

# ADVERSATIVE “CORRECTIVE” COORDINATION: FURTHER EVIDENCE FOR COMBINING SUB-CLAUSAL CONSTITUENTS

LUDOVICO FRANCO<sup>1</sup>

**Abstract.** In this paper, we will provide novel evidence for the availability of a sub-clausal syntax of “corrective” adversative coordination – along the lines of Toosarvandani (2013) and contra Vicente (2010) – coming (a) from agreement facts in Italian, (b) the existence of languages with ‘symmetrical’ patterns of ‘correctives’, such as Russian. Specifically we will show that the evidence collected here supports and updates Toosarvandani (2013)’s claim that basic correctives (vs. anchored correctives) are able to combine sub-clausal constituents, assuming that some cases of corrective coordination, namely the cases of basic correctives, can indeed involve conjuncts that are smaller than complete clauses.

**Keywords:** *coordination, agreement, Italian, negation, correctives.*

## 1. INTRODUCTION

In this paper, we will provide novel evidence for the availability of a sub-clausal syntax of ‘corrective’ adversative coordination – along the lines of Toosarvandani (2013) – coming (a) from agreement facts in Italian, (b) the existence of languages with “symmetrical” patterns of “correctives”.

The puzzle in question is the behaviour of adversative items (of the type of English *but*) which are able to encode at least two different semantic meanings: (a) a *corrective* one and (b) a *counterexpectational* one. In the recent literature, Vicente (2010) and Toosarvandani (2013) also distinguish CORRECTIVE and COUNTEREXPECTATIONAL uses of ‘but’ from the viewpoint of syntax. Such a distinction is also encoded at the level of the lexicon in many languages, where there are two different items signalling the two different uses (e.g. Spanish *sino* [corrective] vs. *pero* [counterexpectational]; German *sondern* [corrective] vs. *aber* [counterexpectational]; Persian *balke* [corrective] vs. *vali* [counterexpectational]).

The difference between the two uses of *but* can roughly be stated as follows. In corrective contexts, what is expressed in the first conjunct is not true, while the second conjunct is true under the same circumstances (cf. Steindl 2013) and negation is commonly interpreted as having scope over the first conjunct, as shown in (1) below taken from

---

<sup>1</sup> CLUNL/Universidade Nova de Lisboa, e-mail: [franco.ludovico@gmail.com](mailto:franco.ludovico@gmail.com).

I wish to thank Paolo Lorusso, Rita Manzini and Leonardo Savoia for their helpful comments. All errors are my own. I gratefully acknowledge the Portuguese National Science Foundation, Fundação para a Ciência e a Tecnologia (FCT), for supporting this work with the research grant IF/00846/2013.

Toosarvandani (2013: 828).

- (1) Max doesn't eat chard, but spinach *corrective*

The sentence in (1) is true only if *Max does not eat chard and he eats spinach*. On the contrary, counterexpectational adversative coordination implies that the proposition stated by the second conjoint is quite implausible, given the proposition stated by the first one. Consider the example in (2), taken from Toosarvandani (2014: 5).

- (2) The player is tall, but agile *counterexpectational*

As stated in Toosarvandani (2014: 4:5) the sentence in (2) “conveys that the player is both tall and agile. There is also an implication that, if the player is tall, she is not agile. The resulting expectation that she is not agile is explicitly denied by the second conjunct, which entails that the player is, in fact, agile”. Crucially, no expectation is denied in corrective context.

A fine-grained distinction between a BASIC and an ANCHORED form for what concerns corrective contexts has been proposed in McCawley (1991). Consider the two sentences in (3) taken from Steindl (2013: 2–3).

- (3) a. Mark eats not a pear but an apple *basic-constituent negation*  
 b. Mark doesn't eat a pear but an apple *anchored-sentence negation*

As shown in (4) a similar pattern is available in Italian, in which the item *ma* expresses corrective (and also counterexpectational)<sup>2</sup> *but*, with the negation that may precede either the verb or the first conjunct. In both cases there is no expectation that is denied.

- (4) a. Gianni beve non il vino ma la birra  
 Gianni drink.prs.3sg not the wine but the beer  
 ‘Gianni drinks not wine but beer.’ *basic-constituent negation*  
 b. Gianni non beve il vino ma la birra  
 Gianni not drink.prs.3sg the wine but the beer  
 ‘Gianni doesn't drinks wine but beer.’ *anchored-sentence negation*

Descriptively, the main difference between (3a)–(4a) and (3b)–(4b) is that in the former examples negation occurs before the first conjunct, while in the latter examples negation occurs at the left edge of the verb phrase. McCawley (1991: 195; cf. also Toosarvandani 2013, 2014; Steindl 2013:3) argues that there is a subtle pragmatic difference between the two types of corrective adversatives introduced above in embedded contexts, namely the different scope of negation seems to entail a different interpretation, as

<sup>2</sup> For the many uses of *ma* in Italian, which are not the focus of the present work, the interested reader may refer to Giuliani (1976: 35ff) and Scorretti (1988), among others. Refer also to Crisma (2012: 490), who shows that Italian usually forms Boolean compounds of determiners and quantifiers with the aid of the item *ma*. Further note that Italian has another widely employed adversative connective, *però*, mainly appearing in counterexpectational contexts. *Però* had an original causal (i.e. *since*) or resultative (i.e. *therefore*) meaning and only from the 16<sup>th</sup> century *però* has been used as adversative connective (cf. Mauri and Giacalone Ramat 2012).

illustrated in (5).

