0. Introduction

In this paper I provide a preliminary analysis of some structures in which a complex correlative pattern obtains involving contrastive focal particles and polarity effects. In particular, I would like to assess the nature of structures such the ones in (1), which Bianchi & Zamparelli (2001) dub “edge coordinations”:

\begin{enumerate}
\item Juan talked not only to Lucy, but also to Mary.
\item Juan didn’t talk to Lucy, but to Mary.
\end{enumerate}

Although I think that the basic analysis can carry over to some salient counterparts such as \textit{(n)either} $X$ \dots \textit{ (n)or} $Y$ and \textit{both} $X$ \dots \textit{ and} $Y$, I will focus on the correlative pair \textit{not (only)} $X$ \dots \textit{ but (also)} $Y$. It is furthermore appealing to extend a possible analysis to other kinds of correlative structures, mainly displayed in paratactic-like constructions (e.g., \textit{when…then}, \textit{as…as}, \textit{more…than}, \textit{if…then}, etc.):

\begin{enumerate}
\item \textit{When} John arrives, \textit{then} we will go out.
\item John is \textit{as} smart \textit{as} Mary.
\item John made \textit{more} mistakes \textit{than} her sister.
\end{enumerate}

The analysis I concentrate on here must be taken as tentative, since it is being further developed in work in progress; I will, nonetheless, settle the scene for a minimalist approach not only to these constructions, but also to the more general phenomenon of “doubling” (or resumption) in structures that, at first glance, seem to impose some sort of parallelism requirement, strongly resembling the facts studied by Fox (2000), Belletti (2003), Torrego (1995; 1998), Uriagereka (1995a; 2001) and Boeckx (2003), among others.

The paper is divided as follows. Section 1 examines the data concerning edge coordinations, in particular two slightly (but crucially) different coordination patterns
are shown, each of them illustrating remarkable syntactic asymmetries. In the next section, I review Bianchi & Zamparelli’s (2001) analysis. In section 3, I spell out my solution to these structures, which capitalizes on Brucart’s (1987; 1999) treatment of «corrective negation». Section 4 concentrates on the leading role of focus in the derivation of edge coordinations. Section 5 contains a summary.

1. Edge coordinations: the asymmetries

Traditionally, “correlative structures” belong to a rather generous list of constructions that were placed somewhere between subordination and coordination, with some formal marks being used as syntactic cues to draw the line. As I said in the outset, the specific structures that are assessed here show different traits that must be highlighted; first of all, they all contain a conjunctive head endowed with a polarity nature that must establish a checking operation in its specifier; second, contrastive focus plays a leading role; finally, questions arise as whether these structures display either some sort of ellipsis process or just a “corrective coda”.

Yet, what I would like to concentrate on in this section is the sharp asymmetries that the examples in (1) illustrate (repeated below as (3)). Following Bianchi & Zamparelli (2001), they will be referred to as adjacent and non-adjacent orders, respectively;¹ as is clear, in the first one, the whole coordinate structure (whose parts I will be labelling here ‘head’ and ‘coda’, just for the sake of exposition) forms a continuous cluster-like string, with the negative particle introducing the first correlate (or ‘head’):

(3) a. Juan talked not (only) to Lucy, but (also) to Mary. (ADJACENT)
   b. Juan didn’t talk to Lucy, but to Mary. (NON-ADJACENT)

Note, moreover, that both patterns can be found either at the beginning or at the end of the sequence.

(4) a. Not (only) MARY, but (also) LUCY he decided to invite. (ADJACENT INITIAL)
   b. Not (only) Mary did I invite, but (also) Lucy. (NON-ADJACENT INITIAL)

(5) a. He invited not (only) Mary, but (also) Lucy. (ADJACENT FINAL)
   b. I didn’t invite (only) Mary, but (also) Lucy. (NON-ADJACENT FINAL)

Let us now move to the asymmetries. In first place, it must be noted that, while in the non-adjacent order the ‘coda’ can be dropped, this possibility is ruled out in the adjacent order. So, truncation is possible in the first case, contrary to what happens when the adjacent order obtains.

(6) a. John called not Mary *(, but Lucy). (ADJACENT)
   b. John didn’t call Mary (*, but Lucy). (NON-ADJACENT)

¹ Throughout the paper, the conjunctive heads will appear in boldface. At the same time, I will use brackets to indicate some optional focal particles that can show up in these structures (basically, only and also).
As noted by Bianchi & Zamparelli (2001), things get better when only appears in the head of the coordination, but not extremely so:

(7) a. He saw not Mary *(but Lucy). (ADJACENT)
    b. He saw not only Mary ??(but (also) Lucy). (ADJACENT)

This contrast seems to be also tenable in other languages, like Catalan, where the contrast is still insufficient to yield a grammatical result.

(8) a. En Joan va veure no només la Maria ??(, sinó també la Laura).
Catalan

The Joan AUX-3SG to-see not only the Maria, but also the Laura
'Joan saw not only Maria (, but also Laura)'

b. En Joan va veure no la Maria *(, sinó la Laura).

The Joan AUX-3SG to-see not the Maria, but the Laura
'Joan saw not Maria (, but Laura)'

The second asymmetry deals with agreement effects between verb and subject and has to assume that a process of ellipsis is at stake. Since the point to be made is more salient in languages that show overt agreement, I will illustrate it with Italian and Spanish; the important thing to notice here is that, again, only the non-adjacent order allows agreement, the adjacent one requiring strict identity between the two verbs (the overt and the assumed elliptical one):²

(8) a. ?Ha hablado no Juan, sino han hablado sus primos.
ADJACENT-Spanish

Have-3SG talked not Juan, but have-3PL talked his cousins
'Juan has not talked, but his cousins'

b. No ha hablado Juan, sino han hablado sus primos.
NON-ADJACENT-Spanish

Not have-3SG talked Juan, but have-3PL talked his cousins
'Juan hasn't talked, but his cousins'

(9) a. ??È arrivato non Gianni, ma sono arrivati i suoi genitori.
ADJACENT-Italian

Is arrived not Gianni, but are-3PL arrived the his parents
'Gianni has arrived not, but his parents'

b. Non è arrivato Gianni, ma sono arrivati i suoi genitori.
NON-ADJACENT-Italian

Not is arrived Gianni, but are-3Pl arrived the his parents
'Gianni has not arrived, but his parents'

The third contrast is related to a parallelism requirement in both conjuncts: the adjacent order does not tolerate extraneous constituents, and, if accepted at all, they receive a parenthetic intonation. Interestingly, the non-adjacent order has no problem whatsoever when that situation arises.

