syntactic properties of Clitic Left Dislocation and Hanging Topic, their differences with respect to Focus and their similarities with parentheticals. On the other, it aims at providing a theory of grammar able to encode the relationships between sentence grammar, context and bigger units such as discourses.

1 Introduction

In this article I consider the interactions between sentence grammar and context. As a first point, I investigate the given/new specifications of phrases with respect to the preceding discourse and the way these properties are syntactically encoded. I'll show, following Rizzi (1997) and subsequent work, that the left periphery of the clause is the area where such an interaction is represented in the syntax. I will also show that current analyses are not able to explain some properties of the elements appearing on the left of the subject and that, in order to have a better understanding of such phenomena, a revised theoretical account must be provided. In particular, I analyze two kinds of topics, clitic left dislocations and hanging topic, and some types of parentheticals. I propose an extra-layer on the left of the clause encoding in the syntax the relations with prosody on one side, and discourse on the other.[1]

In section 2, I briefly present the conceptual history of the left periphery. In the next one, I discuss the properties of a special kind of topic in Italian, Clitic Left Dislocation. In section 4, I propose an analysis of this construction that captures its similarities with parentheticals, in so doing I introduce prosody-oriented heads, which project in the syntax, but are read at the interface with

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[1] I adopt here a very simple definition of topic as 'given information'. This notion however is very

prosody. In section 5, I contrast Clitic Left Dislocation with another kind of topic, the so-called Hanging Topic, and propose a syntactic representation extending the boundaries of syntax to include features connected to the discourse.

2 The syntax of the left periphery of the clause

According to the Government and Binding paradigm developed by Chomsky (1981), a sentence is a predicative structure, where subject and predicate are connected by means of so-called *functional projections*. A typical sentence has the following structure, where *I* stands for *Inflection*, i.e. the temporal, modal, and agreement properties connected with the verb:[2]

(1)　　$[_{IP}$ NP [I $[_{VP}$ V]]]

The subject – in representation (1) a Noun Phrase, NP – is connected to the predicate – in this case a Verb Phrase, VP – by means of Inflection. Hence, according to X-bar theory, the subject is the specifier of the Inflection and the predicate is its complement.[3]

In the Government and Binding framework, only one head position is available on the left of the subject and only one maximal projection position, i.e. only one position where a phrase can appear. The structure available in this framework is therefore the following:

(2)　　$[_{CP}$ XP [C $[_{IP}$ NP [I …

C is a head position, occupied in subordinate clauses by the complementizer head, for instance *that*, as in the following example:

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[2] These are to be understood as abstract properties, universally represented, even if languages might differ in the way they realize them.

[3] X-bar theory was firstly proposed in the 70's, see among the others Chomsky (1970) and Jackendoff (1977). In this work I will not discuss the arguments in favor, or against, this syntactic representation. Let me just point out that more recently, several aspects of X-bar theory have been deeply revised, to account for further empirical observations, see the anti-symmetrical proposal by Kayne (1994).

(3)   John thinks *that* Mary is a genius

That occupies the C position in the subordinate clause. The specifier position of C can be occupied by embedded *wh-* phrases, as in the following case:

(4)   John wonders *which boy* Mary met

In English, C is also the landing site of Verbs and auxiliaries in interrogative inversion, as in the following example:

(5)   *What did* you eat?

Did occupies the C position and *what* its specifier.
The specifier position is the landing site of the XP in V2 languages, where again, the verb occupies the C position:

(6)   *Den Apfel hat* der Hans gegessen
        The apple has Hans eaten
        'Hans ate an apple'

In V2 languages, such as most Germanic ones, the inflected verb occupies the head position on the left of the subject; a phrase, in this case the object, obligatorily precedes it.[4]
These analyses represented a very big step forward with respect to preceding proposals, but there are several facts that could not be accounted for in this framework. For instance, more than one position can appear in the left periphery. Consider for instance the following example:

(7)   A Gianni, QUESTO, domani, gli dovrete dire   (from Rizzi, 1997, ex. 23)

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[4] the first position can be occupied by whatever phrase, even and adverb, as in the following example:
    i.   Gestern hat der Hans einene Apfel gegessen
            Yesterday has Hans an apple eaten
            'Yesterday Hans ate an apple'
For further discussion, see Holmberg (2015).

To Gianni-top, this-FOC, tomorrow-top, you should tell him

'Tomorrow you should tell that to Gianni'

In this example, there are three phrases appearing in the left portion of the sentence: the dative argument of the verb *a Gianni* (to Gianni), the object, *questo* (this) and an adverb *domani* (tomorrow). As noted in the glosses, these phrases have a special informational value, in that *a Gianni* (to Gianni) and *domani* (tomorrow) are topics – i.e., roughly speaking given information, whereas *questo* (this) is a corrective focus, i.e. new information introduced to the purpose of correcting a previous statement.[5]

Therefore, as a first move, we have to provide more than one position in the left periphery. This one however is not the only problem, especially when we consider subordinate contexts. In Italian, finite clauses are introduced by *che* (that), and non-finite by prepositional complementizers, such as *di*. The distribution of topic and corrective focus with respect to these complementizers is not uniform. Consider for instance the following examples:

(8)   Credo che loro apprezzerebbero molto il tuo libro (Rizzi, 1997, ex. 9a):

        (I) believe that they would appreciate very much your book

        'I believe that thay would appreciate your book very much'

(9)   Credo di apprezzare molto il tuo libro (Rizzi, 1997, ex. 9b)

        (I) believe of to appreciate your book very much

        'I believe I appreciate your book very much'

If we insert a topicalized phrase in the embedded position, we obtain the following paradigm:

(10)   Credo che *il tuo libro* loro lo apprezzerebbero molto (Rizzi, 1997, ex. 10a)

        (I) believe that your book-top, they it-would appreciate veruy muh

        'I believe that they would appreciate very much your book'

(11)   *Credo *il tuo libro* che loro lo apprezzerebbero molto (Rizzi, 1997, ex. 10b)

        (I) believe your book-top, that they it-would appreciate very much

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[5] In the literature, corrective focus is represented in capital letters, precisely to distinguish it from topics.

