CHAPTER 32

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SYNTACTIC AND PROSODIC EFFECTS OF INFORMATION STRUCTURE IN ROMANCE

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32.1 INTRODUCTION

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THE study of Information Structure (IS) and syntactic structure in Romance within the generative paradigm started in the 1970s with articles dealing with pragmatically marked constructions on the left edge of the clause (cf. Cinque 1977, on left dislocation; Benincà 1988; Cinque 1990 on various constructions). The right edge of the sentence was first explored by Antinucci and Cinque (1977). The first Romance language to be thoroughly investigated was Italian, which provided the basis for future work already at the end of the 1970s in Cinque (1977). Since then, other Romance languages, such as Spanish, French, European and Brazilian Portuguese, but also Sardinian, Rhaeto-Romance, and non-standard varieties, have been investigated.[1]

The seminal article by Rizzi (1997) on the fine structure of CP, the Left Periphery, has again put Italian in the foreground and opened the Cartographic project (Aboh, this volume); it provided a general frame into which most of the detailed observations made in previous work could be systematized.

On the other hand, the syntactic point of view has been complemented by work done on other related issues such as the prosody of different types of informationally marked constructions in French (Doetjes et al. 2002; Delais-Roussarie et al. 2004), in Spanish (see among others Zubizarreta 1998, this volume), in Italian (Frascarelli and Hinterhölzl 2007; Bianchi and Frascarelli 2010), and European Portuguese (Frota 2000).

More recently, work on the 'right edge' has been made by Belletti (2004, 2009), López (2009), and Villalba (2009) for Catalan, Martins (2013) for European Portuguese, among others.

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[1] In this chapter we only take into account work provided within the generative framework.

There is general consensus on the fact that IS-relevant information is encoded in Romance at the left and right edges of the clause. The majority of the authors analyse the left edge as left-peripheral positions to the clause.

Another general observation is the fact that several elements can be stacked in the left and right peripheries, some of them display rigid orders, others do not and can be iterated and/or switched with other elements. It seems that in Romance there is no one-to-one correspondence between pragmatic import and syntactic properties. It is also clear that in all Romance languages investigated so far the two peripheries are similar but not completely overlapping, neither from the syntactic nor from the informational point of view.

In this chapter, we first provide an empirical description of the left edge of the clause (in Section 32.2) and then the right edge (in Section 32.3). In Section 32.4, we briefly discuss some general prosodic aspects of Romance and the prosodic correlates of information structure and marked word orders. Section 32.5 constitutes a brief outline of different 'families' of syntactic and prosodic approaches to the problem.

The phenomena we discuss in this chapter are intended to provide an overview of the most representative and theoretically relevant phenomena, and cannot be exhaustive for reasons of space. We are well aware of the fact that it is not possible to cover all the material produced on Romance in various theoretical frameworks in one single chapter, especially if the non-European varieties like Brazilian Portuguese, Southern American Spanish, Quebec French, and the French varieties spoken in the former French colonies in Africa are taken into account, not to mention creoles. Therefore, we have selected those constructions with specific theoretical import, leaving out others, for instance all bi-clausal constructions such as pseudo-clefts and cleft-sentences are not systematically treated here.

32.2 THE LEFT PERIPHERY

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32.2.1 Topics

The first construction originally pinned down by a set of syntactic tests in Benincà (1988) is the one of Hanging Topics and scene setting adverbs (either temporal or locative adverbials), which are the most external elements of the clause. Hanging Topics (HTs) can correspond to an argument of the predicate (as in (1a)), an adjunct or even be only pragmatically related to the arguments of the following clause (as in (1b)):

(1) a. Pierre, sa voiture, cet idiot ne s'occupe pas d'elle correctement.
     'Pierre, his car, this idiot does not treat it properly.'

(from Delais-Roussarie et al. 2004: 8)

    b. Fiori, mi piacciono le camelie
       Flowers, me.like.PRES.3PL the camelias

    'As for flowers, I like camelias.'

The typical properties that distinguish HT from other types of topics, notably realized as Clitic Left Dislocation (ClLD), are the following ones: (see López, this volume, for examples).[2]

A) HTs corresponding to a prepositional argument in the sentence never copy the preposition (1a), while ClLD always does, see (2).

(2) A la campagne, Paul n'y reste jamais longtemps.
     'In the country, Paul never stays there a long time.'

(from Delais-Roussarie et al. 2004: 2b)

B) As shown in (1a), HTs must have resumptive elements but can be resumed by any epithet, i.e. a complete DP, or clitics indifferently, while ClLDs can only be resumed through clitics. This is also the test often used in the literature to distinguish between the two constructions.

C) In some Romance languages, an HT is not accepted in the CP of an embedded clause, while ClLDs can freely occur both in main and embedded domains.[3]

D) As discussed by Cinque (1990) with regard to Italian, HT and ClLD are not clause-bound (López, this volume). However, only HT can violate strong islands. It has been observed that strong islands block ClLD in several languages, like Spanish (Gutiérrez Ordóñez 1997); Catalan (Villalba 1998, 2009); Romanian (Cornilescu 2004; Soare 2009); and Greek (Iatridou 1995; Anagnostopoulou 1997).

Although the syntax of left dislocations seems *prima facie* rather stable across Romance, that is all Romance languages we know of have constructions where a topic is found on the left edge of the clause and is resumed by a clitic inside the clause, there are clear differences in the distribution of the various constructions in terms of usage. Differently from Italian, French generally prefers HTs to ClLD in main clauses while ClLDs are mainly used in embedded clauses, where HTs are either excluded or marginal (Delais-Roussarie et al. 2004).

E) While French HTs can be iterated, as shown in (1a) (Delais-Roussarie et al. 2004), in the other Romance languages it is reported that only one HT is allowed per sentence (see Villalba 2009, among others). In this respect, HTs thus contrast with ClLDed elements that can co-occur.

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[2] While Rizzi (1997) does not discuss the differences between left dislocation with a resumptive clitic and the cases where the resumptive clitic is not present, other authors distinguish the two instances and call them ClLD and Topicalization (not to be confused with the English-type Topicalization phenomenon). As noted by Delais-Roussarie et al. (2004), the properties of the two constructions are extremely similar, therefore we keep them together for reasons of space.

[3] Some speakers do also find them grammatical in embedded domains and there is variation according to the type of embedded clause, a phenomenon we do not deal with any further, because the empirical range of the phenomenon is still not well-defined.

