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A NOTE ON BACKWARD ANAPHORA

Valentina Bianchi

1. Introduction

In generative approaches to anaphora, a persistent view is the distinction between binding and coreference, dating back to Reinhart (1983, 1986). True binding is syntactically constrained by a c-command requirement (Reinhart's Bound Anaphora Condition), and results in the binder's argument position and the bound pronoun being interpreted as two occurrences of the same variable bound by a lambda operator:

(1) a. John, loves his wife
   b. John [\lambda x. loves (x, x’s wife)]

On the most restrictive assumptions (see e.g. Heim & Kratzer 1998: 260–266), semantic binding as in (1b) strictly requires syntactic binding as in (1a), and vice versa, syntactic binding is invariably interpreted as semantic binding.

On the other hand, the kind of anaphora that obtains in non-c-command configurations is “accidental coreference”: the unbound pronoun is a free variable which is assigned a value by the context; the assigned value may happen to be the...

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1 The material in this paper was presented at the main session of the 30th GLOW Colloquium (Tromsøe, April 12-14th 2007), at the “Workshop on Romance–Japanese: Comparative syntax and language acquisition” (Siena, May 4-5th 2007), and in a seminar held at the Scuola Normale Superiore, Pisa (19 October 2007). I thank the audiences at those events for various important comments and suggestions. Thanks also to Mara Frascarelli, Ken Safir and Philippe Schlenker for making available to me some yet unpublished papers of theirs. This work was inspired by discussions on Weak Crossover with Michelangelo Falco, and especially by joint work with Cristiano Chesi on his top-down minimalist grammar (Chesi 2004, 2007); my warmest thanks to both of them. I am entirely responsible for any remaining errors.

CONTRASTIVENESS AND NEW INFORMATION:
A NEW VIEW ON FOCUS

Sandra Paoli

Introduction

It is a fairly accepted view that word ordering phenomena are, to a certain extent, determined by the informational import of constituents, loosely their contextually known or new status. Since the introduction of information structure in the inventory of projecting categories in transformational theories of syntax (cf. Horváth, 1986; Kiss, 1987; Brody, 1990), the label Focus has been applied to phrases performing two discourse functions, roughly the introduction of new information and the introduction of a contrast. A number of linguists have argued, more or less explicitly, in favour of a clear-cut distinction between the two types on the basis of syntactic, phonetic, phonological and pragmatic factors (cf. Kiss, 1998; Zubizarreta, 1998; Nespor and Guasti, 2002; Donati and Nespor, 2003; Benincà and Poletto, 2004). Others (cf. Frascarelli, 2000; Brunetti, 2004; Lonzi, 2006; Stoyanova, 2008) have claimed that the two are not syntactically distinct. As far as contrastiveness is concerned, it has been analysed in binary [+/-] terms, much on the lines of newness of information, reflecting the traditional dichotomy ‘focus-topic’, ‘new-old’.

Investigating cases of ‘hybrid’ focal elements that simultaneously express new information and a contrast, this article addresses a neglected area within the

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1 The implementation of the ideas presented here has greatly benefited from conversations and discussions with Louise Mycock, and from comments on an earlier version by Mary Dalrymple. Special thanks go to Wallace Chafe, for taking the time to read this piece and to highlight any points at which his ideas had been misunderstood, and for his willingness to have the conversation in spite of the theoretical divide. A heart-felt ‘Grazie’ to Paola Benincà and Nicola Munaro for their support. The full responsibility for any shortcomings rests solely with the author.

2 The term focus has been used widely, in different and contradictory ways, to the extent that often it is not clear what it is meant by it. Although it is vital to address these discrepancies and bring some much needed clarity and transparency, it lies outside the immediate scope of this article to undertake such a task.
transformational tradition of grammar: the pragmatic and psychological import of discourse salient phrases. It is clear that an interface phenomenon such as information structure simply cannot be captured fully relying solely on its syntactic properties. Given that contrastiveness is a relational property, its specification must be expressed taking into account the status of the element with which the contrast is established: by this we mean the level of consciousness at which it is held in the mind of speaker and hearer.

Drawing on the notion of ‘activeness’ of a referent introduced by Chafe (1987) and elaborated by Lambrecht (1994), this article argues for the following:

i. there is more to contrastiveness than a simple [±] distinction;

ii. degrees of contrastiveness obtain from the treatment of a piece of discourse ‘in terms of cognitive processes dynamically unfolding through time’ (Chafe, 1987:48);

iii. newness of information and contrastiveness are not mutually exclusive properties of phrases: we view contrastiveness as orthogonal to both new and old information, and as such able to combine with both;

iv. whether the further distinctions between contrastive phrases that we advocate here are expressed at the syntactic level is subject to great cross-linguistic variation.

The observation that the two types of focus, new information and contrastive, are not mutually exclusive or incompatible, is by no means new (cf. Bolinger, 1961:87; and, more recently, Frascarelli, 2000:91): the novelty of our approach is in the way this idea is implemented, with the inclusion of properties pertaining to non-linguistic dimensions in the make-up of constituents and their potential expression at the syntactic level.