'I believe that they would appreciate very much your book'

(12)   *Credo di, *il tuo libro*, apprezzarlo molto (Rizzi, 1997, ex. 11a)

(I) believe (of) your book-top to appreciate-it very much

'I believe I appreciate your book very much'

(13)   Credo, *il tuo libro*, di apprezzarlo molto (Rizzi, 1997, ex. 11b)

(I) believe your book-top (of) to appreciate-it very much

'I believe I appreciate your book very much'

These examples show that the topicalized phrase follows *che* and precedes *di*. The same happens with a corrective focus:

(14)   Credo che MARIA tu abbia visto (non Luisa)

(I) believe that Maria-foc you have seen (not Luisa)

'I believe that you have seen Maria (not Luisa)'

(15)   *Credo MARIA che tu abbia visto (non Luisa)

(I) believe Maria-foc that you have seen (not Luisa)

'I believe that you have seen Maria (not Luisa)'

(16)   *Credo di MARIA aver visto (non Luisa)

(I) believe (of) Maria-foc to have seen (not Luisa)

'I believe you saw Maria (not Luisa)'

(17)   Credo MARIA di aver visto (non Luisa)

I believe Maria-foc (of) to have seen (not Luisa)

'I believe you saw Maria (not Luisa)'

These examples show that the two complementizers do not have the same distribution, in that topic and focus follow *che* (that), but precedes *di* (of). Moreover, in example (7) above, we also saw a topic following a focus. Hence the final situation is the following one:

(18)   *Che* topic FOCUS topic *di*

Rizzi (1997) dubs *che* (that) as Force and *di* (of) as Fin. The structure he proposes is the following one:[6]

(19)   [FORCE [*che* [top topic [FOC Focus [top topic [FIN *di* [IP …

Importantly, topic and focus are associated with typical intonations. Frascarelli and Hinterhölzl (2007) show that different kinds of topics are associated with different intonations and that the topics found on the left of focus are different from the topics on the right. Absence of intonation – or an inappropriate intonation – renders the sentence totally inacceptable, showing that it is not an optional property of these constructions.[7]

Concluding this section, the examples illustrated above clearly point to the conclusion that there are multiple positions available in the left periphery of the clause, and not only one head and one phrase position, as in the preceding framework. The other important conceptual issue is that Rizzi hypothesizes the presence of dedicated projections for topic and focus. In other words, the relation of a phrase with the context, at least as far as its *giveness* or *newness* is concerned, is not just a matter of interpretation, but a syntactic function. I.e., in the left periphery there is a position that can be occupied only by a focus, and positions that can be occupied only by topics, as in the following structures:

(20)   [Top-P XP [top]]

(21)   [Foc-P XP [foc]]

Focus and Topic are phrases projected by a *Top* and a *Foc* head respectively. These heads in languages such as Italian and English are usually empty – even if they are lexically realized in other languages – and the topicalized or focused phrases appear in the specifier position, i.e. on

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[6] In subsequent work Rizzi (2001) shows that the complementizer *se* (if) introducing embedded questions occupies an intermediate position, immediately on the left of focus. I will not discuss this issue here, since it is not relevant to the following discussion.

[7] On the differences between the two topic positions see also Benincà e Poletto (2004).

the left of the head.[8]

In this way, pragmatic properties are directly encoded in the syntax. This way of thinking presents several advantages, which will be addressed in the following discussion, where I argue for a novel analysis of topics and show that Rizzi's (1997) proposal can be revised in order to explain other so far unaccounted for phenomena as well.

3 An analysis of Clitic Left Dislocation

3.1 the pre-focal topic: generalities

In this work I consider the properties of pre-focal topics in Italian. Before going any further, however, note that in this language the focus projection in the left periphery is reserved to corrective focus, which has to be licensed in the previous discourse. Consider for instance the following case:

(22)   A: Gianni ha salutato Maria

         A: Gianni greeted Maria

(23)   B: (No,) LUISA Gianni ha salutato, non Maria

         B: (No,), Luisa-foc Gianni greeted, not Maria

         B: '(No,) Gianni greeted Luisa, not Maria'

Luisa is the focused phrase and occurs in the discourse provided above as a correction of the utterance of speaker A. A left-peripheral focus, however, can also occur *in situ*, as in the following cases:

(24)   (24) A: Gianni ha salutato Maria

         A: Gianni greeted Maria

(25)   B: (No,) Gianni ha salutato LUISA, non Maria

         B: (No Gianni greeted,), Luisa-foc, not Maria

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[8] In Italian and English the focus head is always empty. In some languages, such as Gungbe, the focus head is lexically realized, see Aboh (2007). In other ones, such Armenian, the focus head can host the tensed verb, giving rise to Verb Second structures, See Giorgi and Haroutyunian (2016).