The distribution of HT and ClLD just illustrated suggests that there is no one-to-one correspondence between syntax and pragmatics. Both Italian and French can use two different constructions to express the same pragmatic function. The literature on the Romance languages generally follows Reinhart's (1981) definitions of aboutness topics, and Chafe's (1987) definition of familiarity/given topics. Notice that from the pragmatic point of view HTs can only be so-called aboutness topics,[4] while ClLDed elements can either be aboutness or given[5] topics (for a clear discussion on this, see among others Frascarelli and Hinterhölzl 2007 and Bianchi and Frascarelli 2010). The pragmatic function of a so-called aboutness topic can thus be performed by HT or ClLD indifferently. Notice that this is the case not only across languages, but even within the same language: given topics can either be expressed by left-peripheral or by right peripheral elements.

A further well-known empirical generalization is that ClLD topics can iterate and can also be switched so that all orders are possible. This is not the case for HTs (except in French, see above).

(3) A Marie, de ce crime, je crois que   je ne   lui en   parlerai pas.
     'Marie,   this crime,   I   think that   I   will not tell her   about   it.'

(from Delais-Roussarie et al. 2004: 3)

32.2.2 Focus fronting

The third type of element found in the left periphery of the clause is a focus element. Focus can either be realized *in situ*[6] or through an operation of fronting to the left

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[4] We follow here the original definition of Reinhart (1981: 80–81): she states that: 'Sentence topics, in this view, are one of the means available in language to organize or classify the information exchanged in linguistic communication, they are signals for how to construct the context set or under which entries classify the new propositions'. More technically, 'we define the topic expression of a sentence S in the context C to be the expression corresponding to a ᵢ in the pair <a ᵢ of PPA(S) (possible pragmatic assertions) selected in C'.

[5] Frascarelli and Hinterhölzl (2007: 2) define the three types of topics mentioned here in the following way: 'Topics, however, "do different things" and (at least) three types of topics can be identified: (a) aboutness topic: "what the sentence is about" (Reinhart 1981; Lambrecht 1994); in particular a constituent that is "newly introduced, newly changed or newly returned to" (Givón 1983: 8), a constituent which is proposed as "a matter of standing and current interest or concern" (Strawson 1964); (b) contrastive topic: an element that induces alternatives which have no impact on the focus value and creates oppositional pairs with respect to other topics (Kuno 1976; Büring 1999); (c) familiar topic: a given or accessible (cf. Chafe 1976; 1987) constituent, which is typically destressed and realized in a pronominal form (Pesetsky 1987); when a familiar topic is textually given and d-linked with a pre-established aboutness topic, it is defined as a continuing topic (cf. Givón 1983).'

[6] In this chapter, the terms '*ex situ*' and '*in situ*' are used as merely descriptive, i.e. to indicate whether an element appears or not overtly displaced from its base position. An anonymous reviewer raised the question whether a focused preverbal subject is moved to the left periphery or occupies its SpecTP. Bocci

periphery.[7] Focus fronting can be distinguished from CILD because it never allows for a resumptive pronoun,[8] while CILD obligatorily requires a clitic for direct objects, partitives, and subjects (in languages with subject clitics), but not for datives (cf. (2)), (Rizzi 1997; Cecchetto 2000; Cruschina 2011, Cruschina, in press). Sentence (4) is an example of focus fronting in Italian, where the direct object is fronted to the left periphery and bears main prominence:[9]

(4) UN   CANE   si   è   comprato!
    A   dog   himself   AUX.3SG   buy.PP

    'He bought himself a dog!'

Focus fronting is possible in Italian, Spanish (Zubizarreta 1998), Catalan (Vallduví 1992), Romanian (Motapanyane 1998; Alboiu 2002, 2004), Brazilian Portuguese (Kato and Raposo 1996), but very marginal in French.[10] The availability of focus fronting in European Portuguese is controversial (Costa and Martins 2011).

A complex issue concerns the possible discourse-related import associated with fronted foci. For Italian (Rizzi 1997, among others), Romanian (Alboiu 2004), and European Portuguese (for the variety that allows focus fronting, Costa and Martins 2011), it is reported that focus elements can undergo fronting only if characterized by contrastive import, mainly defined as being opposed to a (new) information focus import, that is, the focus interpretation in answers to wh-questions. In the context of (5) it is generally reported that focus fronting as in (4) is infelicitous and that the object must appear in post-verbal position.

(5) Che cosa si è comprato Mario?

    'What did Mario buy himself?'

With the relevant exception of Brunetti (2004), who advocates a unified notion of focus along the lines of Rooth (1992), such a distribution has been adduced as evidence in

(2013) argues that in Italian focalization *in situ* is not available for subjects in Spec TP. A subject that occurs in preverbal position and associates with the prosody and the interpretation of focus cannot sit in Spec TP, i.e. the position occupied by a non-focused subject: it must be fronted to the left periphery being extracted from its thematic VP position with a quantificational movement that skips Spec TP. We refer the reader to Bocci (2013) for the arguments in favour of this conclusion and its theoretical implications.

[7] Overt focus fronting to the left periphery, when possible, is always optional in Romance and different analyses have been proposed to account for optionality: see Rizzi (1997), Alboiu (2004), Brunetti (2004), Bianchi and Bocci (2012).

[8] A notable exception is Romanian, where clitics can double focused definite objects, but also d-linked wh-items (Motapanyane 1998).

[9] When relevant for the discussion, capitals indicate main prominence.

[10] However, Abeillé et al. (2008) describe a type of fronting which is reminiscent of mirative focus fronting in the sense of Cruschina (2012).

favour of a focus typology. It is worthwhile mentioning, however, that the semantic/pragmatic conditions licensing focus fronting cannot always be properly characterized simply in terms of contrastive focus and should be better understood.

In the alternative semantic framework (Rooth 1992, this volume and much related literature), the notion of contrastive focus is quite broad and is basically related to the idea that contrastive focus evocates alternatives salient in the context (Krifka 2008). Bianchi and Bocci (2012) show that focus fronting in Italian is not licensed by a merely contrastive focus import. Consider (8a) as a reply to (6): (8a) conveys an utterance-internal contrast and the negative tag explicitly provides the relevant alternative. Notably, in such a context focus fronting is not licensed: (8b)—the fronted counterpart of (8a)—is infelicitous. Consider now (8a) as a reply to (7): focus conveys a contrast across utterances (Bianchi 2013) and focus fronting becomes possible; (8b) is perfectly natural.