After a brief overview of the syntactic representation of Focus in section 1, data from a North-eastern Italian variety are analysed and discussed in section 2. This leads, in section 3, to the identification of some basic features which, combined, provide a way of capturing the breakdown of the properties of the two types of contrastive focus; section 4 investigates whether these features find expression at the syntactic level, and addresses some remaining issues. Some of the prosodic properties of the two types of contrastive focus are examined in section 5, and in section 6 we present a few concluding remarks.

3 Cf. section 3.2 for a specification of whose consciousness is relevant to the discussion.

4 Intended here in its loose meaning of ‘grammar-driven’.

5 Part of the data presented in this article was first discussed in Paoli (2010), which adduces to a more complex system of Focus projections by referring to degrees of contrast expressed in terms of explicitness and implicitness. The current contribution is an elaboration of the idea of degrees of contrastiveness, and it offers a more in-depth and expanded analysis, allowing for further-reaching theoretical considerations.

I. New Information and Contrastive: different types of Focus?

The notion of focus has been extensively discussed and defined from various perspectives, pragmatic, semantic, phonological and syntactic. On a pragmatic level, the information in focus is what is perceived by the speaker to be the most important part of their utterance, and the one that provides the hearer with essential elements of knowledge (cf. Dik, 1989; among others). The ‘focal’ status is assigned to at least one syntactic constituent, be it a smaller part or the whole clause, and it generally expresses new information. Semantically, focus is defined as the non-presupposed (i.e. not known, not shared by both speaker and hearer) information in a sentence (cf. Bolinger 1954:152; Halliday, 1967:204ff; Jackendoff, 1972:230, among some of the earlier scholars), which has scope over a set of possible alternatives. At the phonological level focus is generally foregrounded by means of stress. Syntactically, as a result of an increased interest in the syntactic encoding of information structure (cf. Brody, 1990; Kiss, 1995, 1998; Puskins, 2000, among others) combined with the formulation of an articulated CF (cf. Rizzi, 1997), focus has come to be interpreted in the transformational tradition of grammar as a syntactic projection, F(phrase), to which focalised phrases move and where they receive the relevant interpretation.

Within the Cartographic approach, the further distinction between N(ew) Informational F(ocus) and C(contrastive) F(ocus) also finds expression at the syntactic level, with the introduction of two separate projections, NIF (Phrase) and CF (Phrase) respectively, which are either assumed to be located in the same syntactic space (cf. Benincà and Poletto, 2004) or not (cf. Rizzi, 1997; Belletti, 2004).

It is significant that NIF and CF are analysed as projecting distinct phrases: in a system such as the one proposed by Benincà and Poletto (2004), which, crucially, does not admit recursion of syntactically and semantically identical material, the two are implicitly assumed to be distinct, and the existence of ‘hybrid’ types, simultaneously expressing new information and a contrast, is excluded a priori.

Interestingly, the original reasons behind the syntactic distinction between CF and NIF proposed by Kiss (1995, 1998) for Hungarian, have been shown not to hold cross-linguistically (cf. Frascarelli, 2000). While Kiss distinguishes between the operator-like Identificational Focus (which loosely corresponds to what we call CF here) and Information Focus (our NIF) which does not involve movement, Frascarelli (2000) points out that in Italian, for example, NIF, just like CF, is subject to weak cross over as well as parasitic gaps effects. The two seem to be, therefore, syntactically indistinguishable; yet, they are undeniably different. It therefore seems

6 An investigation of the relation between Kiss’s Identificational Focus and CF is, however, not relevant to the current discussion.
that such differences must find expression in dimensions other than syntax. What remains to be established is the exact nature of the information related to CF and NIF that is (or could potentially be) encoded at the syntactic level, and a way to capture its variation across languages.

2. Focus in Triestino

One of the so-called Italian dialects, Triestino, a variety spoken in the northeastern corner of the city of Triest, offers an interesting term of comparison with the standard language. While in Italian (cf. 1) a phrase expressing the narrow focus of a sentence needs to be placed post-verbally when the VP is repeated in the answer, Triestino (cf. 2) admits its fronting to a sentence-initial position:

1 a. Sp. A: Cosa comprano a Marina i tuoi genitori?
   'What are your parents buying Marina?'

b. Sp. B: (Le comprano) UNA MOTO.
   'They are buying her a motorbike'

b'. Sp. B: *UNA MOTO le comprano.

2 a. Sp. A: Cossa i ghe ciol a Marina tua
   what she-buys to Marina your
   
mama e tuo papà?
   your mum and your dad
   'What are your parents buying Marina?'

b. Sp. B: (I ghe ciol) UNA MOTO.
   she buys a motorbike
   'They are buying her a motorbike'

b'. Sp. B: UNA MOTO i ghe ciol.

