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Syntactic encoding of information structure in Romance

1 Introduction

The study of IS and syntactic structure in Romance started in the 70's with articles approaching 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 already at the end of the 70's in Cinque (1977) provided the basis for future work. 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.

The seminal article by Rizzi (1997) on the fine structure of CP, the Left Periphery, has put again Italian in the foreground and opened the Cartographic project; 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 as on the prosody of different types of informationally marked constructions in French (Delais-Roussarie et al. 2004, Doetjes et al. 2002), in Spanish (see among others Zubizzarreta's work on focus 1998, and topic 2008 and Zubizzarreta this work), and in Italian (see Frascarelli and Hinterhölzl 2007, Frascarelli and Bianchi 2010, Cruschina 2013). More recently, work on the 'right edge' has been made by Adriana Belletti (2004, 2008). See Lopez (2009) and Villalba (2009) for Catalan, Martins (2013) for European Portuguese, among others. All studies agree that IS-relevant information is encoded in Romance at the left and right edges of the clause, which are standardly referred to in Romance syntax as the left and the right periphery. 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. 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.

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In this chapter, we first provide an empirical description of the left edge of the clause (in section 2) and then the right edge (in section 3) In section 4, we briefly discuss the general prosodic characteristics of Romance and the prosodic marking of information structure. Section 5 constitutes a brief outline of different "families" of syntactic and prosodic approaches to the problem.

2 The left periphery

The first construction already 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 to the clause. They are mostly confined to main clauses, where there is need to establish the context, and are rarely admitted in embedded clauses.¹ Hanging topics 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):

- a. Gianni, non scrivo più a quel cretino di sicuro
 G. not write anymore to that moron for sure
 'As for G., I won't write that moron for sure'
 - b. Fiori, mi piacciono le camelie
 Flowers, me.like camelias
 'As for flowers, I like camelias'

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

¹ Some speakers do find them grammatical also 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.

² While Rizzi (1997) does not discuss the differences between left dislocation with a resumptive clitics and the cases where the resumptive clitic is not present, other authors distinguish the two instances and call them CILD 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. (See also $\ 2010$).

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

(2) A Carlo_i, penso che (gli_i) darò il libro domani.to Carlo, I think that I will (to him) give the book tomorrow

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

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

D) As discussed by Cinque (1990) with regard to Italian, HT and CILD are not clause-bound (see Lopez, this volume). However, only HT can violate strong islands. It has been observed in several languages that strong islands block CILD, like Spanish, (see Gutiérrez Ordóñez 1997) Catalan, (see Villalba 1997, 2009), Rumanian (see Corneliescou 2004, Soare 2007), and Greek (see Iatridou 1995, Anagnostopoulou 1997).

Although the syntax of left dislocations seems *prima facie* rather stable across Romance, i.e. 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 CILD in main clauses while CILDs are mainly used in embedded clauses, where HT are either excluded or marginal. See Delais-Roussarie et al. (2004).

E) While French HTs can be iterated (see Delais-Rossarie 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.

The distribution of HT and CILD just illustrated suggests that there is not a 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»,³ while LDs can either be aboutness or given topics (for a clear discussion on this, see among other Frascarelli and Hinterhölzl 2007 and Bianchi & Frascarelli 2012). 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 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 queste condizioni, l'appartamento, a mia suocera, non glielo presto piúTo these conditions, the flat, to my mother-in-law, not her-it give anymore

Hence, all analyses agree that HT and CILD are two distinct constructions and have to be kept apart.

2.1 Focus fronting

The third type of elements found in the left periphery of the clause are foci. Focus can either be realized in situ or through an operation of fronting to the left periphery. Focus fronting can be distinguished from CILD because it never allows for a resumptive pronouns, while CILD obligatorily requires a clitic for direct objects, partitives, and subjects (in languages with subject clitics), but not for datives (cf. (2)). See Rizzi (1997), Cecchetto (2000), Cruschina (2010, forthcoming). (4) is an example of focus fronting in Italian, where the direct object is fronted to the left periphery and bears main prominence:

(4) UN CANE si è comprato!A DOG himself.he-is bought!He bought himself a dog!

Focus fronting is possible in Italian, Spanish (see Zubizzareta 1998), Catalan (Vallduví 1992, 1993), Romanian (Alboiu 2002, 2004, Cornilescu 2004), Brazilian Portuguese (Kato & Raposo

³ We follow here the original definition of Reinhart (1981).