(6) A: Maria   era   molto   elegante   ieri   a teatro.
       'Maria   was   really   elegant   yesterday   at the theatre.'

(7) A: Ieri sera   a teatro   Maria   si era messa   uno straccetto   di H&M.
       'Yesterday   at the theatre   Maria   wore   a cheap-dress   from H&M.'

(8) a. B: Si   era messa   un   vestito di ARMANI,   non
          'She   wore   an   Armani dress,   not

          uno straccetto   di H&M.
          a cheap-dress   from H&M.'

    b. B: Un   vestito di ARMANI   si   era messa,   non
          'An   Armani dress   she   wore,   not

          uno straccetto   di H&M.
          a cheap-dress   from H&M.'

As illustrated in the previous examples, the availability of focus fronting strictly depends on the interpretative properties of the context. This suggests that focus fronting cannot be viewed as a pure 'stylistic' phenomenon occurring in the PF branch of the derivation (Bianchi and Bocci 2012).

Notice that the corrective import of focus is not the only possible interpretation for fronted foci in Italian. Cruschina (2012: 3.5.2) shows that focus fronting in Italian, as well as in Sardinian and Sicilian, is also licensed by 'mirative' import, as illustrated in (9).

(9) Ma guarda tu!   In BAGNO ha   messo le chiavi!
    but look.IMP2SG   in bathroom AUX.PRES3SG   put.PP the keys

    'Look at that! He put the keys in the bathroom!'

According to Cruschina (2012: 120), in a case of mirative fronting the information provided by the focus element does not meet the speaker's expectations or what is assumed by the speaker to be shared knowledge. In this sense the sentence gives rise to an effect of unexpectedness and surprise. Notably, the background in case of mirative fronting is not necessarily discourse-given.

In addition, for Spanish, Catalan, and European Portuguese, several scholars have reported that focus fronting can convey imports that cannot be labelled as cases of contrastive focus fronting and are, in some respects, close to the mirative import described by Cruschina (2009, 2012, Cruschina, in press). Ambar (1999), for instance, analyses a type of focus fronting in European Portuguese that she terms 'evaluative construction', illustrated in (10) from Ambar (1999: (44)), see also Costa and Martins (2011).

(10) Muitos   livros   lhe   ofereci   eu!
     many   book   him   offered   I

The Romance varieties in which focus fronting is licensed in a larger series of contexts are Sicilian and Sardinian, which seem to have maintained the pattern of Old Romance (see (11)). In contrast to the other Romance varieties, focus fronting in Sicilian and Sardinian can express new information focus (see Cruschina 2012, López, this volume).

(11) 'Qual   è   il   maestro, di voi tre?' L'uno   si   fece   avanti   e
     which is the master   of you three the one REFL made.3SG forward and
     disse: 'Messere, io sono.'
     said.3SG sir   I   am
     '"Who is the master among you three?" One took a step forward and
     said: "Oh Sir, I am."' (Novellino XIX: 174)

In Old Romance the direct object could also be preposed without a clitic, which is not the case in modern Romance, where the clitic must be present (Benincà and Poletto 2004). However, this is not the case for elements that do not have a possible clitic, as for instance temporal items. Furthermore, in modern Romance, the possibility for a preposed argument to be in focus (or Operator) position is more restricted than it used to be in Old Romance varieties. This aspect of the Old Romance grammar still survives in modern Portuguese (Benincà 2006).

In French, left-peripheral focus is reported to be impossible or at best marginal. The main strategy for information (as in (12a)) as well as contrastive focus (see (12b)) in French are clefts:

(12) a Q: Qui (est-ce qui) a parlé?   (from Belletti 2014: 3)

         'Who spoke?'

      A: C'est   Jean   (qui a parlé).
          'It is   Jean   (that spoke).'

      b Context:
         On m'a dit que hier t'as acheté un journal   (from Belletti 2014: 5)

         'They told me that yesterday you have bought a newspaper.'

         Correction:
         Non, c'est UN LIVRE que j'ai acheté.

         'Not, it is a book that I have bought.'

Clefts have been analysed by several authors as monoclausal constructions in interrogatives, but not in declaratives. Munaro and Pollock (2005) provide tests to distinguish between monoclausal and bi-clausal clefts, and show that even in French and even in interrogatives there can still be bi-clausal constructions, that is the supposed grammaticalization cline has not been completed in all constructions. (See Mioto (2012) for Brazilian Portuguese and Belletti (2014) for an approach comparing French and Italian.)

Generally, we conclude that all Romance languages have ClLD left dislocations (which copies the case and in some cases is obligatorily resumed by clitics) and HT (which does not copy the case and has always to be resumed either by clitics or by epithets) (López, this volume). The syntax of topics also seems to be diachronically stable since the first records of Romance (Benincà 2006), while focus is syntactically encoded in different ways across modern Romance languages. This is probably a consequence of the fact that all Romance languages were V2 languages, with the generalized possibility of having a focus moved to the specifier of a Focus projection in the left periphery, and some of them still preserve traces of this grammar, while others have completely lost it. But this primarily derives from the fact that, as already noted, the pragmatic uses of syntactic focus vary across languages (as also pointed out by Krifka 2008: fn. 4).

32.3 RIGHT PERIPHERY

While work on the left periphery has been rather extensive in the past fifteen years, the work on the right edge of the clause has been undertaken by fewer linguists, and on a smaller sample of languages. In this section, we present the empirical properties of the elements located at the right edge of the clause in Romance.

32.3.1 Clitic Right Dislocation, Marginalization, and Afterthoughts

As seen above, the left edge of the clause is targeted by distinct types of displacement related to information structure. Analogously, on the right edge of the clause there are

several types of discourse-related constructions, which exhibit different morphosyntactic properties.

The first construction found in all the Romance varieties investigated is Clitic Right Dislocation (RD),[11] which is not, as its name suggests, the perfect mirror image of clitic left dislocation. With ClLD, Right Dislocation shares the following properties:

A) the dislocated element can be any type of XP and resumed (or better anticipated) by a clitic inside the clause.
B) Multiple instances of RDed elements can co-occur (López, this volume) and their relative order is free.
C) Quantifiers resist RD.