² I use lines to indicate the alleged process of ellipsis, an issue I return to.
(10)  
  a. I have invited not your brother to the party, but your sister to the cinema.
  b. I haven’t invited your brother to the party, but your sister (to the cinema).

(11)  
  a. No le di los libros a María, sino las revistas (a Juan).
      (NON-ADJACENT-Spanish)
      ‘I didn’t give the books to María, but the magazines to Juan’
  b. Le di no los libros a María, sino las revistas (a Juan).
      (ADJACENT-Spanish)
      ‘I gave not the books to María, but the magazines to Juan’

In the adjacent order, plural agreement with two subjects can obtain with slight deviance (cf. (12a)); as far as the non-adjacent order is concerned, it is not possible for the conjoined subject to trigger plural agreement (cf. (12b)). That makes the final asymmetry.3

(12)  
  a. *Hablaron con Juan no sólo María, sino también Laura.
      (ADJACENT-Spanish)
      ‘Talked to Juan not only María, but also Laura’
  b. No hablaron con Juan sólo María, sino también Laura.
      (NON-ADJACENT-Spanish)
      ‘Didn’t talk to Juan only María, but also Laura’

Once we have revisited the most intriguing asymmetries regarding edge coordination’s patterns of (3), we are in a position to offer an analysis that can account for the data. In the next section, I offer the basics of the appealing approach by Zamparelli & Bianchi (2001).

2. Bianchi & Zamparelli’s (2001) analysis

In Bianchi & Zamparelli (2001) two different analyses that try to capture the just observed facts are put forth. Let us have a look at the adjacent order first, which is the one in (13):

(13)  
  a. The assassin killed not (only) Smith, but (also) his dog.
  b. El asesino mató no (sólo) a Smith, sino (también) a su perro. (Spanish)

The analysis in Bianchi & Zamparelli (2001) goes like this: first of all, they assume some peripheral functional projections in order to derive the desired semantic effects (pace Rizzi 1997 and much related work); to be more concrete, they hold that focus particles (in the case at hand, not only... but also) are generated as directly attached constituents to the material that acts as the sentence’s focus, which in a subsequent derivational step move to the specifier of a Focus Phrase. Furthermore, in the top of the

3 Bianchi & Zamparelli (2001) point out a fifth asymmetry dealing with presupposition. I will put it aside for the time being, since I investigate it in work in progress.
structure we find a Ground Phrase, whose specifier is the target for material containing backgrounded information (or the ‘aboutness’, in the sense of Herburger 2000). Bianchi & Zamparelli (2001) defend the idea that there is only one GP per speech act: “the rationale is that this projection should host material which is factored across all conjuncts, becoming background for the whole current speech act.” (p. 5)

The proposed structure, thus, would be as in (15), for a sentence like the one in (14):

(14) I called not (only) Mary, but (also) Lucy.
(15) GroundP
    
    Ground'
    
    Ground° ConJP
    
    FocusP ConJP
    
    Focus° FocusP
    
    I called [not (only) Mary]
    
    but Focus° FocusP
    
    I called [(also) Lucy]

As (15) shows, the basic skeleton of the analysis assumes, below the GP, the existence of a Conjunction Phrase (cf. Munn 1993, Progovac 2003, inter alia) that takes as its arguments two Focus Phrases, which, in turn, dominate two clauses. In order to derive the adjacent order, two steps are needed: first, the head and the coda (the ‘correlates’, in Bianchi & Zamparelli’s 2001 terms) move to the specifiers of both FocPs (cf. (16)); second, a remnant movement operation of the TPs takes place in an ATB-fashion targeting the [Spec, GP] (cf. (17)).

(16) GroundP
    
    Ground'
    
    Ground° ConJP
    
    FocusP ConJP
    
    not (only) Mary Focus° FocusP
    
    I called not (only) Mary
    
    but Focus° FocusP
    
    I called [(also) Inés]
Now, let us see how such a derivation of the adjacent order faces the asymmetries of section 1. Consider first the truncation phenomenon, illustrated in (6); in Bianchi & Zamparelli’s (2001) account, it has its source in the fact that the string consisting of the ATB-raised and the first correlate do not correspond to a syntactic constituent.

The agreement facts that constitute the second difference between both orders follow from (17): the verb in the ATB-raised TP would have to spell-out two inconsistent $\phi$-features (e.g., singular vs. plural), as we could see in (8) (repeated here as (18)):

\begin{enumerate}
\item \textit{a.} ¿Ha hablado no Juan, sino han hablado sus primos. ADJACENT-Spanish) Has-3SG talked not Juan, but have-3PL talked his cousins ‘Juan has not talked, but his cousins’
\item \textit{b.} No ha hablado Juan, sino han hablado sus primos. NON-ADJACENT-Spanish) Not has-3SG talked Juan, but have-3PL talked his cousins ‘Juan hasn’t talked, but his cousins’
\end{enumerate}

As for the parallelism requirement, it is derived if we assume that introducing any extraneous constituent would invoke an additional ‘scrambling’ operation out of the TP, which would render the remnant TPs not identical, hence barring the ATB process. Therefore, something along the lines of (19) would have to be at stake:

\begin{center}
\begin{tikzpicture}
  \node {GroundP} [grow=down, sibling distance=3cm, level distance=3cm]
  child{node {I called} edge from parent node {Ground'}
    child{node {Ground°} edge from parent node {ConjP}
      child{node {FocusP} edge from parent node {not (only) Mary edge from parent node {Focus' edge from parent node {Conj° edge from parent node {FocusP edge from parent node {but edge from parent node {Focus° edge from parent node {TP₁ edge from parent node {also edge from parent node {Inés edge from parent node {\textit{I called not (only) Mary}}}}}}}}}}}}
    child{node {Focus'} edge from parent node {Conj° edge from parent node {FocusP edge from parent node {\textit{I called (also) Inés}}}}}}}
\end{tikzpicture}
\end{center}
Finally, plural agreement between two conjoined subjects is allowed under this analysis by if the [Spec, TP] position of both correlates shares the same referential index, which predicts that the same inflectional agreeing head will be spelled-out with plural features.