1996), but very marginal in French.⁴ The availability of focus fronting in European Portuguese is controversial: see Costa & Martins (2011).

A complex issue concerns the possible discourse-related import associated with fronted foci. As will be clearer in this section, focus fronting cannot be viewed as a pure 'stylistic' phenomenon occurring in the PF branch of the derivation, since its availability strictly depends on the interpretative properties of the context (Bianchi & Bocci 2012).

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

- (5) Che cosa si è comprata Maria?
 - What herself bought Maria

With the relevant exception of Brunetti (2004), who advocates a unified notion of focus, such a distribution has been adduced as evidence in favor 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 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. See Krifka (2008). Bianchi & 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 (8.a) – is infelicitous. Consider now (8a) as a reply to (6): focus conveys a contrast across utterances (see Bianchi 2013) and focus fronting becomes possible. (8b) is perfectly natural.

(6) A: Maria era molto elegante ieri a teatro.

⁴ However, Abeillé & al. (2008) described a type of fronting which is reminiscent of mirative focus fronting.

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 uno straccetto di H&M(she) wore an Armani dress, not a a cheap-dress from H&M
 - B: Un vestito di ARMANI si era messa, non uno straccetto di H&M
 An Armani dress (she) wore, not a a cheap-dress from H&M

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 Sardian and Sicilian, is licensed also by 'mirative' import, as illustrated in (9).

(9) Ma guarda tu! In bagno ha messo le chiavi!but look.IMP2SG In bathroom have.PRES3SG PUT.PP the keys'Look at that! He put the keys in the bathroom!'

According to Cruschina (2012:120), in 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 given. Also for Spanish, Catalan and European Portuguese, several scholars have reported that focus fronting can convey imports that cannot be labeled as cases of contrastive focus fronting and are, for some respects, close to the mirative import described by Cruschina (2009, 2012, *forthcoming*). Ambar (1999), for instance, analyzes a type of focus fronting in European Portuguese that she terms "evaluative construction", illustrated in (10) from Ambar (1999:(44)). See also Costa & 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

with the other Romance varieties, focus fronting in Sicilian and Sardinian can express new information focus, as illustrated in (12) from Cruschina (2011:60). See also Lopez (this volume).

- (11) "Qual è il maestro, di voi tre?" L'uno si fece Avanti e disse: "Messere, io sono." which is the master of you three the one refl made.3sg forward and 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)
- (12) A Chi scrivisti airi? Sicilian 'What did you write yesterday?'
 - B N'articulu scrissi.
 an articulu write.PAST.1SG
 'I wrote an article'

One specific generalization is that in all modern Romance varieties if a direct object in the left periphery is followed by a fronted focus, then this direct object must have a resumptive clitic. This shows that focus can only be realized once in the left periphery, and that all elements preceding it are either in the topic or in the scene setting field (Benincà & Poletto 2004). In Old Romance the direct object could also be preposed without a clitic. 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 is still surviving in modern Portuguese (see Benincà 2006).

Generally, we conclude that all Romance languages have left dislocations, (which copy the case and in some cases is obligatorily resumed by clitics) and hanging topics (which do not copy the case and have always to be resumed either by clitics or by epithets). See also Lopez (this volume). The syntax of topics seems to be also diachronically stable since the first records of Romance (Benincà 2006), while focus is syntactically marked 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 a Focus Spec 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).

3 Right periphery

While the 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 less numerous sample of languages. In this section, we present the empirical properties of the elements located at the right edge of the clause in Romance.

3.1 Clitic Right dislocation, marginalization and afterthought

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 morpho-syntactic properties.

The first construction found in all the Romance varieties investigated until now is clitic right dislocation (CIRD), which is not, as its definition suggests, the perfect mirror image of clitic left dislocation. With CILD, 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 CIRDed elements can co-occur (see Lopez (this volume)) and their relative order is free.

C) Quantifiers resist ClRD.

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

Unlike CILD, CIRD is clause bound. Since CIRD is subject to subject to Ross's right roof constraint, a CIRDed topic can only appear at the right edge of the clause where it is interpreted. This generalization holds for Catalan (Villalba 2009), 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 postverbal (contrastive) focus, constituents that are prosodically subordinate in their in situ syntactic position. Cardinaletti (2001,

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2002) shows, for instance, that marginalized elements and CIRDed constituents contrast in several respects: 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: Vallduvi (1993) and Cecchetto (2000) show that CIRD and afterthoughts have distinct syntactic properties:

a) on a par with marginalization and in contrast to CIRD, when more than one afterthought is found, the order is fixed and reflects the basic word order (see again 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 ClRD (which requires a clitic) and marginalization (which has no resumption).

c) afterthought do not obey the right roof constraint.