However, while ClLD can either be used to express aboutness topics, shift topics, or given topics,[12] RD only accepts given topics, as originally noted by Benincà (1988).

Unlike ClLD, RD is clause bound. Since RD is subject to Ross's (1967) right roof constraint, an RDed topic can only appear at the right edge of the clause where it is interpreted. This generalization holds for Catalan (Villalba 2009) and Italian (Cecchetto 1999), while it is controversial in French (Delais-Roussarie et al. 2004; de Cat 2007).

Vallduví (1992) argues that in Catalan all the constituents that follow an instance of post-verbal focus must be syntactically right dislocated. This is not true in Italian where 'Marginalization' is possible (Antinucci and Cinque 1977): after an instance of post-verbal (contrastive) focus, constituents can be prosodically subordinate in their *in situ* syntactic position:

(13) Ha comprato   GIANNI,   il giornale.
      AUX.PRES3SG buy.PP Gianni   the newspaper.

(from Cardinaletti 2001: 2a)

Cardinaletti (2001, 2002) shows, for instance, that marginalized elements and RDed constituents contrast in several respects: only marginalized elements can be quantifiers; when several marginalized constituents co-occur, they must appear in the unmarked word order.

The third construction found in the right periphery is the so-called Afterthought: Cecchetto (2000) and Villalba (2009) show that RD and Afterthoughts have distinct syntactic properties:

[11] See Villalba (2011) for a comparative analysis of right dislocation in Spanish and Catalan.
[12] See fn. 5.

A) On a par with Marginalization and in contrast to RD, when more than one Afterthought is found, the order is fixed and reflects the basic word order (see Cecchetto 1999 for Italian and Villalba 2009 for Catalan).
B) Afterthoughts can allow for other types of resumptive elements, not only clitics, in contrast to RD (which requires a clitic) and Marginalization (which has no resumption).
C) Afterthoughts do not obey the right roof constraint.

The fact that RD, Marginalization, and Afterthoughts have so many distinct syntactic properties is generally explained in terms of different syntactic positions of the three constructions.

32.3.2 Low focus

The other major class of phenomena on the right edge of the clause has to do with focus: while contrastive/corrective focus is the type of focus typically found on the left of the clause in the majority of the modern Romance languages (see the preceding discussion for exceptions), low focus can either be contrastive/corrective or new information focus. This is shown by the standard test which uses question–answer pairs to determine information focus:

(14) A: Chi   ha   parlato?
        Who   aux.3SG   speak.PAST.PART

     B. Ha   parlato   Gianni
        aux.3SG   speak.PAST.PART   Gianni

     'Who spoke? Gianni spoke.'

As (14B) shows, this interacts with the position where the subject is realized in an interesting way: all Romance languages (including French) display at least a limited amount of post-participial subjects which occur at the edge of the vP.

French is the language where post-verbal subjects are most limited, as they occur only in sentences where there is a wh-operator (such as wh-interrogatives or relative clauses) or a modal operator (as in subjunctive clauses). However, post-verbal subjects of unaccusative verbs are more widespread. Brazilian Portuguese is losing post-verbal subjects altogether except for the unaccusative class, while Italian, Spanish, Catalan, and European Portuguese all also display post-verbal subjects in sentences where no operator is present. The distribution of post-verbal subjects depends in some languages on the type of verb: while transitive and intransitive verbs only allow for new information (or contrastive) focalized post-verbal subjects, that is, the interpretation is only one of

narrow focus on the subject, a sub-class of unaccusative verbs allow for post-verbal subjects with a broad focus interpretation.

(15) a. La torta,   la compra   MARIO   (, non Piero).
        The cake,   it buy.PRES3SG Mario   (not Piero)

     'Mario will buy the cake, not Piero.'

    b. E'   arrivato   PIETRO.
       aux.3SG   arrive.PAST.PART   Pietro

     'Pietro arrived.'

Tortora (1997), developing a description in Benincà (1988), compares data from the Piedmontese dialect of Borgomanero, Italian, and English. She shows that the correct divide between cases like (15a) and (15b) is not the one between unaccusatives and transitives or unergatives, but first of all inside unaccusatives, between verbs of inherently directed motion and other unaccusatives, that is the *arrivare* class as opposed to the *partire* class. Consider the Italian examples in (16) in contrast to (15b):

(16) E'   partito   MARIO.
     aux.3SG   leave.PP   Mario

     'Mario left.'

In (15b) the post-verbal subject bears main prominence, however it does not necessarily express narrow focus, and the sentence can be 'all new' as in the answer to a question like 'What happened?'. In (16) the subject is necessarily interpreted as narrow focus (with a contrastive or new information import). The fundamental distinction illustrated above is that a subject of an unaccusative verb like *arrivare* ('to arrive') can occur post-verbally only if the verb is associated with an implicit speaker-oriented locative, otherwise the subject can only occur in preverbal position. Very fine-grained distinctions among different verbal classes like these clearly call for a syntactic account, which more readily reflects the thematic structure of the different verbal classes.

Narrow focus can license reordering of the internal arguments of the verb: even French, which generally resists focus movement to the left periphery, allows for marked sequences in which the indirect object precedes the direct one when the latter is focused:

(17) a. Ils   ont   donné   un prix   à Jean.
        they   AUX.3PL   give.pp   a prize   to Jean

                                             (from Belletti and Shlonsky 1995: 41)

    b. Ils   ont   donné   à Jean   un prix.
       they   AUX.3PL   give.pp   to Jean   a prize

     'They gave a prize to Jean.'

For an analysis in cartographic terms see (Belletti and Shlonsky 1995; for an analysis in the Optimality Theoretic framework see Adli 2011).

A key proposal which accounts for both RD and low focus and whose insights have been followed also by those authors who assume a non-cartographic framework (see among others López 2009), has been made by Belletti (2004), who claims that there exists a low right periphery at the vP edge in Italian. The low periphery hosts topic and Focus projections in a way rather similar, though not identical, to the 'high' left periphery in CP. According to Belletti (2004), those post-verbal subjects that convey narrow focus are located in a Focus projection at the edge of the vP phase. Those post-verbal subjects (like those of inherently directed motion verbs) that allow for a broad focus interpretation remain in their thematic position. She argues that the parallel between the high left periphery in the CP phase and the one in the vP is not complete though, as the vP Left Periphery contains new information focus, which is never realized in the CP in Italian. Within her view, the two peripheries are parallel in the sense that both Focus projections are preceded and followed by topic projections. Belletti's analysis is mainly based on post-verbal subjects in Italian, which shares this property with Spanish. However, Spanish and Portuguese are more liberal as they also allow for VSO and VOS orders, that is, cases where a non-right-dislocated object occurs either before or after the post-verbal subject. An account which departs from Belletti's proposal of two partially symmetric peripheries is the one by Costa (2004), who assumes that the subject can occur in SpecAgrS, SpecT, SpecV in addition to the possibility of Left Dislocation and shows that what is called 'free variation' is not free variation at all. He argues that Information Structure and their interplay with prosody may choose a VOS output over an SVO order, when the subject is the focus of the sentence and must receive the sentence's nuclear stress.