B: '(No,) Gianni greeted Luisa, not Maria'

The discourse in (24)-(25) is identical to the provided above, the only difference being the position of the focused phrase. In the literature there is a considerable discussion about these two positions for a corrective focus in Italian. In particular, the discussion concerns the possibilities that the *in situ* position – cf. example (25) – is only apparently so, being the result of complex movements of the remnant portion of the sentence on the left of focus. I'm not going to discuss this issue here, which is very technical and to a certain extent far from the main point of this article, i.e. the relationship between sentence grammar and discourse.[9]

In Italian the topic position on the left of focus correspond (mostly) to Clitic Left Dislocation (CLLD) and encodes given information, i.e. information already present in the context. For instance, a suitable context for CLLD is the following one:

(26) A: Domani è il compleanno di Gianni
      A: Tomorrow is Gianni's birthday

(27) B: A Gianni, gli darò un bellissimo regalo
      B: To Gianni, I to him-will give a beautiful present
      B: 'To Gianni, I will give a beautiful present'

In this construction the left peripheral phrase is associated to a sentence internal clitic. In the example above, the phrase *a Gianni* is associated to the dative clitic *gli* (to him). CLLD is also characterized by the so-called *comma intonation*. In certain cases, the comma intonation alone identifies CLLD, for instance when no corresponding clitic is available, as in the case of the subject:

(28) A: Dov'è Gianni?
      A: Where is Gianni?

(29) B: Gianni, penso che sia partito
      B: Gianni, I think that (he) left

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[9] See for a discussion of this point Samek-Lodovici (2015) and references cited there.

The embedded null subject in (29) does not have a corresponding clitic, but the construction is a CLLD one and is characterized by the comma intonation.[10]

3.2 The puzzle

CLLD is a very special construction, presenting several anomalies, and has been extensively studied by many scholars.[11] The main issue concerns the fact that the same argument – as in example (27) above the indirect object of the verb *dare* (give) – is lexicalized twice, once as a left peripheral full lexical item, *Gianni*, and once as a sentence-internal clitic. By itself, this property would not be surprising, since many languages have similar double realizations of an argument in constructions with a resumptive pronoun, or in clitic doubling ones.[12]

In the literature, however, it is convincingly argued that the Italian clitic is neither one. In the following lines I'll briefly present some evidence to this extent.

Cinque (1990) shows that the presence of the clitic is not an instance of clitic doubling, given that Italian never exhibits this construction, neither with moved nor with unmoved phrases. Consider the following example:

(30)   *Chi/a chi lo conosci? (from Cinque, 1990, ch.2 ex.2a)
        Whom/to whom him-(do you) know

The ungrammaticality of this example shows that in Italian a clitic can never double a moved phrase, as the *wh-*.

(31)   *Lo conosciamo Gianni (from Cinque, 1990, ch.2 ex.2b)
        him-(we)-know Gianni

Also, the ungrammaticality of example (31) shows that a clitic can never double a non-moved

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[10] See for a discussion of this and related issues Frascarelli (2000).

[11] See among the others Cinque (1990), Frascarelli (2000), Frascarelli and Hinterhölzl (2007), Giorgi (2015).

[12] Languages such as Spanish and Catalan instantiate clitic doubling, whereas Hebrew exhibits resumptive strategies.

phrase, as is the case with the object *Gianni*.[13]

Furthermore, the clitic is not the spell-out of a moved phrase, i.e., it is not a resumptive clitic, in that for instance it cannot license parasitic gaps, as shown in the following example (where *e* stands for *empty*):[14]

(32)   *Gianni l'ho cercato per mesi, senza trovare *e* (from Cinque, 1990, ch.3, ex.6)

       Gianni I have looked for him for months, without finding

Hence in sentence (27) above, given that the clitic is neither a double nor a resumptive pronoun, then it must be the real argument of the verb. But if the clitic is the argument of the verb, what is the left dislocated phrase? In principle, such a construction should be ungrammatical, in that the presence of the left dislocated phrase could not be licensed under any possible version of the principle of *Full Interpretation*, being neither an argument, a variable, nor an operator.[15]

3.3 Current theories

Coherently with these considerations, it has also been argued – cf. Rizzi (1997), Frascarelli (2000), Cinque (1990), Frascarelli & Hinterhölzl (2007) – that in this construction the left

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[13] Hebrew is such a language, see for instance Sharvit (1999) and Shlonsky (1992).

[14] Gaps in adverbial clauses such as the ones introduced by *senza* are ungrammatical:

   i.   *Quale libro hai scritto l'articolo senza leggere *e* ?

            Which book did you write the article without reading?

However, it is possible to rescue them, by introducing and additional gap, on which they can be *parasitical*:

   ii.   Quale libro hai recensito *e* senza leggere *e*?

            Which book did you review without reading?

Sentence (ii) is much better than (i), because the additional gap in the object position of *hai recensito* (you have reviewed) creates a dependency, which is syntactically permitted. In some languages, as in Hebrew for instance, the role of this gap can be played by a clitic, but not in Italian, as shown in the text.