What is of immediate interest here is the nature and status of the fronted element UNA MOTO 'a motorbike' in (2b'). Clearly, it is not an instance of CF as it is usually conceived: firstly, it simply provides the value for the x sought in the preceding turn, 'which x are your parents buying for Marina'; secondly, its pitch accent is audibly different from the typical L+H* that marks contrastive elements, followed by a noticeable rise and fall on the element neglected. Yet, given the grammaticality of

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7 The following abbreviations are used throughout the examples: scel (subject clitic, a weak pronominal form found in Northern Italian and Tuscan dialects); Ita (Italian), Ts (Triestino), Srd (Sardinian), Sic (Sicilian). If no specification is made, the languages in the examples should be clear from the previous text. The narrow focus of the sentence is indicated in SMALL CAPITALS and purely CF in BOLD CAPITALS. As a simplification, the Triestino fronting cases are written in SMALL CAPITALS.
response with the canonical SVO order is the most neutral (communicatively speaking) and natural one, in which "una moto" 'a motorbike' simply provides the new information sought by Speaker A. By instead fronting the object in (2b'), "una moto i ghe ciol' 'A motorbike they are buying her", Speaker B performs two communicative tasks: they provide the new information and, based on their knowledge of A's expectations, they signal that such information will be unexpected. This could be due to a variety of reasons: perhaps Speaker A knows that Marina's parents do not like motorbikes, or they usually do not buy such expensive gifts as birthday presents, etc.

Cross-linguistic evidence shows that, indeed, factors such as surprise for an unexpected event can be encoded morphologically by languages: Cinque (1999:84-85, 201 note 21) mentions the Korean suffix -kwun-, the Menomini verbal suffix -aiah- and the sentential particles in the Tibeto-Burman language Akha. These are all analysed by Cinque as expressions of Evaluative Mood, one of the highest projections in his hierarchy, placed in the Mood field between the highest Speech Act and the lower Evidential. The Turkish suffix -mığ also marks unexpectedness; from a very preliminary investigation it appears that the suffix can express equally speaker- and hearer-oriented surprise, something that has gone unnoticed so far (cf. Slobin and Aksu, 1982; DeLancey, 1997 among others). Compare the following, from Slobin and Aksu (1982:187):

8 a. Kemal gel-di.
   Kemal come-past
   'Kemal came'

b. Kemal gel-mış.
   Kemal come-mış
   'Kemal came (imagine!)'

(8a) simply communicates the event that Kemal, some time prior to the utterance time, came. In its mitrative use, (8b) expresses the same event but using the affix -mış it adds that such an event was unexpected. Interestingly, the same sentence could also be used as an answer to the question 'Who came?' when the speaker knows that the information they are about to provide will be unexpected by the hearer: the context offered was that Kemal had not been to visit for a long time.10

9 Sirin Tufan, p.c.
10 A recent article by Zimmermann (2008) independently makes a similar link. He makes a case for analysing elusive phenomena such as contrastivity and emphasis in terms of hearer expectation or discourse expectability.
3.2 Pragmatic scalability

Let us focus on the pragmatic nature of the degrees of contrastiveness. Contrastiveness is clearly a relational property, being the result of the interaction of two elements: no individual item may be contrastive on its own. It therefore makes sense, and it is indeed necessary, to take into consideration the status of the element with which the contrast is established. This is precisely what the meaning of explicit contrastiveness introduced in the previous section refers to. CF traditionally assigns a new value to the variable whose (incorrect) value has already been assigned, in the form of ‘It’s X, not Y’. Thus, crucially, the element with which the contrast is established is already present in the discourse; and not simply present, but active. We refer here to the notion of activeness used by Chafe (1987:22ff) and re-interpreted by Lambrecht (1994:99ff). According to Chafe any event of transmitting information does not only involve knowledge, but consciousness, too: given the size of the knowledge and information that our minds hold, it is only natural that at any given point, only a small amount can be focused on or is, in Chafe’s words, active. Within the state of activeness, Chafe identifies three possible levels:

9 a. the referent is active: it is the focus of consciousness at a given moment;
   b. the referent is semi-active (accessible): it is in a person’s awareness, in their
      peripheral consciousness, but not directly focused on;
   c. the referent is inactive: it is either not present at all or held in a person’s long-
      term memory, neither focally nor peripherally active.

Within these three levels there are also a number of further specifications that could be identified. In the case of an active referent, it may be textually (i.e. present in the discourse) or situationally (i.e. deictically present) active; an inactive element may be so by virtue of not being present in the person’s knowledge at all or by having been demoted from a previously accessible status. In the case of a semi-active referent Lambrecht (1994:100) adds that the accessible state could be due to one of three factors:

10 i. deactivation from an earlier active state (textually accessible);
   ii. inference from another active or accessible element (inferredly accessible, either
       from the linguistic or extra-linguistic contexts);
   iii. deictically present in the text-external world (situationally accessible).