The fact that CIRD, marginalization and afterthoughts have so many distinct syntactic properties is generally explained in terms of different syntactic positions of the three constructions.

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 above 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 new information focus:

- (13) A: Chi ha parlato?Who has spoken
 - B. Ha parlato GianniHas spoken Gianni'Who spoke? Gianni spoke'

As (13B) 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 postparticipial subjects which occur at the edge of the vP.

French is the language where postverbal subjects are most limited, as they occur only in sentences where there is a wh-operator (like wh-interrogatives or relative clauses) or a modal operator (like in subjunctive clauses). Brazilian Portuguese is losing postverbal subjects altogether, while Italian,

Spanish, Catalan and European Portuguese all display postverbal subjects also in sentences where no operator is present. The distribution of postverbal subjects depends in some languages on the type of verb: while transitive and intransitive verbs only allow for new information (or contrastive) focalized postverbal subjects, i.e. the interpretation is only one of narrow focus on the subject, a subclass of unaccusative verbs allow for postverbal subjects with a broad focus interpretation.

(14) a. La torta, la compra MARIO (, non Piero)The cake, it buys Mario (not Piero)'Mario will buy the cake, not Piero'

b. E' arrivato Piero
 Is arrived Mario
 'Mario arrived'

Tortora (1997), developing a description in Benincà (1988) compared with data from the Piedmontese dialect of Borgomanero, Italian, and English, shows that the correct divide between cases like (14a) and (14b) 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, i.e. the *arrive* class as opposed to the *partire* class. Consider the Italian examples in (15) in contrast to (14b)

(15) E' partito Mario'Is left Mario''Mario left'

In (14.) the postverbal 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 (15) 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 are clearly call for a syntactic account, which more readily reflects the thematic structure of the different verbal classes.

A key proposal which accounts for both CIRD and low focus and whose insights have been followed also by those authors who assume a non-cartographic framework (see among others Lopez (2009)), has been made by Belletti (2004), who claims that there exists a low left periphery at the vP edge, containing topic and focus positions in a way rather similar, though not identical to the "high" left periphery in CP. According to Belletti (2004), those postverbal subjects that only convey narrow focus are located in a focus projection at the edge of the vP phase. Those postverbal 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 the both focus projections are preceded and followed by topic projections. Belletti's analysis is mainly based on postverbal 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, i.e. cases where a non right-dislocated object occurs either before or after the postverbal 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 that Information Structure and their interplay with prosody may choose a VSO 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.

4 Prosodic aspects

4.1 Stress assignment, argument structure and givenness

Vallduví (1991) proposes a seminal typology: 'plastic' vs. 'rigid' languages. English is a prototypical "plastic" language. In 'plastic' languages, the default prosodic pattern of the sentence can be directly shaped by information structure properties, which can trigger prosodic operations like destressing or stress shift. As opposed to English, Catalan, Spanish, and Italian represent the 'rigid' type. The prosodic systems of these languages are assumed to be 'rigid' in the sense that

main prominence is invariantly assigned to the rightmost element in the 'core' intonational phrase and main stress cannot be shifted by prosodic operations. In Section 4.2 we briefly discuss this point in relation to the phonological representation of postfocal elements.

Beside this characterization, the prosodic systems of Romance can be described as 'rigid' with respects to other prosodic aspects. In Romance, prominence assignment is not sensitive to the argument structure; Romance fails to destress/deaccent given information in situ. In this section we roughly address these two points. In Section 4.2 we will briefly discuss a related issue, i.e. the phonological representation of postfocal elements.

In Romance languages, the prosodic constituency of broad focus sentences, i.e. all-new sentences, results from the interplay of several factors: syntactic factors, like syntactic branching (Nespor & Vogel 1986) and maximal projection boundaries (see Truckenbrodt 1995), and phonological factors, like minimum/maximum phonological weight etc. (Ghini 1993, Prieto 2007, Feldhausen 2010). How the interplay between these factors shapes the prosodic constituency seems to vary across Romance languages, as shown by comparative research on Italian, Spanish, Catalan, Northern and Southern European Portuguese (see D'Imperio et al. 2005, and related work). Nevertheless, in all Romance languages, at the level of 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 (see Zubizarreta this volume, see also the references cited therein). In this sense, the prosodic systems of the Romance languages are uncontroversially 'rigid'.