[15] The principle of Full Interpretation, formulated by Chomsky (1986), requires that every element of Phonological Form or Logical Form must receive an appropriate interpretation, that is, must be licensed in the some way.

peripheral topic is base generated there, i.e. not moved from a sentence internal position. In this section I'll review two important arguments in favor of this conclusion.

The first argument in favor of this hypothesis, discussed among the others by Rizzi (1997) and Benincà and Poletto (2004), is that CLLD is immune from *weak crossover effects*, contrasting with focus. Let me briefly introduce the issue.

Weak crossover effects are detected in many languages in constructions where a phrase, moved in the left periphery from a sentence-internal position, has the same reference of a possessive pronoun contained inside the same sentence. The relevant configuration is the one where the interrogative phrase *crosses over* the pronoun. Consider for instance the following contrast, where the identity of indices signals coreference: [16]

(33)   Who$_i$ praised his$_i$ mother?

(34)   ??Who$_i$ did his$_i$ mother praise?

In (33) the pronoun is contained inside an object phrase and the interrogative *who* originates in the subject position of the clause. In (34), conversely, the pronoun is contained inside the subject phrase, and the interrogative originates from the object position of the clause. Therefore, in order to appear in the left periphery, *who* must *cross over* a coreferent pronoun.[17]

This effect is quite robust and holds in several languages. For this reason it has been taken as a diagnostic for movement. In other words, when a phrase in the left periphery gives rise to weak crossover effects, it means that it has been moved there, if no effect is detected it can be taken to be base generated. Consider the following contrast:

(35)   *?GIANNI$_i$, sua$_i$ madre ama moltissimo e_i
          Gianni, his mother loves very much
          'His mother loves Gianni-foc very much'

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[16] The first proposal concerning weak crossover appears in Postal (1971), see also Chomsky (1976). The literature on these phenomena in various languages is nowadays very rich, see Safir (to appear) for a discussion and references.

[17] The effect is called *weak*, because the ungrammaticality of the construction is not severe. There is salso a *strong crossover* effect – see Postal (1971) – which is not relevant to the present discussion.

(36)   Gianni$_i$, sua$_i$ madre lo$_i$ ama moltissimo

         Gianni ¡, his¡ mother him¡-loves very much

         'His mother loves Gianni-top very much'

In example (35) *Gianni* is a focus and the structure is ungrammatical. In (36), it is left dislocated and the sentence is perfect.

The second argument concerns the so-called *reconstruction effects*. It is well know, that on certain occasions pronouns must be interpreted in their basic position and not in the derived one. In order to discuss this argument, let me briefly illustrate condition C of the binding theory, i.e. the principle ruling the coreferential interpretation of a noun. Consider the following examples:[18]

(37) John$_i$ said he$_i$ was running for office (from Sportiche, 2007, ex. (1a))

(38) *He$_i$ said that John$_i$ was running for office (from Sportiche, 2007, ex. (1b))

(39) The office that John$_i$ is running for will make him$_i$ influential (from Sportiche, 2007, ex. (1c))

(40) The office that he$_i$ is running for will make John$_i$ influential (from Sportiche, 2007, ex. (1d))

Coreference is possible in (37), but not in (38). As pointed out by Sportiche (2007), the problem is not due to linear precedence, because both (39) and (40) are grammatical, showing that precedence by itself is not enough for accounting for the contrast between (37) and (38). In sentence (37) the problem is instead constituted by the structural relation between the pronoun and its intended antecedent.

Condition C establishes that a noun cannot be c-commanded by a coreferent pronoun: in this case the pronoun, a subject, c-commands *John*, an object, and the sentence is ungrammatical. The interesting property of this binding relation is that it is computed on the phrases in their basic positions, that is, principle C cannot be violated at any point in the derivation. Note that this consideration is quite robust and holds in many languages. Consider for instance the following Italian example (where *e* in example (42) stands for *empty,* signaling the basic position of the

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[18] The literature on this issue is very rich and it is impossible to summarize the relevant discussion in this work. See among the many others, Sportiche (2007) and references cited there.

interrogative phrase*):[19]

(41) *Lui$_i$ ha trovato [una foto di Gianni$_i$ da bambino] in un cassetto

He found a picture of Gianni as a child in a drawer

(42) *[Quale foto di Gianni$_i$ da bambino] lui$_i$ ha trovato *e* in un cassetto?

Which picture of Gianni as a child did he found in a drawer?

There is no difference in grammaticality between sentences (41) and (42) and they both contrast with the following example, which does not instantiate any binding violation:

(43) Gianni$_i$ ha trovato una sua$_i$ foto da bambino in un cassetto

Gianni found a picture of his in a drawer

This means that c-command relations relevant for principle C in sentence (42) are computed on a structure in which the interrogative phrase *quale foto di Gianni da bambino* (which picture of Gianni as a child) occupies the same position as the non-interrogative one in example (41). Interestingly, by considering focus and CLLD we find a contrast. Consider the following sentences:

(44) La mia foto con Leo$_i$, lui$_i$ non *l'*ha ancora mostrata (from Frascarelli and Hinterhölzl, 2007, ex.9)

My picture with Leo, he not it-has shown yet

'My picture with Leo, he did not show it yet'

(45) *LA MIA FOTO CON LEO$_i$, lui$_i$ non ha ancora mostrato *e* (from Frascarelli and Hinterhölzl, 2007, ex.9)

My picture with Leo-top, he not has shown yet

'My picture with Leo-foc, he did not show it yet'

(46) *Lui$_i$ non ha ancora mostrato la mia foto con Leo$_i$

'He did not show yet my picture with Leo'

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[19] For a discussion of condition C and CLLD in Italian see Cecchetto and Chierchia (1999), Frascarelli and Hinterhölzl (2007).