The levels of activeness, although clearly boxed as discrete values in the following summarizing table, are to be interpreted as points along a continuum:

| 13 A referent that is inferentially accessible on an extra-linguistic basis is possibly one that is part of shared knowledge between the speaker and hearer, be it specific to their own environment, or culture, or universal, in other words the shared world knowledge of speaker and addressee. |
On the basis of this classification, we propose that the varying degrees of contrastiveness obtain by establishing a contrast with referents that are at different levels on the activeness scale. In order to implement this further distinction in a manageable way, we propose an array of 'proto', cross-dimensional features, expressing properties that encompass the psychological, the pragmatic, the semantic, the prosodic as well as the syntactic domains. These are the building blocks into which constituents of interface phenomena such as discourse saliency can be broken down. Identifying an [active] feature which can combine with [+contrastive] enables us to derive explicit and implicit contrast; in section 4 we discuss whether such a feature can find expression at the syntactic level.

Before moving on to applying these distinctions to the Triestino cases, a few more words of explanation of the 'active' status of a referent are in order. As Chafe points out (1994:73ff), if language is to perform its communicative function successfully, the speaker needs to take into account the addressee's mind: clearly, if

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**Table 1: Levels of activeness**

<table>
<thead>
<tr>
<th>Level of activeness</th>
<th>Characteristics</th>
<th>Referent is</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Active</td>
<td>Focus of consciousness</td>
<td>a. Linguistically active, hence explicitly mentioned in the conversation;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Extra-linguistically active, and not (necessarily) mentioned in the conversation;</td>
</tr>
<tr>
<td>2. Semi-active (accessible)</td>
<td>In peripheral consciousness, speaker has background awareness of it.</td>
<td>a. Demoted from an earlier active state;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Inferrable (either linguistically or extra-linguistically);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Deictically present, hence situationally accessible;</td>
</tr>
<tr>
<td>3. Inactive</td>
<td>Neither focally nor peripherally active</td>
<td>a. Demoted from an earlier accessible state, in long-term memory;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Never present, hence completely new;</td>
</tr>
</tbody>
</table>

---

Although our primary interest here is on the permutations of [+active] and [+contrastive], the combination of [active] and [new] is also possible, hence offering a way of further distinguishing within the NIF category (cf. the distinction suggested within the intuited status, between (3a) and (3b)). In spite of obvious scope for overlap between [+active] and [new], their existence as independent features is justified: a newly introduced element is necessarily inactive in the sense the speaker thinks that the referent Mary is active in the consciousness of their interlocutor, they will be able to refer to her with the pronoun she. If the speaker's judgement were only based on the state Mary held in their own mind, the use of such a pronoun may cause a breakdown in communication. In a similar fashion, the treatment of a referent as active or inactive is a consequence of the speaker's monitoring of what is happening in the addressee's mind.

With specific reference to Triestino, and with a view in mind to identify feature combinations that could readily, if needed, be expressed at the syntactic level, we simplify the ternary distinction proposed by Chafe to the binary [+active] and [-active], collapsing the semi-active and the inactive ones into the single [-active].

**Table 2: Mapping of levels of activeness onto features**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Level of activeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+active]</td>
<td>1. Active</td>
</tr>
<tr>
<td>[-active]</td>
<td>2. Semi-active (accessible)</td>
</tr>
<tr>
<td></td>
<td>3. Inactive</td>
</tr>
</tbody>
</table>

---

15 The need for Chafe's three-way distinction may indeed prove necessary when extending the investigation of Focus to other languages. The simplification to two suggested here does not theoretically preclude it.

16 Not all permutations would be pragmatically possible: an element could not simultaneously be [+active] and [new]; the combination of [-active] and [new] would correspond to the case of (3a) in Table 1, representing an inactive element that has been demoted from an earlier active state, and is not, therefore, new. In the two remaining possibilities, [+active], [-active], and [-active], [-view], the [active] feature does not add significantly to the status of newness of an element: in the former case the referent is the focus of consciousness, and hence not new, and in the latter, being new, it is not. This highlights a degree of overlap between [-active] and [-new]. A significant difference in the way [+active] interacts with contrastiveness and newness of information falls out of the relational nature of contrast mentioned above: while combined with [+contrastive], [+active] can only refer to the level of consciousness pertaining to the element with which a contrast is established, when combined with [-new], [+active] refers to the degree of consciousness of the referent itself.
that being introduced at that very precise moment it cannot already be ‘lit up’ in the
listener’s mind, but so could be an element that has been introduced at some earlier
point in the discourse, and therefore is not new, but has been pushed in the long term
memory and is, therefore, inactive. Thus, while [new] refers to the properties of a
referent with respect to its status in discourse, [active] reflects the level of
consciousness at which it is held in the mind.