What about the non-adjacent order? Bianchi & Zamparelli (2001) claim that some modifications to the starting structure in (15) are needed so that we can explain the full range of properties. In their implementation, (20) starts its derivational life as in (21):

(20) I didn’t call (only) Mary, but (also) Lucy.

(21)

As the reader may have already noted, the two structures differ in non-trivial respects: the non-adjacent order dispenses with the GP, the first of the two correlates is not launched to the specifier of the FocP, and, this time, ellipsis is obtained by some kind of PF process subject to a parallelism requirement, not ATB movement, as indicated in (22):
In Bianchi & Zamparelli’s (2001) words:

We remain agnostic as to the exact nature of this ellipsis process. The only property that is crucial for our argument is that this process does not require strict identity of the antecedent IP and the elliptical IP (contrary to the ATB derivation); in particular, it seems to be insensitive to differences in functional features. Bianchi & Zamparelli (2001: 9).

Going back to the asymmetries, given the structure in (21), they can receive an explanation. First, the possibility of truncating the string is a result of the whole structure corresponding to the first correlate (i.e., the first FocP). Second, the ϕ-features mismatch between the two verbs are a direct consequence of the PF ellipsis, which, contrary to ATB movement, does not require strict identity in overt ϕ-features. Third, the appearance of an extraneous constituent showing up between the head and the coda is faced by assuming some kind of ‘reconstruction’ of an identical counterpart in the elliptical TP, as roughly illustrated in (23):

Finally, plural agreement is not possible in the non-adjacent order due to the fact that the verb that survives the ellipsis process is just the obe belonging to the first TP, being just coindexed with the subject of that very TP.

This section has summarized the theoretical assumptions made by Bianchi & Zamparelli (2001) in order to provide an analysis that can account for the interest-
ing asymmetries that the adjacent and non-adjacent orders of edge coordinations exhibit, and, as we have just seen, the results seem to fit with the proposal. However, it is worth wondering whether a more unitary and elegant analysis is possible, and, in this respect, whether some aspects should be looked at more carefully, specially the two different assumed base structures, the ellipsis/ATB processes, and the use of so much functional structure to make the semantics be transparent at Logical Form.

3. A Minimalist Analysis

In the following pages I offer an alternative analysis for edge coordinations dispensing with much of the machinery in Bianchi & Zamparelli (2001). The aspects of their analysis that I will be concentrating on are two: whether ellipsis should be invoked and the corrective nature of such constructions. I will leave the issues concerning focus for the next section.

3.1. Ellipsis

The first aspect of Bianchi & Zamparelli (2001) I am going to dwell on is the ellipsis processes they postulate for edge coordinations. It is interesting to compare these structures with some that can be taken to imply ellipsis as well; a good example is the coordinated structure in (24a). The question can more generally be stated as follows: do we have to assume ellipsis every time we have a distributive interpretation of an event? Do we have to assume, for instance, that (24a) —in one of its readings— has been reduced by ellipsis, as indicated in (24b)?

(24) a. Mary and John went to the cinema.
    b. \[ \text{ConjP} \left[ \text{CP} \text{ Mary went to the cinema} \right] \text{ Conj } \left[ \text{Conj and} \right] \left[ \text{CP} \text{ John went to the cinema} \right] \]

By parity of reasoning, whenever we have two objects, a similar derivation should be assumed.

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4 The reduction process outlined in Bianchi & Zamparelli (2001) is an extension of Zamparelli (2000), where the same kind of mechanism is used to derive the “distributive coordination” in (i), whose initial structure is as in (ii):

(i) \text{Both John and Mary went to the cinema.}
(ii) \text{Both} \left[ \text{CP} \text{ John went to the cinema} \right] \left[ \text{Conj and} \right] \left[ \text{CP} \text{ Mary went to the cinema} \right]

As Zamparelli (2000) points out:

“The idea I want to pursue to explain this complex pattern is that distributive coordination is the result of the coordination of two full sentences—in most cases, root sentences—which are ‘reduced’ by meaning-preserving syntactic operations. The distributive semantics falls out automatically from this structures without having to stipulate the existence of a special, distributive type of conjunction” (Zamparelli 2000: 9).

Due to space limitations, I cannot fully review Zamparelli (2000) here. I come back to the whole issue in work in progress.
The point I want to make, at any rate, is whether we have to assume the analysis in (25b) for the structure in (26), which is a bona fide edge coordination (cf. (26b)), or else a non-elliptical counterpart can be defended (cf. (26c)):

(26) a. I didn’t buy a book, but a magazine.
   b. \[ConjP [CP I didn’t buy a book] [Conj’ but [CP bought a magazine]] \] (ELLIPSIS)
   c. I didn’t buy \[ConjP [DP a book] [Conj’ but [DP a magazine]] \] (NO ELLIPSIS)

On such cases, one could perfectly assume that the event quantifier is the only element that gets affected by the distributive reading, resorting to a neo-Davidsonian approach along the lines of Herburger (2000) or Beghelli & Stowell (1997), whereby all sentences (and not only those containing stage-level predicates, in the sense of Kratzer 1995) contain an existential quantification over events which can give rise either to collective or distributive interpretations. In particular, following Beghelli & Stowell (1997), one could argue that distributive readings arise by keeping the existential quantifier (which is generated within the \(\text{vP}\), and later on moved to a particular functional projection in the CP-field: a Share Phrase) under the scope of the subject; if the covert existential quantifier takes wide scope, then distribution fails, and a collective reading obtains instead.