The focused phrase of example (45) is interpreted in the reconstructed position, i.e. as if it were in the basic position, giving rise to ungrammaticality, – see example (46). On the contrary, CLLD does not give rise to an ungrammatical result, so that example (44) is fully grammatical.

Concluding this section, current theories are correctly arguing in favor of a fundamental difference between focus and CLLD constructions, but they do not explain why this should be the case. This issue will be tackled in the next section.

4. Why is CLLD possible at all?

As pointed out in section 3.2, CLLD in principle should not be licensed in syntax, given that the dislocated phrase is neither an argument, a variable, nor an operator. Furthermore, the left peripheral phrase does not really belong to the syntactic structure of the core sentence, given that it has not originated from a sentence-internal position, but is base-generated there.

In this section, I propose that CLLD shares some important properties with parentheticals, such as intonation, distribution and the fact of being realized together with the clause without really belonging to it.[20]

4.1 CLLD and parentheticals

In previous work (Giorgi 2012, 2015, 2016), I analyzed a particular type of parenthetical, i.e. the clausal structures introducing Free Indirect Discourse (henceforth, FID). Here I compare CLLD with these parentheticals and with *as clauses* – another well studied type. To illustrate FID consider the following example:

(47)   The new ration did not start till tomorrow and he had only four cigarettes left, *thought Winston* (adapted, Orwell, *1984*, ch. 5)

In this work, I will not consider the properties of FID in general, but only those of the parentheticals introducing them, i.e. *thought Winston*, or *Winston thought* without inversion. The

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[20] See also Giorgi (2015, 2016).

sentence in which the parenthetical is inserted is called the *host* sentence.[21]

As far as as-clauses are concerned, see the following cases, in Italian and English, where the Italian the clause introduced by *come* exhibits the same properties, at least in this context, as the clause introduced by *as*:[22]

(48)   Gianni, *come tutti sanno*, è un genio

(49)   Gianni *as everybody knows*, is a genius

As pointed out above, parentheticals are associated to a typical intonation the so-called *comma intonation*, which is very general property of parentheticals of all types, hence exhibited both by FID and as-clauses. CLLD shares this property as well.[23]

CLLD and parentheticals also have similar distributional properties. For instance, they can appear on the left of the sentence:

(50)   A Piero, gli ho regalato in libro

        To Piero, (I) to him-have given a book

        'I gave a book to Piero-top'

(51)   Winston thought, the new ration did not start till tomorrow and he had only four cigarettes

        left, (adapted, Orwell, *1984*, ch. 5).

(52)   As everybody knows, John is a genius

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[21]In this work, I will not analyze the inversion phenomena in these clauses, because the issue is not immediately relevant to the discussion. On these phenomena, see D'Alessandro (to appear) and references cited there.

[22] On *as-clauses*, see the important work by Potts (2002, 2005).

[23] On parentheticals see Dehé (2009), Dehé and Kavalova (2007), de Vries (2007) among the others. Note that there is ample debate about the actual phonological and phonetic realization of the *comma* pattern. On the intonation of different types of topics, see Frascarelli and Hinterhölzl (2007). According to Selkirk (2005), as I'm going to discuss in the text, a feature, specified for the value [+comma], is responsible for the *comma intonation*. In her view, *Comma Phrases* are then mapped into *Intonational Phrases*.

They can also appear on the right:[24]

(53)   Gli ho regalato un libro, a Piero
          (I) to him-have given a book, to Piero
         'I gave a book to Piero-top'

(54)   The new ration did not start till tomorrow and he had only four cigarettes left, Winston
         thought, (adapted, Orwell, *1984*, ch. 5).

(55)   John is a genius, as everybody knows

They can also occupy a position internal to the sentence, for instance following the subject:

(56)   Io, a Piero, gli ho regalato un libro.
          (I), to Piero, to him-have given a book
         'I gave a book to Piero-top'

(57)   The new ration, Winston thought, did not start till tomorrow and he had only four
         cigarettes left (adapted, Orwell, *1984*, ch. 5).

(58)   John, as everybody knows, is a genius

As-clauses and CLLD can also appear in embedded clauses, as in the following cases:[25]

(59)   Gianni ha detto che, a Piero, gli regalerà un libro
         Gianni has said that, to Piero to him-will give a book
         Gianni said that he will give a book to Piero-top

(60)   Mary said that, as everybody knows, John is a genius

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[24] When the dislocated phrase occupies the position on the right we can speak of *right dislocation*.

[25] As discussed in Giorgi (2015, 2016), FID parentheticals cannot be embedded, due to their
particular semantic value.

From these observations, it can be concluded that CLLD should be considered a kind of parenthetical. In the next section, I sketch a theoretical analysis for these cases.