3.3 Application of these distinctions

The proto-, cross-dimensional features suggested here as well as their combination,
are by no means exhaustive nor definitive: this is an attempt at including in a
manageable fashion (hence the choice of binary values for the features) important
properties that refer to the mental status of referents which need to be taken into
account when discussing contrastiveness in a comprehensive and exhaustive way.
Although transformational approaches to grammar allow for discourse properties
to have a determinative role in accounting for word order phenomena and have adopted
them as syntactic projections, their integration and use in the system has been done in
a selective way. The concepts of contrastive focus, new information focus and
even topic have been included in a rather sterilised fashion, that is to say without
taking into account the complexity of their properties, especially of their psycho-
logical and pragmatic import. The identification and introduction of these cross-
dimensional features as the building blocks of different types of CF is a first step
towards allowing the incorporation of the whole range of properties of information
structure into the various computations.

Focusing on the interaction of [active] and [-contrastive], we obtain the following
two types of CF:

<table>
<thead>
<tr>
<th>[+contr]</th>
<th>[-active]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicitly Contrastive Focus</td>
<td>Implicitly Contrastive Focus</td>
</tr>
</tbody>
</table>

Table 3: Degrees of contrastiveness

E(licitly) CF is the well-known type that corresponds to the syntactic structure
‘It’s X, not Y’: Y has been introduced in the discourse and is still active in the mind
of the participants. I(mPLICITLY) CF corresponds to a ‘new’ type, a contrast
established with an element that is not in the active consciousness of the speaker
but is part of the peripheral focus of knowledge of the participants. Imagine A and B
are talking about a recent visit of a friend of theirs, John. Both A and B know that
John has been a vegetarian for a long time; yet, there is no linguistic mention in the
current discourse of this. In this context, the utterance ‘John had A CHUNKY STEAK
for dinner (imagine!)’ would express something unexpected on the basis of the state

of affairs that can be inferred when talking about John, i.e., among other things, that
he is a vegetarian. The contrast is implicit because the fact that John is a vegetarian,
has not been explicitly mentioned in the conversation: it is, nevertheless, accessible
when talking about John\(^7\).

As well as exemplifying degrees of contrastiveness, the cases of Triestino
fronting also point to the possibility of an element expressing simultaneously new
information and a contrast. If we allow for the combination of the two types of CF
and the feature [+new], we obtain further specifications, shown in Table 4:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Type specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+new]</td>
<td>Explicitly Contrastive, New Info, focus</td>
</tr>
</tbody>
</table>

Table 4: Newness and contrastiveness

Although the feature [active] can indeed combine with [new] as discussed in
note 16, in Table 4 it is a property of contrastiveness, in other words a secondary
feature for which contrastiveness is further specified. This needs to be indicated with
the introduction of further bracketing:

<table>
<thead>
<tr>
<th>Type of focus</th>
<th>Feature specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicitly Contrastive, New Info, focus</td>
<td>[+new], [+contr, active]</td>
</tr>
</tbody>
</table>

Table 5: Formal representation

The type { [+new], [+contr, active] } is the representation of the cases of fronting
in Triestino: the fronted element is not only an instance of ICF but also expresses
new information. The other type, { [+new], [+contr, active] }, refers to an ECF phrase
which also expresses new information. Not immediately obvious, which perhaps
questions its legitimacy, this would be the case of a conversation carried out
by three people. A makes a statement, B questions it, C replies correcting the
information provided by A:

\(^7\) This concept of inferability is very similar to the idea of file-cards (Heim, 1982, Valdoví,
1992): a knowledge store in which every referent is associated to a card with the relevant
information about it.
Sandra Paoli

11 a. A: Mary had steak for dinner.
   b. B: What did she have for dinner (sorry I didn’t hear you)?
   c. C: She had FISH.

Let us now turn to the discussion of another aspect of contrastiveness. We have seen how contrastiveness can derive from an unexpected state of affairs. Interestingly, a similar effect is obtained when a given situation is so totally obvious that its explicit mentioning would be unnecessary (possibly violating Grice’s, 1975 Maxim of Relation ‘Be relevant’), and hence, contrary to expectation. Consider the following:

12 a. Sp. A: What are you fishing for?
      Sp. B: I am fishing for FISH!! (what do you think, duh!)
   b. Sp. A: What are you doing with that vase?
      Sp. B: I’m PUTTING FLOWERS in it!! (what do you expect??)

These examples are particularly effective in Italian, especially (12a). The reaction to a completely superfluous question is a contrast, given that the information can be implicitly inferred from the shared world knowledge. The contrast can therefore derive both from an assertion that goes against what is expected, but also from an assertion that is exactly what is expected and hence not in need of being spelled out. In terms of features, this case would fall within the ECF, with the further specification that the referent is extra-linguistically active.  

4. Further reflections

4.1 Cross-linguistic variation

Intuitively, it makes sense to recognise the cross-dimensional nature of interface phenomena and allow its expression through a range of cross-dimensional features. Whether these features are ‘translatable’ onto the syntactic level is not immediately apparent, and as mentioned in section 3.1, the degree of cross-linguistic variation is remarkable. The view of what it means to be expressed at the syntactic level that we take here is rather simplistic: a feature is syntactic if it causes word re-ordering phenomena.