However, the distinction between Italian, on the one hand, and Spanish and Portuguese, on the other, at present remains unexplained and awaits more detailed comparative empirical work.

32.4 PROSODY AND INFORMATION STRUCTURE

32.4.1 Preliminary considerations

In Romance languages, the prosodic constituency of broad focus sentences, that is all-new sentences, results from the interplay of several factors: syntactic factors, like syntactic branching (Nespor and Vogel 1986, see also Selkirk 1986) and maximal projection boundaries (Truckenbrodt 1995), and phonological factors, like minimum/maximum phonological weight, etc. (Ghini 1993; Selkirk 2000; Prieto 2007; Feldhausen 2010). How the interplay between these factors shapes the prosodic constituency seems to vary across Romance languages (D'Imperio et al. 2005, and related work). Nevertheless, in all Romance languages, at the level of the phonological phrase, intonational phrase,

and utterance phrase, prosodic heads are invariantly assigned rightmost in broad focus sentences and stress assignment is insensitive to the argument structure of the verb (Zubizarreta, this volume).

It is a well-established observation that in Germanic languages such as English, German, and Dutch elements expressing discourse-given information in the sense of Schwarzschild (1999) generally fail to bear phrasal stress and to associate with pitch accents (Féry and Samek-Lodovici 2006; Rochemont, this volume). The distinction between the effect of focus on post-focal elements and the effect of givenness is crucial when we take Romance into consideration. Romance languages, in contrast to Germanic languages, fail to destress given information *in situ*, but the occurrence of focus forces the post-focal elements included in its scope to be prosodically subordinate to focus, giving rise to a marked prosodic structure. In other words, focus can alter the default prominence distribution, while discourse-givenness cannot.

That given information is not destressed/deaccented in Romance has been pointed out by many scholars (Vallduví 1991, 1992; Ladd 1996; Cruttenden 1997) and this generalization has received strong experimental support (Swerts et al. 2002; Zubizarreta, this volume). Consider the exchange in (18) from Selkirk (2007: (54)). In B's reply, 'Bin Laden', being discourse-given, is destressed and deaccented and does not qualify as the head of its phonological phrase. Accordingly, the prosodic head ends up being assigned to 'search', giving rise to a marked prosodic pattern in which 'Bin Laden' is less prominent than 'search'. Notably, the marked prosodic pattern in (18B) is to be ascribed exclusively to DESTRESS-GIVEN.

(18) A: Bin Laden has successfully avoided capture for nearly five years.
     B: It's not clear that the search for Bin Laden is still going on.

(19) B: Non è chiaro che la ricerca di Bin Laden sia ancora in corso.   *Italian*
     Not is clear that the search of Bin Laden be still going on

Consider now (19B), the Italian counterpart of (18B): in this context 'Bin Laden', although discourse-given, is pitch accented and cannot be less prominent than 'ricerca'. The same facts are observed in Spanish, Catalan, and Romanian.

32.4.2   Focus, stress, and pitch accents

Romance languages differ with regard to the intonational properties associated with focus. On the one hand, Neapolitan Italian and European Portuguese mark narrow focus and broad focus with distinct nuclear pitch accents, but use the same pitch accent for contrastive focus and new information focus. On the other hand, Tuscan Italian, Catalan, and Argentinian Spanish associate the same pitch accent with narrow information focus and broad focus, while they associate a distinct nuclear pitch accent with contrastive focus.

Frota (2000) shows that in European Portuguese, narrow focus, either contrastive or informational, associates with a H*+L nuclear pitch accent, independently of its position in the sentence. This pitch accent categorically contrasts with the nuclear H+L* characterizing broad focus sentences. D'Imperio (2002) shows that this is also true for Neapolitan Italian: narrow focus associates with L+H*, while the last word in broad focus sentences associates with H+L*.

In contrast to European Portuguese and Neapolitan Italian, Face and D'Imperio (2005) report that in Spanish 'a narrowly focused word in final position is not distinguished intonationally from any other word in the same position'. This suggests that in Spanish focus can 'project' (cf. Arregi, this volume).

Catalan, Argentinian Spanish, and Tuscan Italian intonationally distinguish between contrastive focus and information focus. Prieto (2014) reports that in Catalan broad focus is intonationally marked with a nuclear L* pitch accent, while narrow contrastive focus is marked with a L+H* pitch accent (but see also Estebas-Vilaplana 2000). The very same opposition between narrow contrastive focus and information focus is also observed in Argentinian Spanish (Feldhausen et al. 2011). For Tuscan Italian, Avesani and Vayra (2003), Bocci and Avesani (2011), and Bocci (2013) argue that narrow contrastive/corrective focus associates with a nuclear L+H* pitch accent (or H+H*), while narrow information focus associates with H+L*, which is the same nuclear pitch accent used in broad focus sentences. Moreover Bocci and Avesani (2011) and Bocci (2013) show that in sentences with unmarked word order and main prominence on the rightmost element, neither phrasing nor the selection of prenuclear pitch accents disambiguate the size of focus: both narrow corrective/contrastive and new information focus 'project' (see also Estebas-Vilaplana 2000 for Catalan).

A focus element that does not occur in sentence-final position gives rise to a marked prosodic structure, in which post-focal elements are subordinate to focus both metrically and intonationally.[13] At the metrical level, however, prosodic subordination to focus does not imply that post-focal elements are extrametrical (i.e. dephrased and destressed), but rather that they must bear a degree of prominence lower than focus. At the intonational level, it is observed that focus in non-sentence-final position triggers a dramatic compression of the pitch contour associated with the post-focal elements. Post-focal elements can be realized with a low and flat pitch contour or with significantly compressed pitch accents. The occurrence of compressed tonal events is reported in particular for southern varieties of Italian (Grice et al. 2005; Gili Fivela et al. 2015), European Portuguese (Frota 2000), French (Delais-Roussarie et al. 2002), and, to some extent, Catalan (Estebas-Vilaplana 2000).