4.2 The *comma feature* projects a phrase in the syntax:

According to Selkirk (2005), parentheticals are associated with a feature, the so-called *comma feature*, responsible for their typical intonation. I capitalize here on a proposal by Giorgi (2012, 2015, 2016) and hypothesize that the comma feature is already visible in the syntax and projects its own phrase.[26]

I dubbed this kind of phrases *prosody-oriented* ones – i.e. phrases whose head projects in the syntax, but is read off at the interface with the phonological component. According to my proposal, these heads host parentheticals. I will not reproduce here the arguments in favor of the analysis I discussed in previous work, let me only point out that parentheticals are linearly orderedōwith respect to the sentence, even though they are not wholly part of it. Here I show that CLLD exhibits several properties resembling parentheticals and propose that this construction is not part of the left periphery in the sense of Rizzi (1997). I argue that CLLD has a special status, precisely because it appears in a phrase projected by a prosody-oriented head.[27]

Let's call the prosody-oriented head projecting the comma feature *K*. Consider the following exemplification for FID cases:

(61)   [$_{KP}$ **K** [*Winston thought* [$_{KP}$ **K** [$_{CP}$ The new ration..]]]]

Example (61) represents the basic structure. The parenthetical appears in between the two heads K, where the host clause in the complement of the lower one. The word order given in (47), where the parenthetical appears at the end of the sentence, is the result of a derivation, moving the host clause in the specifier of the KP, as exemplified in (62):[28]

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[26] Actually, according to Selkirk's (2005) proposal, they are associated with two features, one for the parenthetical and another for the host sentence. I follow this theoretical proposal in the text.

[27] This proposal provides a solution for the problems connected with parenthetical linearization, a complex issue that cannot be discussed here. I refer the reader to the cited references.

[28] I will not discuss here the technicalities necessary to derive (62) and the other possible orders from the basic structure (61). The issue is quite complex, and would deserve a detailed analysis, which cannot be provided here.

(62)   [_KP [_CP The new ration…]_i **K** [*thought Winston* [_KP **K** ~~The new ration~~…]]]

Consider now the same proposal as applied to CLLD. The structure corresponding to example (63), according to this theory, is exemplified in (64):

(63)   A Gianni, Maria gli ha dato un bellissimo regalo
         To Gianni Maria to him-has given a wonderful present
         'Maria gave a wonderful present to Gianni-top'

(64)   [_KP *A Gianni* **K** [_IP Maria gli ha dato un bellissimo regalo]]
         to Gianni Maria him has given a wonderful present

When the left dislocated structure is on the left of an embedded clause, as in example (65), the structural representation is as in (66): [29]

(65)   Tutti sanno che a Gianni, Maria gli ha dato un bellissimo regalo
         Everybody knows that to Gianni, Maria to him-has given a wonderful present
         'Everybody knows that Maria gave a wonderful present to Gianni-top'

(66)   Tutti sanno [_CP che [_KP *a Gianni* **K** [_IP Maria gli ha dato un bellissimo regalo]]]
         Everybody knows that to Gianni Maria to him has given a wonderful present

In these cases as well, further orderings are derived through manipulation of the basic structure. Several technical issues can be considered with respect to this proposal, some of which have been addressed in Giorgi (2015, 2016). In the following section, I sketch the most important

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[29] The reader might have noticed that in the syntactic representation of CLLD only one head K appears. This is indeed the main difference between CLLD and parentheticals, which, as discussed in the text, share several properties, but still are two different phenomena. Simplifying somewhat, parentheticals such as the ones presented here are predicative structures, whereas CLLD is not, being just a phrase, in these cases a Noun Phrase or a Prepositional Phrase. In a way, therefore, the structure associated to CLLD is simpler with respect to the one associated to the parentheticals discussed in the text.

consequences of this approach.

4.3 A brief discussion of some theoretical consequences of this proposal

The proposal presented in the previous section, though being technically very close to Rizzi's (1997) analysis and subsequent works, introduces an important novelty. According to my perspective, a sentence is constituted by the traditional syntactic components plus an extra-layer on the left, hosting material connected to the sentence, but not really part of it, due to the nature of the heads projecting the relevant phrases. This is precisely what gives rise to the difference between focus and CLLD: a focused phrase appears on the left of the subject, but is still part of the clause, whereas CLLD is not, as discussed in section 3.3 above. Parentheticals as well are connected to the sentence, but are not fully integrated, as amply discussed in the literature, see for instance Dehé and Kavalova (2007).

This notion of 'being there, but not really part of it', which emerges in several syntactic phenomena, is explained by the fact that the heads hosting the phrases in question are not syntactic heads, but prosody-oriented ones. This difference in their very nature creates a barrier to normal syntactic operations, which cannot operate in the usual way through different domains, even if they form a single connected three.

Consider also that in this way, the interfaces between syntax and phonology, and between syntax and interpretation become simpler and less 'mysterious', because it is possible to better specify the input on which they operate, which is in both cases provided by syntax.

In the next section, I consider other issues, which will further enlarge the domain of syntax to include some discourse phenomena as well.

5. Hanging Topics and Quotations

In this section, I consider a construction apparently very similar to CLLD, but which cannot be accounted for in the same way, i.e. *Hanging Topic* (henceforth, HT), and compare it to the predicated introducing quotations.