The reason for including [active] as a further specification of [+contrastive] is clearly motivated by the data at hand: the difference it marks, though, need not be interpretable at the syntactic level. In the Triestino cases the specific type of contrastiveness does not seem to have a correlate at the syntactic level: the triggering force behind these cases of fronting is the [+contrastive] specification, irrespective of its impoliteness or explicitness. An object that expresses NIF can only be found post-verbally: it can be licensed sentence-initially only when it also expresses a contrast. It therefore seems that in Triestino [+contrastive] is a syntactic feature in that it causes re-ordering phenomena, while [+new], on its own, is not. This is certainly not the case cross-linguistically: indeed, the syntactic expression of [+new] and [+contrastive] features is subject to considerable variation.

It was mentioned above that a syntactic position dedicated to NIF in the left edge of the clause is endorsed by Benincà and Poletto (2004), who on the basis of examples such as (13) from Italian claim that NIF can indeed target a position within the left periphery, but this becomes available only in the presence of a CF phrase:

13 A GIORGIO, QUESTO LIBRO, devi dare.
   to Giorgio this book you must give
   ‘It is to Giorgio that you must give this book’

Since the direct object questo libro ‘this book’ cannot be resumed by an object clitic, i.e. it is not left-dislocated, they conclude that it must therefore be an instance of Focus, more specifically, NIF. It is not clear that (13) is equally acceptable throughout the Italian peninsula. It must be stressed that Italian is subject to strong regional variation with the consequence that the ‘standard’ language yields widely differing grammaticality judgments depending on the geographical origin of the speaker. Given the interpretation of (13), the possible question that could elicit it, Che cosa devo dare a Mario? ‘What do I need to give to Mario?’, does not seem to produce it: a less awkward answer, which is by no means completely felicitous, would be (14), in which the direct object expressing new information necessarily appears post-verbally.

14 A GIORGIO, devi dare QUESTO LIBRO.
   to Giorgio you must give this book
   ‘It’s (actually) to Giorgio, (and) you must give him this book’

The ability of Italian to license phrases expressing NIF at the left edge of a clause is at least questioned by the evidence in (14): it seems that such position is not uniformly available across the peninsula. As mentioned above, the acceptability

19 Cf. Lonzi (2007) for an interesting discussion of the syntactic status of contrastiveness: cross-linguistic considerations clearly point to a great degree of variation.
20 This is based on the intuition of a small group of speakers including both North-eastern and North-western Italian informants.
21 Cf. Stoyanova (2008:40ff) for a discussion of the availability of more than one focus position to Italian, and its link with the formation of multiple wh-questions.
of (14) may be a matter of regional variation, depending, in other words, on the underlying influence of the individual dialects that the various speakers have.

It was mentioned earlier that Sicilian and in Sardinian (cf. Bentley, 2007; Jones, 1993), allow constituents expressing new information sentence-initially (cf. 15a, Sardinian from Jones, 1993:18; 15b, Sicilian) without the need for the Focus field to have been activated by a CF phrase. In such varieties, a functional projection associated with NIF, NIFP, has been assumed:

15 a. CUSU LIBRI appo lessu. *Sard*
   this book I have read
   ‘I have read this book’

b. CARNI mangiai. *Sic*
   meat I ate
   ‘I ate meat’

Although CF and NIF cannot co-occur, Bentley (2007: 53, from which the following examples are taken) notices that in Sicilian CF (cf. 16c), unlike NIF (cf. 16b), can be separated from the verb phrase, on the lines of the distinction encoded in the Finnish, Hungarian and Basque data mentioned earlier. This suggests that the element expressing contrastive focus occupies a higher position than the one encoding new information:

16 a. Sp. A: Chi cci ricisti a to niputi?
   what to-them you-said to your nephews
   ‘What did you tell your nephews?’

   the truth (*to my nephews) to-them I said
   ‘I told them the truth’

c. NA LITTRA, a Pina. cci scrisse (no nu pizzino)
   a letter to Pina to-her I wrote (not a card)
   ‘It’s a letter that I wrote to Pina, not a card’

The new information direct object A VERITÀ ‘the truth’ cannot be separated from the verb: the same restriction does not apply to the contrastive NA LITTRA ‘a letter’ in (16c).

The conclusion that can be drawn from this, is that, clearly, [+contrastive] and [+new] do not have the same status cross-linguistically: while in some varieties they are both responsible for re-ordering phenomena (as in Sicilian), in others only one of them triggers overt movement (cf. [+contrastive] in Triestino). The encoding of such variation may be subject to parametrisation and linked to other properties of the language. Furthermore, the discussion in Bentley (2007) seems to suggest that in those languages in which both [+new] and [+contrastive] are syntactic features, there are distinct and ordered functional projections associated with them: in Sicilian the position dedicated to CF appears to be higher than the one occupied by NIF.

We therefore conclude that both [+contrastive] and [+new] may be syntactic features, but certainly need not be; the same can be said of the feature introduced in this article, [active], and the evidence to motivate the choice is to be found in each individual language. If examples such as (13) are indeed acceptable with the interpretation of the higher phrase as contrastive and the lower one as new information, the uniqueness of Focus (cf. Rizzi, 1997) needs to be restated in less constrained terms.