Nevertheless, it seems that in certain circumstances, a process of ellipsis must be postulated, like in the example (27b), where, besides the distributive reading, two adverbs show up: since it is impossible to introduce an adjunct in a simple PP coordination, a supporting verb must have been deleted, as indicated by Nunes (2001):

(27) a. Eu conversei com o João e a Maria. (Portuguese)
   I talked-1SG with the João and the Maria
   ‘I talked to João and Maria’
   b. Eu conversei com o João (sábado) e com a Maria (domingo). (Portuguese)
   I talked-1SG with the João (saturday) and with the Maria (sunday)
   ‘I talked to João (on Saturday) and to Maria (on Sunday)’
   [from Nunes (2001: 339)]

Here I will assume a non-elliptical process for edge coordinations, pace Beghelli & Stowell (1997). It is important, however, to distinguish edge coordinations proper (cf. (28)) from a very similar —although crucially different— pattern, namely, verbal ellipsis (cf. Brucart 1987; 1999) or, according to Depiante (2004), pseudostripping (cf. (29)):

(28) a. Ana vio a María, pero no a Susana. (Spanish)
   Ana saw-3SG to María, but not to Susana
   ‘Ana saw María, not Susana’
   b. Ana no vio a María, pero sí a Susana. (Spanish)
   Ana not saw-3SG to María, but yer to Susana
   ‘Ana didn’t see María, but Susana’
According to Depiante (2004), the structures in (28) should be treated together with *gapping* and *stripping*. As for the examples in (29), they belong to the same group *ellipsis* and *sluicing* do. I will put aside here whether the examples of (29) are real instances of VP (or TP, in Depiante’s (2004) analysis) ellipsis, what I want to discuss in what follows is the exact status of the coordinated structures in (28).

As I just said, Depiante (2004), just like Bianchi & Zamparelli (2001), assimilates edge coordinations to ellipsis, and, more precisely, to *stripping*. On the face of it, Brucart (1999) argues that there is no such process at all in the structures under inspection; in Brucart’s (1999) words:

“The negation that appears in these constructions, which we will call "corrective", adopting the proposal by Bosque (1984), is not the remnant of an elliptical VP, but a partial negation that only affects the phrase to its right […] with which it forms a non-sentential syntactic projection. Moreover, the negative constituent acts as a parenthetical adjunct of an element in the main clause with which it holds a polarity contrast relation” (Brucart 1999: § 43.2.3.4.) [my translation]

Depiante (2004) offers three arguments against Brucart’s (1999) proposal: let us quickly review them. The first one has to do with the licensing conditions of the alleged ‘remnants’, and, more precisely, with case a θ-role assignment. The second problem is related to structures such the one in (30), where an anaphoric dependency can be established despite there not being any overt antecedent (arguably, the material undergoing ellipsis contains it):

(30) Juan no tiene un auto, pero sí Pedro, y está en muy buenas condiciones.

Juan not have-3SG a car, but yes Pedro, and be-3SG in very bad conditions

‘Juan does not have a car, but Pedro does, and it looks very good’

[from Depiante (2004: 65)]

The third argument has to do with the fact that there is a list of well-known properties of what Depiante (2004) dubs “local ellipsis” (which includes *gapping* and *stripping*) with which edge coordinations pattern: it is restricted to coordinated TPs (cf. (31)), it is locally bounded (cf. (32)), it is sensible to islands (cf. (33)), and it can operate on non-syntactic constituents (cf. (34)).

(31) a. Susan didn’t read a book although Mary did. Non-local ellipsis

b. *Susan read a book although not a magazine. Local ellipsis

[from Depiante (2004: 58-59)]
(32) a. I play tennis every weekend and I think that Susan said that Peter claimed that Max does too.  
Non-local ellipsis.  
b. *I read a book and I think that Susan said that Peter claimed that Max a magazine. Local ellipsis  
[from Depiante (2004: 59-60)]

(33) a. John parked his car where Mary did.  
Non-local ellipsis  
b. *John parked his car where Mary her van.  
Local ellipsis  
[from Depiante (2004: 60)]

(34) a. I read a book and [TP Mary did [vP read a book too]]  
Non-local ellipsis  
b. Peter caught an eel for Mary in the Charles River and [TP John [vP caught a flounder for Mary in the Charles River]]  
Local ellipsis  
[from Depiante (2004: 61)]

Let us address each argument of Depiante (2004). The first one can be dismissed right from the beginning, since, if real, it could also be raised in many more cases, as the ones in (35), for which it is far from obvious that a process of ellipsis should be invoked:

(35) a. Mary and John are brothers.  
b. I called Mary and John.  

Note that the coordinated DPs do not trigger a distributive reading, but, what really matters here is whether they (actually, one of them) can or cannot receive case and θ-role. If there were just one verb and Depiante (2004) were correct, the derivation of both examples in (35) should crash, contrary to fact. A reasonable move would be to assume that both DPs receive the same case (Nominative and Accusative) and θ-role.

As for Depiante’s (2004) second argument, it should be noticed that ellipsis does exist here, but because of the conjunction that is being used: Spanish “pero” can only head clauses (that is, propositional entities), contrary to English “but”, which can correspond not only to “pero”, but also to “sino” (and “excepto”), which is the one we are interested in here. In this vein, note that (36a) must be translated in Spanish as (36b), not as (36c) or (36d):

(36) a. There is not one people, but two.  
b. *Hay no una persona, pero dos. (Spanish)  
c. Hay no una persona, sino dos. (Spanish)  
d. Vinieron todos excepto Juan.  
CAME-3PL all except Juan  
‘All (of them) came but Juan’  

When clausal structures are considered, “pero” is fine:

(37) a. John will come, but he says he is tired.  
b. Juan vendrá, pero dice que está cansado. (Spanish)  

More importantly for my purposes, note that the kind of anaphoric dependency pointed out in Depiante (2004) does not arise in the case of true edge coordinations (which, to repeat, involve the coordinating conjunction “sino”, not “pero”):
(38) *Juan no tiene un auto, sino Pedro, y está en muy buenas condiciones.

Juan not have-3SG a car, but Pedro, and be-3SG in very bad conditions

‘Juan does not have a car, but Pedro, and it looks very good’

Moving on to the third argument, I think that it just shows that local and non-local ellipses are different, but nothing deeper.

What I would like to defend here, much in the sense of both Bosque (1984) and Brucart (1987; 1999) is that sentences like (39b) do not involve ellipsis at all, but just a conjunction phrase that contains a “corrective negation/affirmation”; (39a), however apparently identical, does involve ellipsis.