Vallduví (1991) proposes that Catalan, Spanish, and Italian have a 'rigid' prosodic template, in which main prominence is invariantly assigned to the rightmost element.

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[13] It is worth noticing that prosodic subordination opposes fronted/initial foci and ClLDed topics. In fact, initial foci obligatory force prosodic subordination of the rest of the sentence, while ClLDed topics do not.

When the focus element does not occur in sentence-final position, post-focal material must be evacuated from the prosodic slot to which main prominence is assigned. According to Vallduví, right-dislocated elements in Catalan are placed outside the intonational phrase relevant for the assignment of phrasal stress. Right Dislocation thus allows focus to be aligned with main prominence and post-focal elements to be prosodically non-prominent.

Vallduví's analysis does not extend to European Portuguese. Frota (2000) shows that in European Portuguese sentences with initial focus form a single intonational phrase and the prosodic head of this constituent is assigned left-most, that is to focus. As illustrated in (20) from Frota (2000: 256), the occurrence of focus on the first constituent induces a marked pattern where the labels strong and weak are inverted. The compressed pitch accents observed on post-focal constituents can be analysed as associated with the metrical heads of the phonological phrases occurring after focus.

	Strong		weak	weak	
(20)	[[AS ANGOLANAS]	[ofereceram	especiaria]	[aos jornalistas	]]
	the Angolans.FEM	offered	spices	to-the journalists-FEM	

(from Frota 2000: 256)

Relevantly, Estebas-Villaplana (2000) notices that in Catalan focus assignment does not necessarily force syntactic extraposition of post-focal material, *pace* Vallduví (1991, 1992) and Vallduví and Zacharski (1994). She observes that a focus element in non-final position can be prosodically focused by aligning main prominence to the focus element and by adding an L-phrase accent at its right edge. Post-focal material is phrased into an independent intermediate phrase, whose metrical head can be optionally realized with a compressed pitch accent.

Frascarelli (2000) argues that in Italian post-verbal focus is followed by an obligatory intonational phrase boundary (but see D'Imperio and Gili Fivela 2004). In the case of fronted foci, however, she reports that an intonational phrase boundary occurs at their right edge only when an element intervenes between the verb and the focus element, while otherwise a phonological phrase boundary is inserted (but see also Bocci 2013). Bocci and Avesani (2011, 2015) show that post-focal elements in Tuscan Italian are not invisible to phrasal stress assignment. They argue that post-focal elements, although discourse-given, form prosodic constituents bearing phrase-level metrical stress, as illustrated in (21).

{	*				}	prosodic utterance level
[	*				]	intonatational phrase level
(	*	)$_\varphi$ (		*	)	phonological phrase level
(21) GERMANICO	vorrebbe	invitare	Pierangela			
'Germanico	would.like	to.invite	Pierangela'			

According to their proposal, prosodic subordination to focus is obtained by violating the right-mostness of the prosodic heads at the level of intonational phrase and prosodic utterance. Under their view, the prosodic system of Italian is not 'rigid' in the sense that right-mostness of prosodic heads is inviolable. It is 'rigid' in the sense that post-focal material must be exhaustively phrased and that every prosodic constituent must be assigned a head of the pertinent level.

32.4.3 The prosody of Clitic Left Dislocated topics

It is largely acknowledged that in Romance languages ClLDed topics form independent prosodic constituents, mostly identified as intonational phrases: see, among others, Frota (2000) for European Portuguese; Doetjes et al. (2002) for French; Feldhausen (2010) for Catalan; Gili Fivela (1999, 2002), Frascarelli (2000), and Bocci (2013) for Italian.

Although generically correct, this general characterization seems to obscure a more fine-grained picture. Feldhausen (2010), for instance, shows that ClLDed elements in Catalan are not mandatorily preceded by a prosodic boundary, while the insertion of a prosodic boundary is obligatory at their right edge. As a consequence embedded ClLDed are not exhaustively contained in an independent prosodic constituent.

It is reported that ClLDed topics associate with pitch accents often described as prominent. Since ClLDed topics are followed by a prosodic boundary, their pitch accents qualify as nuclear. Recent analyses have argued that the intonational properties associated with ClLDed pattern with specific pragmatic imports. Frascarelli and Hinterhölzl (2007) in particular argue for a strict correspondence between types of topics and intonational properties in Italian. They propose that aboutness, contrastive and given/familiar topics are realized in distinct positions in the left periphery of the clause and associate with distinct pitch accents: L*+H for aboutness topics, H* for contrastive topics, and L* for given topics. See also Brunetti et al. (2010) and Torregrossa (2012).

32.4.4 The prosody of Right Dislocated topics

It is generally acknowledged that right dislocated topics form independent intonational phrases (Zubizarreta 1998 for Spanish, Frascarelli 2000 for Italian, Feldhausen 2010 for Catalan, among others). Moreover it is reported that they are realized with a low and flat pitch contour, lacking any relevant degree of intonational prominence (Astruc 2004).

While for Vallduví RDed elements in Catalan are prosodically enclitic and outside the domain of stress-assignment, Bocci (2013) and Bocci and Avesani (2011) propose that RDed topics in Italian form independent constituents that bear phrase-level stress. According to their analysis, the low and flat contour generally observed on RDed topics does not stem from the pragmatic properties of these elements or from being enclitic,

but is merely determined by the occurrence of a preceding focus element. Their flat contour would be just another case of pitch compression induced by focus on the material at its right. Bocci (2013) argues that genuine instances of Right Dislocation can also occur on the left of focus. This is observed, for instance, in bi-clausal sentences like (22), in which the object of the main clause is right dislocated and focus is expressed in the subsequent adjunct clause.