It is a well-established observation that in Germanic languages like 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 (Ladd 1996, German et. al. 2006, and many others). See (Rochemont, this volume). One central insight in Schwarzschild's (1999) proposal was to derive the prosodic effects of focus from the notion of Givenness. However, Féry & Samek-Lodovici (2006) and Selkirk (2008), among others, have argued that the notion of givenness cannot subsume the notion of focus and that givenness and focus both shape the prosodic structure in English. On the basis of English, Féry & Samek-Lodovici (2006) and Selkirk (2008) assume two independent constraints. i. DESTRESS-GIVEN states that discourse-given elements must be prosodically non-prominent (i.e. given elements cannot bear phrasal stress and cannot associate with pitch accents). ii. STRESS FOCUS (Truckenbrodt (1995) requires the focus element to be the most prominent element within the scope of the focus operator. See Myrberg & Riad (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 postfocal elements included in its scope to be prosodically subordinate to focus, giving rise to a marked prosodic structure.

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 & al. (2002), for instance, compare the prosodic marking of given information in Dutch and Italian. They show that in contrast to Dutch speakers, Italian speakers do not deaccent given information and are unable to reconstruct the previous context on the basis of prosodic information (cf. Rasier et al. 2011 for a similar experiment comparing Dutch and French). See also Zubizarreta (this volume).

Consider the exchange in (16) from Selkirk (2007:(54)) in order to illustrate the prosodic effect of DESTRESS-GIVEN. 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 (15B) is to be ascribed exclusively to DESTRESS-GIVEN.

- (16) 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
 (17) 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 (17B), the Italian counterpart of (16B): in the same context 'Bin Laden', though discourse-given, is pitch accented and cannot be less prominent than the previous element ('ricerca'). The same facts are observed in Spanish, Catalan and Rumanian.

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, it is reported that Tuscan Italian and Catalan associate the same 13 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. Hence, in European Portuguese, sentences with unmarked word order and narrow focus in final position are distinct from broad focus sentences. D'Imperio (2002) shows that this is true also for Neapolitan Italian: narrow focus associates with L+H*, while the last word in broad focus sentences associates with H+L*.⁵

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' in the sense of Selkirk (1995).. Catalan and Tuscan Italian intonationally distinguish between contrastive focus and information focus. With regard to Catalan, Prieto (in press) reports that 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).

For Tuscan Italian, Avesani & Vayra (2004), Bocci & Avesani (2011), Bocci (2013) ague that 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 & Avesani (2011), 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 types of foci thus '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. 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.

The occurrence of focus in non sentence-final positions triggers a dramatic compression of the pitch contour associated with the post-focal elements. Post-focal elements can be realized with a

⁵ For an overview of the intonational differences between Italian varieties, we refer the reader to Grice et al. (2004) and Gili Fivela et al. (forthcoming).

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 & al. 2004), European Portugese (Frota 2000), French (Delais-Roussarie et al. 2002), and, to some extent, Catalan (Estebas-Vilaplana 2000).

The mechanism of prosodic subordination triggered by focus and the metrical representation of post-focal material are relevant issues since the prosodic properties of 'rigid languages' has been claimed to account for focus-related word order alternations. Vallduví (1991) proposes that Catalan, Spanish, and Italian have a 'rigid' prosodic template, in which main prominence is invariantly assigned to the rightmost element. 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 sentential stress. Right dislocation thus allows focus to get aligned with main prominence and post-focal elements to be prosodically non-prominent.

Along these lines, some recent analyses on the syntax-prosody interface in Italian assume that main prominence is always assigned rightmost: (see Szendröi 2001, 2002, Samek-Lodovici 2005, 2006). Fronted foci, or more in general non sentence-final foci, are assumed to be followed by an intonational phrase boundary closing the prosodic domain relevant for the assignment of phrasal stress.⁶ For Szendröi (2001, 2002), in particular, focus fronting in Italian is derived by a mechanism of prosodic right dislocation that makes post-focal elements extrametrical: they form prosodic constituents that are enclitic to the intonational phrase containing focus. These assumptions, however, are not fully supported from the experimental results reported in the literature.