5.1 A brief discussion of Hanging Topic

As an example of HT, consider the following sentence:

(67)   Gianni, Maria gli ha dato un bellissimo regalo

         Gianni, Maria to him-has given a wonderful present

         'Gianni, Maria gave a wonderful present to him'

In this sentence a left dislocated phrase, *Gianni,* is associated with a clitic in a clause internal-position *gli*, exactly like CLLD. However, between example (63), CLLD, and (67), HT, there is a very small difference. In (63) the left dislocated phrase *Gianni* is realized together with the preposition *a* (to), marking the receiver theta role – i.e., the Dative case. In (67) the preposition is missing.[30] Moreover, in (67) the dislocated phrase is not associated to a comma intonation, i.e. the parenthetical-like intonation, suggesting that the analysis for this kind of topic cannot be provided along the lines sketched above for CLLD.[31]

On one hand, as discussed in Giorgi (2015), there is indeed evidence that HT, as CLLD, is not generated in a clause-internal position, as is immune from weak-crossover effects and cannot be interpreted under reconstruction.[32]

On the other hand, there are interesting interpretive and distributional differences between the two. Consider for instance the following examples:

(68)   Gianni, gli hanno dato un bel voto

         Gianni, they gave him a good mark

(69)   Gianni, hanno dato un bel voto perfino a lui

         Gianni, they gave a mark even to him

(70)   Gianni, hanno dato un bel voto perfino a quel cretino

         Gianni, they gave a good mark even to that idiot

As shown above, HT, like CLLD must be associated with a resumptive element inside the clause. Contrary to what happens with CLLD, this element can be a clitic, as in (68) – and (67) above – but can also be a full pronoun or an epithet, as in (69) and (70) respectively. Speaking informally, this means that the relation between HT and its clause is 'looser' than the one between the clause

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[30] This implies that an accusative dislocated phrase, which is realized without the preposition, could be in principle be ambiguous between CLLD and HT. To avoid this problem, I will only use dative phrases in the examples.

[31] See Samek-Lodovici (2015) and Brunetti (2004), for a discussion of the intonational issue.

[32] I refer the reader to the relevant discussion of this point in Giorgi (2015).

and CLLD.

Furthermore, HT cannot be embedded, contrasting with CLLD:

(71)   *Mario ha detto, *Gianni*, che non *gli* daranno il passaporto
       Mario said, Gianni, that they to him-will not issue the passport

(72)   *Mario ha detto che, *Gianni*, non *gli* daranno il passaporto
       Mario said that, Gianni, they to him-will not issue the passport

Both sentences (71) and (72) are ungrammatical and contrast with (73), containing a CLLD. Note that embedding is not possible even if the main verb is a *saying* verb. In other words it is impossible to interpret HT in a shifted context, such as the one created by Mario's utterance, as in the following example:[33]

(73)   Mario ha detto che, *a Gianni*, *gli* daranno il passaporto
       Mario said that to Gianni, they to him-will issue the passport

Hence, HT is a root phenomenon, whereas CLLD is not.

With respect to word order properties, HT and CLLD can co-occur, but HT must precede CLLD:

(74)   Gianni, quel libro, glielo hanno già comprato
       Gianni-HT, that book-CLLD, to him-it- (they) have already bought
       'They already bought that book to Gianni'

(75)   *Quel libro, Gianni, glielo hanno già comprato
       That book-CLLD, Gianni-HT, to him-it-(they) have already bought
       'They already bought that book to Gianni'

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[33] Note that HT, even though it cannot be embedded itself, can be connected to an embedded clause, as in the following case:

i.   Gianni, Mario ha detto che gli daranno il passaporto
       Gianni, Mario said that they to him-will give the passport
       'Gianni-HT, Mario said they will give him his passport'

Gianni is a HT, being associated with a dative, whereas *quel libro* (that book) is a left dislocated phrase. Furthermore, HT must precede a left-peripheral focus as well, as in the following case:

(76)   Gianni, IL LIBRO gli hanno comprato, (non la penna)

Gianni-HT, the book-FOC, to him-it- (they) have bought (not the pen)

'They already bought the book to Gianni (not the pen)'

(77)   *QUEL LIBRO, Gianni, gli hanno comprato (non la penna)

That book-FOC, Gianni-HT, to him-it-(they) have already bought (not the pen)

'They already bought that book to Gianni (not the pen)'

Finally, HT can never appear on the right of the sentence, contrary to CLLD – cf. example (53) above:

(78)   *Quel libro, glielo hanno già comprato, Gianni

That book-CLLD, to him-it- (they) have already bought, Gianni-HT

'They already bought that book to Gianni'

These pieces of evidence point to the conclusion that HT and CLLD must be accounted for in different ways, hence the parenthetical solution might not be the appropriate one for HT.

Consider also the following example (from Cinque 2008, ex.61), which I will further discuss in the next section:

(79)   A pink shirt? I will never wear any such thing in my life!

The phrase *a pink shirt* can be conceived of as a HT. Interestingly, in this case it is associated to an interrogative intonation, but it might be associated to an exclamative one as well:

(80)   A pink shirt! I will never wear any such thing in my life!

This evidence shows that the illocutionary force of a HT can differ from the one of the main sentence, something that could never happen with a CLLD.

Concluding these brief remarks, a HT doesn't have the comma intonation, can only appear on the extreme left of the sentence, cannot be embedded and can be illocutionary independent.