(22) La dobbiamo   avvisare,   [Marianna]$_{RD}$,   quando   arriva   PIERANGELO
     her must.1PL   inform   Marianna$_i$ when   arrive.3SG   Pierangelo

Prefocal RDed topics, always associate with fully-fledged nuclear pitch accents (mostly H+L*). Consider Figure 32.1, reporting a pitch contour of (22), from Bocci (2013: 152).
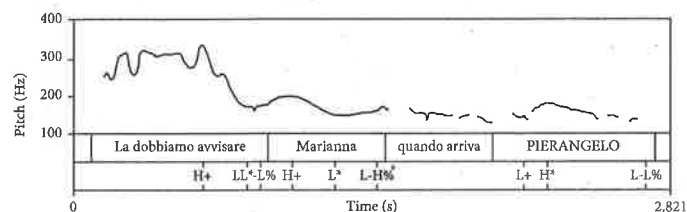
FIGURE 32.1 Pitch contour of (22), from Bocci (2013: 152).

If this analysis is on the right track and RDed topics are always fully represented in the prosodic structure and assigned phrase-level stress, RD cannot be analysed as a device to make non-focal material extraprosodic and thus to align focus with main prominence.

32.5 APPROACHES TO WORD ORDER ALTERNATIONS

In what follows we briefly discuss those approaches that derive the peculiar distribution of IS relevant constituents on the left and on the right side of the clause on the basis of (i) syntactic accounts, that is those analyses that see the reordering of the constituents as a consequence of a syntactic process, and (ii) prosodic accounts, that is those analyses that account for word order alternations in terms of prosodic alignment. Given that the literature on the various Romance languages is vast and complex, we try to group together different analyses according to the formal notions they make use of. See also Samek-Lodovici (this volume) and Neeleman and Hans van de Koot (this volume).

32.5.1 Syntactic accounts

A) Among the factors according to which syntactic analyses can be systematized, the first is whether they use a base generation approach or a movement approach: there is general consensus that HTs are base generated (although some authors see HTs as elliptical independent clauses, while for others they belong to the left periphery of the following clause), it is also generally assumed that focus movement to the left periphery is achieved via A'-movement in a similar way to wh-movement: the reasons for assuming this are clear: as originally noted by Rizzi (1997), wh-items and left-peripheral foci are incompatible (at least in main interrogatives) and focus fronting has the typical properties associated with quantificational A'-movement.

There is, however, no consensus on whether ClLD should be derived via base generation or movement.

B) Syntactic analyses also diverge in whether they are cartographic or not, that is whether each left-peripheral element is located in the specifier of a head which bears the same features (see Skopeteas, this volume). Although the general observation is that ClLD (at least the case of given topics) is recursive (see for instance Villalba 2009), some authors such as Rizzi (1997), Benincà and Poletto (2004), and Frascarelli and Hinterhölzl (2007) adopt a cartographic view where each construction has its own XP and has its own fixed position in the expanded left periphery. This is by no means a general move: López (2009) for instance assumes that ClLD and focus are both moved to the left periphery without assuming that they have to be in the specifiers of separate projections. However, he also assumes that movement is feature driven.

C) Another distinction among syntactic approaches refers precisely to the feature that triggers the movement of the XP to the left periphery. Various authors have tried to decompose movement into more primitive notions like 'contrast' or 'context' (see López 2009), while others take the notions of topic and focus to be primitives. There is a rather wide discussion on the exact role of focus, which definitely varies across Romance: various authors point out that in some Romance languages focus can have a mirative value (Hernanz 2006; Gallego 2007; Paoli 2010; Cruschina 2012).

As for the right periphery, we can summarize the possible analyses provided in the literature in three major groups:

1) The first set of accounts assumes that RD, differently from ClLD is achieved by having a bi-clausal analysis where the RDed element is part of a second elliptical

clause (see Kayne 1994). The major drawback of this analysis is that it is not clear why ellipsis is obligatory and which type of ellipsis this is (see van Craenenbroeck 2010 for different types of ellipsis).

2) Another analysis of RD is that it is identical to ClLD in the technical sense that the RD is actually moved to the left periphery like ClLD, modulo the additional movement of the whole IP to a left-peripheral position which is crucially higher than the one where the RD is sitting (see for instance Cardinaletti 2001; Samek-Lodovici 2006; Frascarelli and Hinterhölzl 2007; among others). This is also assumed to be the analysis for some specific cases of French (for instance the topic-like subject of stylistic inversion in French interrogatives) by Kayne and Pollock (2001) and Poletto and Pollock (2004). The crucial prediction of this type of analysis is that right dislocated elements are not c-commanded by the rest of the clause against Cecchetto (2000).

3) The third major group of analyses is the one represented by Belletti (2004), Villalba (2009), López (2009), Feldhausen (2010), and Bocci (2013) which sees RD as leftward movement to a vP peripheral position followed by movement(s) of (the elements in) the vP to a higher position. This analysis has in common with analysis 2 that RD is not a case of rightward movement, which would be banned in an antisymmetric framework and at the same time does not have the drawbacks of analysis 2, which totally equates RD with ClLD. This analysis predicts that RD elements are c-commanded by the preceding material.

The last set of phenomena is the one of low focus, which is often discussed in relation to post-verbal subjects (see among others Costa 2004). Among the syntactic analysis of low focus, we can distinguish between an analysis which assumes that the Romance languages have the possibility of focalizing *in situ* and those that take a parallel view with respect to focus fronting and argue for a analysis in terms of focus fronting to the edge of the vP phase followed by remnant movement of the rest of the vP in a way that is parallel to the one sketched above for RD (analysis 3).

32.5.2   Stress-based accounts

Several authors have argued that focus movement and/or subject inversion are not instances of feature-driven syntactic movement, but operations necessary to assign main prominence to focus. Some of these analyses are couched within the framework of Optimality Theory and (Szendrői 2001, 2002; Gutiérrez-Bravo 2002; Samek-Lodovici, 2005, 2006, see also Samek-Lodovici, this volume and Féry 2013), while others are not (Zubizarreta 1998). These analyses differ in several important respects, but share the common insight that main prominence is rigidly assigned rightmost in the domain relevant for the assignment of prominence and that main prominence cannot be shifted by prosodic operations. Word order readjustments thus take place in order to align

focus with main prominence and/or to prevent non-focal material from bearing main prominence.

In her seminal work, Zubizarreta (1998) discusses in detail a 'modularized' algorithm that directly computes the location of main prominence on the syntactic representation in Romance and Germanic languages (but see also Zubizarreta, this volume). With regard to Spanish, she argues that both VSO and SVO are compatible with a broad focus interpretation, when main prominence is assigned in the default position, that is to the rightmost element (the object). In contexts that induce narrow information focus on the subject, however, the appropriate word order is VOS, with main prominence on the rightmost element (the subject). Under her analysis, main prominence is rigidly assigned by the algorithm, and thus a last resort operation alters the basic word order VSO and adjoins the object leftward. This operation gives rise to the order VOS in which the subject can receive main stress, occurring rightmost. By assuming this type of prosodically motivated movement, Zubizarreta accounts for several focus-related word order alternations.