(39) a. Juan ha cantado, pero Pedro no.

Juan have-3SG sung, but Pedro not

‘Juan has sung, but Pedro has not’

b. Juan ha cantado, (y) no Pedro.

Juan have-3SG sung, but not Pedro

‘Juan has sung, and not Pedro’

The next data, taken from Brucart (1999), provide evidence supporting a non-elliptical analysis of edge coordinations. (40) illustrates that true ellipsis, but not edge coordinations, requires anaphoric dependencies, making it impossible for the elliptical chunk to precede the structure ellipsis relies on (cf. (40c)):

(40) a. Juan, (y) no Pedro, es el verdadero asesino. Edge Coordination  (Spanish)

Juan, (and) not Pedro, is the true guilty

‘Juan, (and) not Pedro, is the true guilty’

b. Juan trabaja los lunes, pero Pedro no trabaja los lunes.  Edge coordination (Spanish)

Juan work-3SG the mondays, but Pedro not

‘Juan works on Monday, but Pedro does not’

c. *Juan, (y) Pedro no es el verdadero asesino, es el verdadero asesino. False ellipsis (Spanish)

Juan, (and) Pedro not is the true murderer, is the true murderer

‘Juan, and Pedro is not, is the true murderer’

In (41), we can see that aspectual adverbs like “todavía” (Eng. yet) are allowed in edge coordinations, but not in bona fide elliptical contexts:

(41) a. Juan ha llamado a Inés, y Pedro todavía no ha llamado a Inés.

Juan have-3SG called to Inés, and Pedro yet not

‘Juan has called Inés, and Pedro hasn’t (done it) yet.’

b. Juan ha llamado a Inés, (y) no Miguel. Edge coordination (Spanish)

Juan have-3SG called to Inés, (and) not Miguel

‘Juan has called Inés, (and) not Miguel’

c. *Juan ha llamado a Inés, (y) no todavía César. Edge coordination (Spanish)

Juan have-3SG called to Inés, (and) not yet César

‘Juan has called Inés, (and) not yet César’
Another argument against ellipsis is offered in (42), which proves that only edge coordinations allow negation when the second correlate is an instance of what I am calling “corrective negation”; ellipsis does not.

(42) a. ¿Inés no hizo los deberes, no Ana. Edge coordination (Spanish)
    Inés not make-PAST-3SG the homework, not Ana
    ‘Inés didn’t make her homework, not Ana’
b. Fue Inés, (y) no María, la que no hizo los deberes. Edge coordination (Spanish)
    Be-PAST-3SG Inés, (and) not María, the that not make-PAST-3SG the homework
    ‘It was Inés, (and) not María, the one that didn’t make her homework’
c. *Luisa no hizo los deberes, y María no hizo los deberes. Ellipsis (Spanish)
    Luisa not make-PAST-3SG the homework, and María not
    ‘Luisa didn’t make her homework, and María didn’t’

For the punch line, witness that in (43), edge coordinations cannot be followed by another clause, unless it is an appositive relative, a fact that supports the non-clausal status of these structures:

(43) a. María suspenderá un examen, (y) no Luis, pero ya lo recuperará en septiembre. Edge coordination
    María fail-FUT-3SG an exam, (and) not Luis, but already CL-it pass-FUT-3SG in September
    ‘María will not pass an exam, (and) not Luis, but he will pass it in September’
b. María suspenderá un examen, (y) no Luis, quien ya lo recuperará en septiembre. Edge coordination
    María fail-FUT-3SG an exam, (and) not Luis, who already CL-it pass-FUT-3SG in September
    ‘María will not pass and exam, (and) not Luis, who will pass it in September’
c. *María suspenderá un examen, y Luis no suspenderá un examen, pero ya lo recuperará en septiembre. Ellipsis
    María fail-FUT-3SG an exam, and Luis not, but already CL-it pass-FUT-3SG in September
    ‘María will fail in an exam, and Luis won’t, but he will pass it in September’

3.2. A Polarity Correction

At this point, we need to clarify what it means to be a “corrective negation/affirmation”. Technically, I argue that it involves a conjunction phrase whose head may or may
not be overtly filled, and a species of ‘contrastive polarity’ checking. When considering structures of a similar type, Herburger (2000) makes the following reasoning:5

Finally […] this type of contour always suggests that there is a “polarity-reversing” continuation. If the sentences is negated, having a bound reading, the fall-rise contour signals a positive continuation, along the lines of “not X, but Y”; and if the sentences is affirmative, a fall-rise contour signals “X, but not Y.” Fall-rise contour thus seems like a tonal way of saying but. (Herburger 2000: 54)

Before concentrating on the role played by focus in edge coordinations, we have to address two issues: the structure to be adopted in edge coordinations and the nature of the polarity checking. As for the structure, I will adopt the mainstream analysis for coordination (cf. Munn 1993, Kayne 1994, Larson 1991, Progovac 2003, inter alia), in which the coordinating conjunction heads a syntactic projection that takes the coda as its ‘complement’ (i.e., its sister) and the other coordinated elements as its specifiers, a position that is sound under the Bare Phrase Structure proposal outlined by Chomsky (1995). So, a string like (44) should be represented as in (45):

(44) (not) John but Mary.
(45) {but, {John, {but, {but, Mary}}}}

Edge coordinations can show not only two arguments, but actually multiple “correlates”, as in (46). The good news of the analysis of (45) is that this case of ‘conjunction doubling’ can be seen as an agreement mark, following the treatment of Spanish “ni” (Eng. neither) put forward by Bosque (1994):

5 In Herburger (2000: ch. 2, Appendix), it is pointed out that the interaction between focus and negation can provoke a bound reading, whereby negation only affects focus; in the free reading negation affects the verb, as indicated in (i) and (ii):

(i) Sascha didn’t visit MONTMARTRE.
(ii) “What Sascha visited wasn’t Montmartre.” [bound reading]
(iii) “What Sascha didn’t visit wasn’t Montmartre.” [free reading]

[from Herburger (2000: 29)]

It is interesting to note that edge coordinations seems to provide a test to differentiate free and bound readings. In (iv), continuing with but… forces the bound reading; continuing it with and not… or but not… forces the free reading. That is, if the coda is negative, free reading emerges, and vice-versa.