5.2 A comparison with quotations

In section 4 I discussed the parenthetical introducing FID. There is a very similar structure, exemplified by the following examples:[34]

(81)   Domani, disse Gianni, partirò all'alba

Tomorrow, said Gianni, I will leave at dawn

(82)   Domani partirò all'alba, disse Gianni

Tomorrow I will leave at dawn, said Gianni

(83)   Gianni disse: "partirò domani"

Gianni said "I will leave tomorrow"

According to the proposal discussed above for FID parentheticals, the sentence in (81) ban be derived from the following basic structure:

(84)   [$_{KP}$ **K** [*Gianni said* [$_{KP}$ **K** [$_{CP}$ I will leave tomorrow]]]]

The word order in (82) can be derived via topicalization of the CP:

(85)   [$_{KP}$[$_{CP}$ I will leave tomorrow] **K** [*said Gianni* [$_{KP}$ **K** ~~I will leave tomorrow~~]]]

In this respect, these sentences are not especially different from FID, and I will not discuss them further here.

Let's consider instead sentence (83). This case is very similar to the previous ones, but it exhibits

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[34] Note that in these cases the inversion of the subject in the parenthetical, the so-called *quotative inversion*, is the preferred option in Italian. In my Italian, the non-inverted sentence is also acceptable. The same is roughly true for English. I will not investigate this issue here, because it is not relevant for this discussion. Also, I will not discuss the differences between FID and Quotations and refer the reader to Giorgi (2016) and Sharvit (2004), Schlenker (2003, 2004), Guéron (2015) among the many others.

some peculiar properties. The introducing predicate in this case cannot undergo quotative inversion in languages like English:[35]

(86)   *Said John: "I will leave tomorrow"

Moreover, (83) has an intonation of its own, which does not resemble at all the comma intonation of parentheticals, assigned to (81) and (82). The introducing predicate with the non-comma intonation, must appear at the extreme left of the sentence, both in Italian and English. Consider other possible orders: [36]

(87)   *Domani, Gianni disse: "partirò"
         Tomorrow, Gianni said: "I will leave"
(88)   *"Partirò domani" Gianni disse
          "I will leave tomorrow" Gianni said

Sentences (87) and (88) are only possible with the comma intonation.

Hence, given these differences, the sentence in (83) cannot be assigned the structure in (84). The head K in fact would not be appropriate in this case, since the sentence does not have the comma intonation. Moreover, no derivation as the one in (85) should be available, given the impossibility of word orders other than (83). On the other hand, these properties closely resembles the ones described above for HT. Consequently, I propose the same structure for both constructions.

5.3 Towards an explanation

The most relevant property is the fact that both HT and the predicate in (83) can appear only at the extreme left of the sentence. On one hand, like parentheticals, they do not really belong to the rest of the sentence, but on the other, they sharply differ from parentheticals both in intonation and distribution. Both are separated from the rest of the sentence by an extra-long pause. Moreover, HT can also have an illocutionary force of its own – as shown in examples (79) and (80).[37]

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[35] Italian, being a so-called *pro-drop* language, admits subject inversion much more freely.

[36] Note that this sentence would be acceptable with the parenthetical intonation discussed above. It is no possible, however, to maintain the intonation associated to example (83) in (87) and (88).

[37] For a proposal on (79), see Cinque (2008). Cf. also the discussion in Giorgi (2015).

My proposal is that the predicate introducing quotation – when it precedes the direct discourse – and HT are connected to the rest of the structure by means of a *discourse head*. I.e., they do form a unity with the structure following them, but the connection is not provided by means of a syntactic head, but by a special kind of head, which is used to build bigger structures formed by sequences of sentences. In other words, I propose that the sentences forming a discourse are not disconnected trees, ordered in some way by a post-syntactic mechanism, but unitary structures hierarchically organized.

According to this proposal a sentence such as *John said: "Mary will leave tomorrow"* is represented as follows (where *DIS* stands for Discourse Head): [38]

(89)   [$_{DIS-P}$ *John said* DIS [$_{CP}$ Mary will leave tomorrow]]]

Analogously, HT constructions have the following structures:

(90)   [$_{DIS-P}$ *Gianni* DIS [$_{CP}$ Maria *gli* ha dato un bellissimo regalo]]]
           Gianni   Maria to him-has given a beautiful present
        'Gianni, Maria gave him a beautiful present'

The head *DIS* does not permit any kind of manipulation involving specifier and complement. On the other hand, it introduces a syntactic hierarchy, which might be relevant for interpretive aspects. Further research is needed with respect to this issue.

6. Conclusions

In this work I argued that syntactic structures provide the basis on which the interfaces with prosody and interpretation operate. To do so, the syntactic representation must include

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[38] Similarly, Cinque (2008) proposes the following structures:

i.   John is no longer here. He left at noon. (Cinque 2008, ex.59)

ii.   [$_{HP}$ CP [H CP]] (ex.60)

iii.   A pink shirt? I will never wear any such thing in my life!

iv.   [$_{HP}$ DP [H CP]] (Cinque 2007, ex.61).

Cinque's head H corresponds to my head DIS.

information going beyond the simple encoding of 'traditional' sentential grammar relations. For instance, prosody-oriented heads must be provided, to host parentheticals, and discourse heads must be realized to connect sequences corresponding to multi-sentential structures. This move renders the domain of pragmatics much less removed from sentential syntax, than previously thought. This is a welcome result, because, ideally, we would like to have an integrated theory of language, where all the components of grammar work together, on the basis of the same representation. This work is however very sketchy and presents just a research project, not a fully worked out integrated grammar. Further study will tell us whether the approach presented here is able to provide a better account, with respect to the ones currently available.

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