Frota (2000) shows that in European Portuguese initial focus does not call for the insertion of an intonational phrase boundary at its right edge: sentences with initial focus are phrased in a single intonational phrase and the prosodic head of this constituent is assigned leftmost, i.e. to focus. Initial foci do not alter default phrasing, but force metrical subordination of postfocal elements by altering the assignment of the labels strong and weak, as illustrated in (18) from Frota (2000:256). Post-focal pitch accents can be analyzed as associated with the metrical heads of the phonological phrases occurring after focus.

⁶ Szendröi (2001, 2002) and Samek-Lodovici (2004, 2005) assume that focus is necesseritly followed by a intontaitonal phrase boundary. However, their analyses differer with regards to the prosodic assumptions. In particular, Samek-Lodovici (2005, 2006) does not assume that post-focal/right dislocated elements are extrametrical.

Strong	weak	weak	
(18) [[AS ANGOLANAS] [ofereceram especiaria] [aos jornalistas]]7			
the Angolans.FEM	offered spices	to-the journalists-Fi	EM

For Catalan, Estebas-Villaplana (2000) notices that focus assignment does not necessarily forces syntactic extraposition of post-focal material, *pace* Vallduví (1990, 1993). 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 a L- phrase accent at its right edge. Post-focal material is thus phrased into an independent intermediate phrase and the metrical head of such a constituent 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 (but see D'Imperio & Gili Fivela 2001). In case of fronted foci, an intonational phrase boundary is inserted at their right edge only when they are separated from the verb by an intervening element. When adjacent to the main verb, fronted foci are followed by a phonological phrase boundary (Frascarelli 2000:57-59). More recently Bocci (2013) has argued that initial foci, whether or not adjacent to the main verb, are followed only by a phonological phrase boundary.

On the basis of a production experiment (Bocci & Avesani 2011) and a comprehension experiment (Bocci & Avesani *forthcoming*), Bocci & Avesani show that postfocal elements in Tuscan Italian are neither extrametrical nor invisible to phrasal stress assignment. They argue that post-focal elements though discourse-given, form prosodic constituents bearing phrase-level metrical stress, as illustrated in (19)

 $\{ \begin{array}{ccc} * & & \\ \\ [& * & \\ \\ (& * &)_{\phi} \left(& & \\ \end{array} \right)_{\phi} \\ (19) \qquad GERMANICO \text{ vorrebbe invitare Pierangela} \\ \end{array}$

'Germanico would like to invite Pierangela'

According to their proposal, prosodic subordination to focus is obtained by violating rightmostness of the prosodic heads at the level of intonational phrase and prosodic utterance, in line with the results of Frota (2000) for European Portuguese. Under this view, the prosodic system of Italian is not 'rigid' in the sense that rightmostness 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. This can be accounted for by assuming that the STRESS FOCUS holds, while DESTRESS-GIVEN does not.

4.3 The prosody of ClLDed topics

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

Although generically correct, this general characterization seems to obscure a more finegrained 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 the right edge. As a consequence, embedded ClLDed are not exhaustively contained in an independent prosodic constituent.

It is reported that CILDed topics associate with pitch accents, often described as prominent. Since they are followed by a prosodic boundary, the pitch accents associated with CILDed topics qualify as nuclear. Recent analyses have argued that the intonational properties associated with CILDed pattern with specific pragmatic imports. Frascarelli and Hinterhölzl (2007) in particular argue for a strict correspondence between types of topic and intonational properties, and syntactic positions in Italian. They propose that aboutness, contrastive and given⁷ topics are realized in distinct positions in the left periphery of the clause and that they associate with distinct pitch accents: L*+H for aboutness topics, H* for contrastive topics, and L* for (right or left dislocated) given topics. See also Brunetti & al. (2010).

4.4 The prosody of RDed topics

It is generally acknowledged that right dislocated topics form an independent intonational phrase (Vallduví 1992, Zubizarreta 1998, Frascarelli 2000, Feldhausen 2010). Moreover it is reported that they are realized with a low and flat pitch contour, lacking any relevant degree of intonational prominence (see Astruc 2004).

⁷ Frascarelli and Hinterhölzl use the term "familiarity" topics for "given" topics.