With respect to the debate on whether CF and NIF are syntactically distinct, the evidence discussed here points to great variation. Our understanding of Focus as a syntactic space follows Benincà and Poletto’s (2004) idea of a field, which could indeed be internally articulated in two projections, CFP and NIFP, in those languages in which both [+contrastive] and [+new] features are expressed syntactically. This would include Sicilian and (possibly) Sardinian. In Triestino and perhaps Italian, it would be a space hosting only elements carrying the feature [+contrastive] and displaying the other properties associated with quantificational elements.

Summarising the evidence discussed so far, this is the distribution and nature of the features [+new] and [+contrastive]:

<table>
<thead>
<tr>
<th>Features</th>
<th>Italian</th>
<th>Triestino</th>
<th>Sicilian</th>
<th>Sardinian</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+new]</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>[+contrast]</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

| Syntactic status | ?       | ✓         | ✓        | ✓         |

Table 6: Cross-Linguistic variation

4.2 Are [active] features syntactic at all?

Let us now return to the question of whether [+active] is a syntactic feature or not. Consider the following asymmetry in Triestino: with a factive verb such as preoccupare ‘to worry’, [+contrastive], [+active] phrases (in bold capitals) can equally target the main or the embedded left periphery (cf. 17 a and b), while only the left periphery of the main clause is readily available to [+contrastive], [+active] elements (cf. 18 a and b).

17 a. [UNA MOTO] me preoccupa [che] li ghe cioghi a
      a motor bike to-me it worries that to her buy to
      Marina, no una bicicletta.

      Marina not a bike
      ‘I am worried that they buy a motorbike for Marina, not a bike’
b. [Me preoccupa [che UNA MOTO i ghe cioghi a Marina, no una bici]].

18 a. Sp. A: Cossa te preoccupa che i ghe cioghi a Marina? what to-you it-worries that scl to-her buy to Marina
‘What are you worried that they buy Marina?’

b. Sp. B: [UNA MOTO me preoccupa [che i ghe cioghi]].
a motorbike to-me it-worries that scl to-her buy
‘I am worried that they buy her a motorbike’

b’. Sp. B: [?Me preoccupa [che UNA MOTO i ghe cioghi]].

Interestingly, this asymmetry disappears when the selecting predicate is an epistemic verb such as creder ‘to believe’, and both the main and embedded left peripheries are readily available to both [+contrastive], [+active] and [+contrastive], [-active] phrases (cf. 20b and b’):

19 a. [UNA MOTO creo [che i ghe cioghi a Marina, no a motorbike I-believe that scl to-her they-buy to Marina not una bici]].
a bike
‘It’s a motorbike that I think they are buying Marina, not a bike’

b. [Credo che [UNA MOTO i ghe cioghi a Marina, no una bici]].

20 a. Sp. A: Cossa te credi che i ghe cioghi a Marina? what scl you-believe that scl to-her they-buy to Marina
‘What do you think they will buy Marina?’

b. Sp. B: [UNA MOTO creo [che i ghe cioghi]].
a motorbike I-think that scl to-her they-buy
‘I think they are buying her a motorbike’

b’. Sp. B: Credo [che UNA MOTO i ghe cioghi].

Summarising the distribution of the two types of CF:

<table>
<thead>
<tr>
<th></th>
<th>Factive</th>
<th>Epistemic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ECF</td>
<td>ICF</td>
</tr>
<tr>
<td>Main</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Embedded</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 7: Summary of main vs embedded left periphery available

This asymmetry in the licensing of elements in the embedded left periphery has been analysed by Poletto (2000:121ff) as a reflection of the different selecting properties of the two classes of verbs. Epistemic verbs (which she terms ‘bridge verbs’) select a ‘fuller’ CP than factive verbs (her ‘non-bridge verbs’); the structure embedded under the latter appears ‘poorer’ (see also, Benincà and Poletto, 2004:61), in the sense that there are fewer positions available.

The fact that there does not seem to be a position available for the [+contrastive], [-active] element in ‘reduced CPs’ selected by factive verbs may suggest that a position for ICF elements is not constantly accessible: it is only available in a ‘larger’ CP. We re-interpret Benincà and Poletto ‘reduced’ CP to mean a CP in which only the primary features are realised, but not their further specification. In this case, [+contrastive] would be expressed, but its further distinction [-active] would not: so an ECF but not an ICF phrase would find expression in a reduced CP.

5. Some evidence from prosody

Let us now turn to a brief investigation of the prosodic properties of the two types of CF identified. Consider the following minimal pairs (21b) and (22b), ECF and ICF respectively:

the police it-has stopped Marina
‘The police have stopped Marina’

Manuela scl they-have stopped not Marina
‘It is Manuela that they have stopped (not Marina)’

22 a. Sp. A: Chi ga fermà la polizia?
who it-has stopped the police
‘Who have the police stopped?’

b. Sp. B: MANUELA i ga fermà!
Manuela scl they-have stopped!
‘They have stopped Manuela!’