(iv) Sascha didn’t visit MONTMARTRE, but THE LOUVRE. [bound reading]
(v) Sascha didn’t visit MONTMARTRE, and not the LOUVRE. (He DID in fact visit the Louvre) [free reading]

[from Herburger (2000: 30)]
Bosque (1994) explores cases like those in (48), and argues that the doubling of “ni” is an agreement marker between the specifier and the Conj head in order for the whole projection to be properly identified as a NPI. If that situation fails, preverbal ConjPs headed by “ni” are ruled out, just like any other non negative element merging with $\Sigma$.

As Bosque (1994) points out:

It is reasonable to think that what happens here is that preverbal conjunctive phrases cannot be recognized as NPIs because $ni$’s position does not allow to identify as such the whole constituent, but only the conjunction’s complement. We can thus suppose that for the specifier of a conjunctive phrase with $ni$ to be licensed as negative it is necessary that it agrees with its head. In order to get that, it is necessary for the specifier to contain either a negative quantifier, like in *Ningún libro ni ningún artículo le han gustado* [Eng. He didn’t like any book or magazine], or else a syntactic agreement mark (the first $ni$ in [(48)]) with the head of the ConjP, or, finally, what seems coherent, a negative operator properly governed containing the appropriate agreement features (Bosque 1994: 191) [my translation].

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6 In his analysis, Bosque (1994) argues against the deep structure of (ii) for (i), which is coherent with what we have been assuming all along:

(i) No veo a tu padre ni a tu madre. (Spanish)
Not see-1SG to your father nor to your mother
‘I don’t see your father nor your mother’

(ii) No [veo a tu madre] ni [veo a tu madre]. (Spanish)
[from Bosque (1994: 193)]
Now, recall that edge coordinations can come in different disguises, depending on whether the first sentence contains negation or not, and, at the same time — and this is what crucially differentiates adjacent and non-adjacent orders —, this negation can be a normal case of clausal negation (which we assume to be placed in Laka’s 1990 $\Sigma$; cf. (49a)) or an instance of the so-called “constituent negation” (CN) (cf. Klima 1964, Lasnik 1972 and Horn 1989; cf. (49b)):

(49) a. I didn’t read the books, but the magazines. Clausal negation
   b. I read not the books, but the magazines. Constituent negation

The same pattern can arise in other environments, like (50), where the standard view is that negation directly merges with the QP “pocos” (Eng. few people), as Ricardo Etxepare (p.c.) has informed me:

(50) a. [Pocos no han venido a la fiesta]. Clausal negation (Spanish)
     ‘Few people have come to the party’
   b. [[No pocos] han venido a la fiesta]. Constituent negation (Spanish)
     ‘Not few people have come to the party’

The non-easy part of the story is that not any kind of XP (nor any position, for that matter) allows CN. So, for instance, postverbal QP rejects CN:

(51) a. No todos han venido. Preverbal CN (Spanish)
    ‘Not all have-3PL come’
   b. *Han venido no todos. Postverbal CN (Spanish)
    ‘Not everyone has come’

Obviously, any attempt to clarify the adjacent order of edge coordinations must have something to say about CN. In Etxepare (in progress), it is argued that CN does not form a constituent when it appears with strong QQ, the alleged adjacency being a by-product of “association with focus”, in the sense of Rooth (1985) and Herburger (2000): negation selects a focus projection which contains the QP, having propositional scope and forcing the implication that some element in the set of propositional alternatives induced by the focus is true. In other words, in (52a) we assert that John did drink something, although, whatever it is, it was not beer; in Rooth’s (1985) terms, its ‘focus semantic value’ $[[\phi]]^F$ would be the one in (52b), which spells out the set of alternative values for the focus variable:

(52) a. John drank not [beer]$_{\text{FOCUS}}$.
   b. $[[\phi]]^F = [[[\text{John did not drink [beer]}^F]], [[[\text{John did not drink [vodka]}^F]],
       [[[\text{John did not drink [wine]}^F]], [[[\text{John did not drink [bourbon]}^F]],
       [[[\text{John did not drink [cognac]}^F]],…]$

The structure proposed by Etxepare (in progress) to obtain (50b), repeated as (53), is (54):
[No pocos] han venido a la fiesta. (Spanish)

Not few have-3PL come to the party
‘Not few people have come to the party’

(54) \[ \Sigma \text{not} \[ \text{DPP} \ldots \] \}

Restricting the range of data to DPs, it is obvious that, whatever the order, the result is fully out (I use Spanish here, since this language allows postverbal subject DPs):

(55) a. *Han llegado [no los niños]. (Spanish)

Have-3PL arrived not the kids
‘There have arrived not the kids’

b. *[No los niños] han llegado. (Spanish)

Not the kids have-3PL arrived
‘There have arrived not the kids’

A plausible source of the ungrammaticality of (55) is the definite article, which, although can receive a strong Q analysis, as shown by its incompatibility in existential contexts (cf. (56b)), is able to appear in exemplary or presentational ones (cf. (56a)), as noted by Hornstein & Uriagereka (2002).

(56) a. What can we use for a prop? There’s always the table,… Presentational context

b. #There’s the table you got me for a prop on stage. Existential context

[from Hornstein & Uriagereka (2002: 117)]

Hornstein & Uriagereka (2002) account for those facts by arguing that definite descriptions (including proper names) are intrinsically presuppositional. If this is all on track, it could be the case that presuppositional elements (i.e., definite descriptions), despite behaving like strong QQ, cannot associate with the alleged cases of CN we have been considering so far; but one still wonders why. At present I have no principled explanation for why NC cannot associate with definite descriptions, but only with bona fide quantifiers (e.g., all, few, many, etc.).

The bottom line, anyway, is why should a derivation like (57a) be bad?