Notably, Zubizarreta distinguishes contrastive focus from non-contrastive focus and argues that contrastive focus prominence is generated by an independent rule. In her account, fronting of contrastive/emphatic focus is not prosodically motivated, but is an instance of syntactic movement that takes place to check a focus/emphasis feature in T for Spanish and in a dedicated Focus projection for Italian.

Capitalizing on Zubizarreta's insight that subject inversion is not feature-driven in Spanish, Büring and Gutierrez-Bravo (2001) develop a proposal couched within a different framework. They assume that stress assignment is computed on the prosodic structure, as a function of the alignment of the prosodic constituents. Under this view, subject inversion in Spanish is not properly prosodically driven since main stress location is determined only at the end of the phonological computation. Rather, the syntax generates different well-formed structures, with marked and basic word orders. For each generated syntactic representation, the corresponding phonological structure is computed and the optimal structure is selected. They elegantly derive the order VOS in the case of a narrow information subject by assuming that the constraint favouring the basic word order is out-ranked by the constraint that requires the head of the intonational phrased to be rightmost. However, they do not discuss the case of focus fronting in Spanish and this is an important issue. If the prosodic structure of Spanish requires main prominence to be rightmost, it is not clear why leftward focus movement should be possible, since it should give rise to marked prosodic structures in which rightmostness is violated.

Szendrői (2001, 2002) develops a detailed analysis of focus-related order alternations in Italian. Along the lines of Reinhart (1995), Szendrői proposes a model of the grammar in which PF and LF directly communicate and argues that the discourse-related properties of focus and d(iscourse)-linking are prosodically encoded. In particular, it is assumed that an element is discourse-linked if it is destressed. Szendrői assumes that in Italian rightmostness of prosodic heads must be fulfilled at the phrasal levels of

the prosodic hierarchy and that discourse-linked material cannot be destressed *in situ*. According to Szendrői, Italian exploits two alternative processes to destress D-linked elements: syntactic Right Dislocation and prosodic Right Dislocation. In the case of syntactic RD, RDed elements are assumed to be IP-adjoined. Because of this, they would not be integrated in the prosodic representation of the sentence: RDed elements would be extrametrical and thus destressed. When the whole IP/TP is d-linked with the exception of the focus element, syntactic RD is unavailable and prosodic RD applies, giving rise to focus fronting. First, a (non-feature-driven) syntactic movement displaces the focus element to the left periphery; second, a special syntax-prosody mapping rule inserts an intonational phrase boundary after the focus element. In the resulting configuration, post-focal elements would be extrametrical and hence destressed. The only element visible for stress assignment would be the focus element. Independently of theoretical considerations, this analysis crucially relies on problematic assumptions concerning the phonological representation of postfocal material and the mechanism of stress assignment (see Section 32.4).

32.6 CONCLUSION

In this chapter we have analysed the system according to which a sample of Romance languages express IS notions. We have noticed that the two marginal areas of the clause are involved in this process, although they are not completely symmetric. The first empirical generalization is that there is no one-to-one match between pragmatic functions and syntactic constructions, as what appear to be different syntactic constructions (for example, different kinds of topics) correspond to one pragmatic function.

The second empirical generalization is that Romance languages are rather stable as to the syntax of topics while they show variability with respect to the pragmatic and syntactic properties of focus both in terms of diachronic and synchronic variation.

It is very difficult to do justice to the whole work that has been produced on the topic in Romance, and one must admit that the intricacies of the different types of constructions multiplied by the number of Romance languages and varieties can be mind-boggling. Here we have tried to provide at least a first approximation of the various constructions involved, their syntactic properties and pragmatic import and have then tried to group the analyses proposed in two main 'schools of thought'. As this can only be a very general overview, the reader is referred to the work we quote on specific languages.

CHAPTER 33

DISCOURSE FUNCTIONS

The Case of Hungarian

KATALIN É.KISS

33.1 INTRODUCTION

33.1.1 Overview

This chapter first summarizes the history of discovering the discourse motivation underlying the syntactic structure of the Hungarian sentence, beginning with the universal sentence structure proposed by Samuel Brassai in 1852. Section 33.2 introduces the syntactic, semantic, and pragmatic properties of the topic–comment structure, and, particularly, of the topic, in the Hungarian sentence. It describes the topic as a constituent external to the extended verbal projection, binding an empty argument in the comment, derived by movement or base-generated in situ. The topic functions as the logical subject of predication. In accordance with its subject-of-predication role, it is represented by a definite or specific indefinite noun phrase, interpreted referentially or generically. A topic is associated with an existential presupposition, hence it is outside the scope of sentential operators such as negation. Non-referential expressions, among them quantifiers, can be construed as contrastive topics, contrast being a means of individuation enabling non-individual-denoting expressions to be predicated about.

Section 33.3 discusses the focus–background articulation. The Hungarian sentence structure contains a designated focus position at the left edge of the comment, filled by focus movement. Focus movement elicits verb movement across the verbal particle that precedes the verb in focusless sentences. In multiple focus constructions the second, third, etc. foci appear post-verbally, which is derived by assuming iterated focus projections and cyclic verb movement to the highest focus. Focus selection is shown to be subject to semantically motivated distributional restrictions (e.g. interrogative wh-phrases and downward entailing quantifier expressions are obligatorily focused, whereas universal quantifiers cannot be focused).

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ABBREVIATIONS

1	first person
2	second person
3	third person
ABL	ablative
ABS	absolutive
ACC	accusative
ACCOMP	accomplished
ADVB	adverbalizer
AFFIRM	affirmative
AGT	agent
Alt	alternative
APP	applicative
A-quantification	quantification expressed by adverbs
ASL	American Sign Language
ASS	assertion
ATB	Across The Board
AUG	augment
AUT	autonomous
AUX	auxiliary
BAE	bare argument ellipsis
BCS	Bosnian/Croatian/Serbian
Bel	Belarusian
bF	bleached focus
BG	background
Bg	Bulgarian
BOLD	Blood Oxygenation Level Dependent
BPR	Background-Presupposition Rule
C	Complementizer