In light of these characteristics, Szendröi (2001, 2002) assumes that right dislocated elements form enclitic prosodic constituents invisible to phrase-level stress assignment rules and thus destressed (see also Féry 2013). In contrast with this view, Bocci (2013), Bocci and Avesani (2011) argue that right dislocated elements in Italian are not destressed and enclitic, but are assigned intonational phrase stress (see also Samek-Lodovici 2005). According to their analysis, the low and flat contour observed on right dislocated elements does not stem from the pragmatic properties of these elements, but is merely determined by the occurrence of a preceding focus element. To substantiate this analysis, Bocci (2013) shows that genuine instances of right dislocated elements can also occur on the left of focus. This is observed, for instance, in bi-clausal sentences, like (20), in which the object of the main clause is right dislocated and focus is expressed in the subsequent adjunct clause.

(20) La dobbiamo avvisare, Marianna, quando arriva PIERANGELO her-we.must inform Marianna when arrives PIERANGELO

Right dislocated topics that precede focus in the phonological representation have all the syntactic and pragmatic characteristics of genuine right dislocated topics. However, unlike postfocal RDed elements, RDed topics that precede focus always associate with full-flagged nuclear pitch accents (mostly H+L*). Consider (21), reporting a pitch contour of (20), from Bocci (2013:152).



In conclusion, if the analysis of Bocci (2013) is correct, RDed topics are not necessarily deaccented and destressed by virtue of being given and RD cannot be reduced to a device to align focus with main prominence.

5 Approaches to word order alternations

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

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 (though some authors see HTs are 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 way similar to the one of whmovement: the reasons for assuming this are clear: as originally noted by Rizzi (1997), wh-items and left peripheral focus 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 CILD should be derived via base generation or movement. Original work by Benincà (1988) and Cinque (1990), Zubizzarreta (1994) which pinned down the syntactic properties of the construction together with recent work like Frascarelli and Hinterhölzl (2007) assume the base generation of CILD constituents, while other authors (notably Cecchetto 2000) claim that CILD is to be derived via movement. The classical tests used for the argumentation are the fact that weak crossover effects are not found with CILD and parasitic gaps, which are notably not licensed by CILD. However, as Cecchetto (2000) notes, CILD is sensitive to strong islands and displays reconstruction effects (i.e. it displays principle C and principle A violations which cannot be explained in a base generation analysis).

B) Syntactic analyses also diverge in whether they are cartographic or not, i.e. 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 CILD (at least the case of given

topics) is recursive (see for instance Villalba 2009), some authors like 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, Lopez (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 Lopez 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 (Cruschina 2012; Paoli 2010; Hernanz 2006; Gallego 2007). As for the right periphery, we can summarize the possible analyses provided in the literature in three major groups

A) The first set of accounts assumes that RLD, differently from CILD is achieved by having a biclausal analysis where the RD 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 Cranenbroek 2003 for different types of ellipsis).

B) 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 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). However, 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).

C) The third major group of analyses is the one represented by Belletti (2004), Villalba (2009) Lopez (2009), Feldhausen (2010), Bocci (2013) which sees RD as leftward movement to a vP peripheral position followed by remnant movement of the vP to a higher position. This analysis has in common with analysis B 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 B, which totally equates RD with CILD. This analysis predicts that CIRD 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 postverbal 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 parallel to the one sketched above for RD (analysis C).

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; Gutierrez-Bravo 2002; Samek-Lodovici 2005, see also Samek-Lodovici this volume), while other are not (Zubizarreta 1998, Costa 2000). 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 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, i.e. 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 adjunct 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 (2001) develop a proposal couched within different framework. Unlike Zubizarreta, they assume that stress assignment is based 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 over the different alternatives, the optimal candidate is selected. They elegantly derive the order VOS in case of narrow information subject by assuming that the constraint favoring 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), Szendröi 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 is destress; this is subsumed under the Anaphoric interpretation Principle.

As anticipated in Section 4.2, Szendrői assumes that in Italian rightmostness of prosodic heads must be fulfilled at the phrasal levels of the prosodic hierarchy and that, unlike English, discourse-linked material cannot be destressed in situ. According to Szendröi, Italian exploits two alternative processes to destress D-linked elements: syntactic right dislocation and prosodic right dislocation. In 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 not available and Prosodic RD then would apply, giving rise to focus fronting. First, a (non featuredriven) syntactic movement displaces the focus element to the left periphery; second, a special syntax-prosody mapping rule inserts the right edge of the intonational phrase 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 phrase. Independently of theoretical considerations, this analysis crucially relies on problematic assumptions concerning 22 the phonological representation of postfocal material and the mechanism of stress assignment (see Section 4).

Conclusion

In this chapter we have analyzed 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 "school of thought". As this can only be a very general overview, the reader is referred to the work we quote on specific languages.