(57) a. *Ha hablado no el profesor. (Spanish)

Have-3SG talked not the teacher
‘The teacher has not talked’

b. [CP \[ \Sigma \text{not} \[ \text{DPP ha hablado el profesor} \] \]]

Going back to Hornstein & Uriagereka’s (2002) point: if definite descriptions are presuppositional, it would make perfect sense for them to resist being in focal structures. As a result, their natural locus should be the restrictive clause of the existential quantifier (or somewhere outside its scope, for that matter), as indicated in (58b).

7 One possibility would be to blame them for being referential (i.e., presuppositional): things being so, these elements must occupy a wide-scope position at LF, one crucially c-commanding negation (in Beghelli & Stowell’s 1997 system, they would be launched to [Spec, RefP], the highest position in the CP), and this would conflict with CN.

8 Following Irurtzun (2003), I have underlined the focus to make it more salient.
The problem with this approach is that the proper noun is actually the focus (and, more generally, definite descriptions can constitute the focus).

(58) a. A boy saw John.
   b. [the x: John x] [∃ e: C (e) & see (e) & [∃ y: boy y] Experiencer (e,y)]
      Theme (e,x)

Note further that the problem cannot be solved as in Etxepare (in progress), since, even if CN involves movement to Uriagereka’s (1995b) [Spec, FP], hence requiring a preverbal position, this strategy does not help much in the case of definite descriptions (cf. (59b)), although it does with quantifiers (cf. (59a)):

(59) a. [No todos] han venido. (Spanish)
   'Not all have-3PL come
   b. *[No los niños] han venido. (Spanish)
   'Not the kids have-3PL come

An additional drawback is that focused elements tend to be postverbal in Spanish (they are preverbal just in ‘contrastive focus’ environments).

My answer to the observed facts runs as follows: only proportional or universal QQ can associate with CN so that no negative interpretation is obtained. In plain terms, whenever negation combines with universal and proportional QQ, the result is non-negative, as the paraphrase in (60b) indicates:

(60) a. [[Not many] students] came.
   b. [Few students] came. (not many = few)

Existential quantifiers do get a negative interpretation; so, (61a) has the rough meaning of (61b); interestingly, existential quantifiers do not allow CN either, as (61c) shows:

(61) a. The president didn’t answer any question.
   b. There is no question such that the president answered it.
   c. *[Not some] question is annoying.

An important trait of edge coordinations is that, when apparent CN shows up (in the adjacent order), the corrective coda can save the sequence:

(62) a. John drank not beer *, but tequila.
   b. John drank beer , (and) not tequila.

I assume that the facts in (62) are to be captured by a polarity checking operation between the correlates, as is clear in (63), where we can see that the same polar value in these two constituents yields ungrammaticality:

(63) a. *John drank not beer, (and) not tequila.
   b. *John drank beer, but tequila.

The checking I am assuming, would, then, be a local one, but locality does not obtain in many cases, given that the corrective coda can appear in different positions:
(64) a. John, [not Peter], said that.
    b. John said that, [not Peter].

to complicate matters even more, the head of the construction (the specifier of
the ConjP) can dispense with the appropriate polar element when it appears in \(\Sigma\), as
happens in (65):

(65) a. Mary didn’t call his brother, but Peter.
    b. Mary called his brother, not Peter.

The first problem goes away if some process of direct generation and subsequent
stranding is assumed (cf. Boeckx 2003). Regarding the second one, it could undergo
the same fate if we take the specifiers of ConjPs to be able to carry the polar null op-
erators, much in the lines of Brucart’s (1995) analysis of Spanish NPIs:

(66) a. Juan no leyó [OP\textsubscript{NEG} libro alguno] (Spanish)
    Juan not read-PAST-3SG book any
    ‘Juan didn’t read any book’
    b. Juan no leyó [ningún libro] (Spanish)
    Juan not read-PAST-3SG [any book]
    ‘Juan didn’t read any book’

Consequently, what we would have is as depicted in (67):

(67) a. John called [OP\textsubscript{POS} Mary, not John].
    b. John didn’t call [OP\textsubscript{NEG} Mary, but John].

In this section I have addressed the issue of ellipsis in edge coordinations. I have
argued, contra Bianchi & Zamparelli (2001) and Depiante (2004), that edge coordi-
nations do not involve ellipsis, but just a process of corrective negation/affirmation
that has no propositional nature. The process of correction that these structures in-
volve, however, can be of different types, requiring the coda to be either positive or
negative, as noted by Herburger (2000). The trickier part of the analysis is related to
some apparent cases of constituent negation that crucially bear on the
adjacent order. I have assumed that these cases involve association with focus: negation
generates in \(\Sigma\) —not directly merged with the constituent at hand—, and then move-
ment operations apply to obtain the final word order. It is important to highlight
that the analysis I have put forth does not explain why (68a) is fine and (68b) out:

(68) a. Mary didn’t eat the peanuts.
    b. *Mary ate not the peanuts.

In Bianchi & Zamparelli’s (2001) analysis, (68) follows from the fact that negation
and direct object form no constituent; but, even if so, that does not explain why the
continuation is needed. Actually, these authors add the following piece to the puzzle:

Put differently, we have to account for the intrinsic “binary” nature of the ad-
jacent order. At present it is not entirely clear how this constraint should be best
captured, and to what extent it can follow from other modules of the grammar.
The generalization we need to express is that (i) “edge coordinations” always trig-
ger over raising of the first correlate to a Focus position, and (ii) once an opera-
tor appears in this position a second correlate must also be present” (Bianchi & Zamparelli 2001: 6).