The context of (22b) is that Manuela is a very careful and observant driver, and it is hence unexpected that she should be stopped by the police. These are the pitch tracks of two token utterers obtained using Praat: each track also indicates the Hz values of the beginning, the peak(s) and the after-peak. As they are, these figures are not significant in absolute terms, but are useful in their relative values.
In addition to the sharp rise and fall (which do not figure in the pitch track in figure 1) on the second half of (21b), ... no Marina, '... not Marina', the two prosodic contours also differ in the initial and maximum values. ICF starts at a higher value than ECF, and reaches a higher peak on the stressed syllable of Manuela. Figure 3, superimposing pitch tracks for ECF (dashed line) and ICF (dotted line) to one extracted from an instance of a neutral uttering of Manuela (in a continuous line) shows this clearly:

Not only are both (21b) and (22b) clearly not uttered with neutral intonation, but there are noticeable differences between their respective tracks: the curve associated with ICF is much more pronounced than the one produced by ECF. This feels somehow counter-intuitive: explicit and implicit should parallel with a higher and a lower contour, respectively. Nevertheless, this may find a plausible explanation in cognitive terms.

Notice that it is more 'costly', cognitively speaking, to activate something that is not in the focus of consciousness than it is to keep active something that is already active. In other words, something that is already present in the discourse (i.e. given) requires less mental effort to become active than something that is not. This is what Chafe (1994:73) defines as 'activation cost'. As ECF establishes a contrast with a referent that is given and active, it will be less costly than ICF, which, expressing a contrast with a semi-active referent, will on the other hand involve more cognitive energy. There may well be a link between the extra cost and the higher intensity of the pitch tracks. A similar observation can be made on the syntactic level. While an answer to a simple question naturally excludes the VP, in the cases of Triestino fronting that we have discussed here, the VP is preferably repeated (cf. 23b). Furthermore, the fronting of the constituent is needed to obtain the unexpected reading: the same reading is not available when the ICF phrase occurs post-verbally (cf. 23c), differently from ECF (cf. 23d). Compare the following to (22):

23 a. Sp. A: Chi ga fermà la polizia?
   who it-has stopped the police
   'Who have the police stopped?'

scl they-have stopped Manuela 

d. I ga fermá MANUELA (no Marina). 
sclthey-have stopped Manuela not Marina 
'It is Manuela that they have stopped (not Marina)'

This idea that the higher cognitive cost may also be expressed prosodically (in terms of higher hertz values) and syntactically (in terms of more syntactic material and necessary movement) is purely speculative at this stage, however appealing it may be. It clearly needs substantial further investigation, and we propose to do this in future work.

Concluding with an evaluation of the evidence discussed in this section, ICF appears to be uttered with a non-neutral intonation: the sharp rise and fall resemble the contour produced by ECF, possibly linked to the presence of a contrast. Yet, the pitch track produced by ICF starts and peaks at higher values than ECF, suggesting that the two are different at the prosodic level. This lends further support to our claim that the two are pragmatically, and to a certain degree syntactically, distinct.

6. Conclusions

The information structure of a sentence is clearly contributed by a number of different dimensions: psychological, pragmatic, syntactic, semantic, prosodic. If we are to take it seriously and express its import accurately, it is necessary to identify its complexity and to allow the expression of such complexity within grammar. As a first step in this direction, we have introduced in the form of a feature the notion of 'activity'. By conceiving a feature specification breakdown applicable to Focus that aims at expressing its multi-dimensionality, we have introduced the concept of 'cross-dimensional features', traits that may also find expression at the syntactic level.

In this article we have suggested that:
• contrastiveness is a scalar notion: there is more to it than a simple [±] value;
• the varying degrees of contrastiveness can be obtained through establishing a contrast with a referent that is held at different levels of the activity scale in the listener’s consciousness;
• in order to do this, the feature [±active] has been introduced;
• [±active] can combine with both [±contrastive] and [±new];
• [±new] and [±contrastive] can combine with each other;
• the features [±contrastive] and [±new] can be syntactic: we assume that this is the case in those languages in which they trigger word re-ordering phenomena; in those languages in which they do not, the phrases that carry them are simple instances of the syntactic category of Focus;

• when both [±contrastive] and [±new] are expressed at the syntactic level, the two are hosted in distinct and ordered projections, with CF being higher than NIP;
• only the primary values of the syntactic features [±contrastive] and [±new] can find expression in 'reduced' CPs; full CPs are able to host both primary and secondary;
• whether the cross-dimensional features identified in this article are expressed at the syntactic level is subject to great cross-linguistic variation, and it depends on the strategies employed by a language to express information structure.

The system suggested here, and only roughly implemented, is not the final product, but a first step towards trying to solve the tension between syntax and pragmatics witnessed in the understanding of information structure.

References