I have nothing specially deep to add to this quote, apart from noting that (68b) could be explained if that instance of negation, not being in $\Sigma$ (assume, that in this case, “not” is generated as an agreement mark in [Spec, ConjP], just like Bosque’s 1994 treatment of Spanish “ni”), can only be licensed by a corrective ConjP. Obviously, this raises many questions, and many more so if we restrict ourselves to the streamlined operations within the Minimalist Program. Being in its natural place (i.e., $\Sigma$), (68a) poses no problems; now, if negation in (68b) is not in $\Sigma$, then it would be logical to expect some additional mechanism to locally license it, namely, a corrective continuation. Note that the same problem seems to be at stake in other doubling structures involving conjunctions, as (69) suggests:

(69) a. I will go either to Rome *(or to Berlin)
   b. I want both the milk *(and the biscuits)

4. The Role of Focus

So far, nothing has been said about the focal nature of edge coordinations (cf. den Dikken 2003, Han & Romero 2004, Hendriks 2001, Herburger 2000, inter alia). I assume here Irurtzun’s 2003 analysis of focus, whereby focus features (i.e., $[iF]$) are a kind of formal (and interpretable) feature that are assigned in the Numeration (cf. Chomsky 2000), as detailed in (70b), assuming that Mary is the focus:

(70) a. I love Mary.
   b. {I, love, $\nu$, T, C, Mary$[iF]$}

I also follow Irurtzun (2003) in taking focus projection to preserve the command units created by the monotonic application of Merge:

(70)

{γ, $[iF]$}, {α, $[iF]$, β$[iF]$}[iF]}[iF]

{α, $[iF]$, β$[iF]$}[iF] {γ$[iF]$}[iF]

As far as edge coordinations go, the analysis for them would be as in (71):

(71) a. I love Mary, not Susan.
   b. {I, love, $\nu$, T, C, Mary$[iF]$, not, Susan$[iF]$}

There is one remarkable difference between the adjacent and the non-adjacent order: in the latter no focus association (Herburger’s 2000 bound reading) is necessary, while it is in the former. So, in a sentence like (72a), any of the elements in the c-command domain can be the focus, but there is no need for that; in (73), only
the constituent(s) following the negation is the focus. Note, for one thing, that in the adjacent order, negation has to negate the element that immediately precedes; that is to say, we cannot have long-distance focus marking (cf. (73c) vs. (73d)):

(72) a. I didn't give the books to John, (but take them from him).
   b. I didn't give the books to John, (but the magazines).
   c. I didn't give the books to John, (but to Mary).
   d. I didn't give the books to John; I called him.

(73) a. I gave not the books to John, (but the magazines).
   b. I gave not the books to John, (but the magazines to Mary).
   c. *I gave not the books to John, (but to Mary).
   d. I gave the books not to John, (but to Mary).

5. Back to the asymmetries

We have arrived at the critical point of the argument. In this section I would like to lay out how the analysis I have put forward can account for the data of Bianchi & Zamparelli (2001). As we saw, their analysis can explain the noted asymmetries, but in so doing, they increase the number of technical assumptions: functional projections, ellipsis, ATB movement, etc.

Truncation, as I have just said (cf. section 3), could be the consequence of not obtaining the right licensing mechanism: if “not” does not head its projection in these cases (which does not force us to assume that it is CN either, but just some sort of agreement mark), then it is not unlikely that it must undergo a special kind of local licensing, which I take to be incarnated by the ConjP. In fact, remember that this mechanism would be working in other conjunction doubling structures.

The facts about identity, which are explained in Bianchi & Zamparelli (2001) by means of ATB-movement (for it to take place, the remnants must be identical). Note first, that this effect does not yield total ungrammaticality, contrary to truncation. Under the focus analysis I am assuming, the key to the problem has to do with the very nature of these structures: they focus some constituents, and then the ‘alternatives’ that must occupy the focus variable that are offered in the coda. Recall also that the adjacent order works in a rather peculiar way: in its more neutral reading, it marks the whole subsequent string as the focus (it can also mark the first constituent as the focus; cf. (73a)), which is tantamount to saying that the exact number of elements will be needed to satisfy the alternative offer.

The third and fourth asymmetries had to do with agreement: first, only the non-adjacent order allowed for the two verbs (assuming ellipsis) to be different. The relevant data were in (8), which is repeated here as (74):

(74) a. ?Ha hablado no Juan, sino han hablado sus primos. ADJACENT (Spanish)
    Has-3SG talked not Juan, but have-3PL talked his cousins
    ‘Has talked not Juan, but his cousins’
b. No ha hablado Juan, sino han hablado sus primos.  
**NON-ADJACENT** (Spanish)  
Not has-3SG talked Juan, but have-3PL talked his cousins  
‘Hasn’t talked Juan, but his cousins’

Second, only the adjacent order allowed two coordinated subjects to trigger plural agreement in the verb, as indicated in (75):

(75) a. ?Hablaron con Juan no (sólo) María, sino (también) Laura.  
**ADJACENT** (Spanish)  
Talked-3PL to Juan not only María, but also Laura  
‘Talked to Juan not only María, but also Laura’

b. *No hablaron con Juan (sólo) María, sino (también) Laura.  
**NON-ADJACENT** (Spanish)  
Not talked-3PL to Juan only María, but also Laura  
‘Didn’t talk to Juan only María, but also Laura’

I argue that both facts can receive a natural explanation if, in the non-adjacent order, the ConjP enters *Agree* as a more compact unit; what does that mean? I will take assume that this structure behaves just like partitive phrases do in languages like Spanish, as noted by Brucart (1997). To be precise, Brucart (1997) shows that partitive phrases containing differently inflected DPs can trigger either singular or plural agreement (which has interpretive consequences, as Brucart 1997 notes, a matter I put aside here):

(76) a. La mayoría de los estudiantes {aprobó/aprobaron}.  
(Spanish)  
The most of the students-3PL {passed-3SG/passed-3PL}  
‘Most of the students passed’

b. El diez por ciento de los soldados {regresó/regresaron}.  
(Spanish)  
The ten per cent of the soldiers {came-back-3SG/came-back-3PL}  
‘The 10% of the soldiers came back’

The logic I am suggesting is that, whenever the adjacent order obtains, the DPs count as a complex unit whose *φ*-features can be counted.

6. Concluding remarks

The aim of this paper has been to defend the idea that the structures in (77), labelled “edge coordinations” Bianchi & Zamparelli (2001), do not invoke a complex derivation involving ellipsis:

(77) a. John, **(and) not** Peter, accepted the job.

b. I **didn’t** drink wine, **but** beer.

I have tried to show, following Brucart (1999), that all we need is a Conjuntion Phrase and a polarity checking between its two arguments. The proposal leaves, nevertheless, many questions without a principled explanation (what is the correct analysis of CN in Spanish, what is the source for the binary nature of these and
other structures, which is the exact status of the polarity checking, etc.), but I turn to them in work in progress.

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