- (5) a. The doctor recommended that John drink not coffee but tea. *ambiguous*  
 b. The doctor didn't recommend that John drink coffee but tea *unambiguous*  
 c. The doctor recommended that John not drink coffee but tea *unambiguous*.

The sentence in (5a) is ambiguous between a reading in which ‘the doctor didn't recommend that John drink coffee, rather he recommended that John drink tea’ and a reading in which ‘the doctor's recommendation was: don't drink coffee, drink tea.’ On the contrary the sentence in (5b) unambiguously conveys an interpretation in which the ‘the doctor didn't recommend that John drink coffee, rather he recommended that John drink tea’. Finally in the sentence in (5c) the sole possible reading is the one in which the doctor's recommendation was: ‘don't drink coffee, drink tea.’

As we will see in what follows, the distinction between a basic and an anchored form for correctives is crucial in order to provide evidence in favour of a sub-clausal syntactic account. Specifically we will show that the evidence collected here supports Toosarvandani's (2013) claim that basic correctives are able to combine sub-clausal constituents<sup>3</sup>.

The paper is structured as follows. Section 2 reviews the competing proposals on the syntactic behaviour of corrective ‘but’ put forth in the recent literature. Section 3 illustrates the agreement patterns of Italian, which represent clear evidence in favour of a possible sub-clausal (i.e. phrase level) coordination structure for corrective adversatives. Section 4 introduces the so-called “symmetric languages” (Jasinskaja 2012) with respect to corrective contexts focussing on Russian, and arguing that the variable scope of negation between conjuncts in such cases militate against a clause-only account *à la* Vicente (2010, cf. also McCawley 1991).

## 2. CLAUSE-LEVEL COORDINATION VS SUB-CLAUSAL LEVEL COORDINATION FOR CORRECTIVE *BUT*: A REVIEW OF THE RECENT DEBATE

From a syntactic viewpoint, recently Vicente (2010) – mainly basing on Spanish data – has put forth a very interesting proposal regarding the derivational tools involved in *counterexpectational vs. corrective* adversative coordination. He argues that while counterexpectational *but* (which is rendered in Spanish by the morpheme *pero*) standardly behaves like other coordinators (e.g. *and*, *or*), being able to combine sub-clausal constituents, corrective *but* (which is rendered in Spanish by *sino*) is only able to combine full clauses. In his words, he states that:

- (6) a. Corrective *but* (*sino*) always requires its conjuncts to be full clauses  
 b. Counterexpectational *but* (*pero*) allows its conjuncts to be smaller than clauses  
 Vicente (2010: 385)

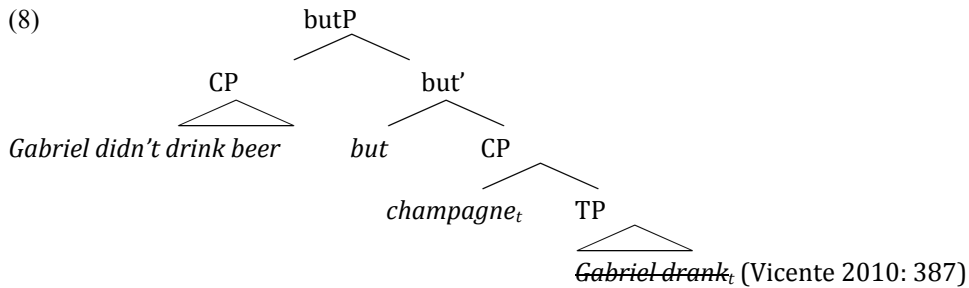
Precisely, Vicente argues that when negation takes scope (only) over the first conjunct, corrective *but* requires a full clausal structure in its second conjunct, implying the obligatory

<sup>3</sup> To our knowledge, the first proposal of a sub-clausal account of (at least certain types of) *but*-coordination has been made in Barwise and Cooper (1981).

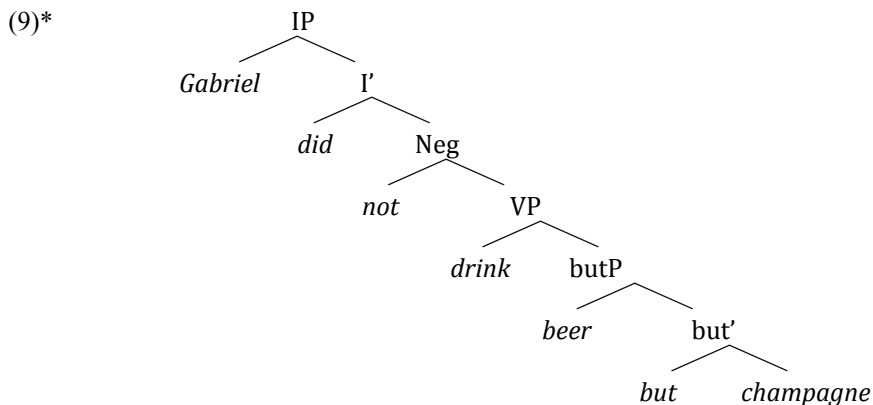
involvement of a mechanism of ellipsis and the impossibility of corrective coordination to apply, for instance, at the DP level.<sup>4</sup> Consider the sentences in (7) taken from Vicente (2010: 386).

- (7) a. Gabriel didn't drink beer but champagne.  
 b. Gabriel no bebió cerveza *sino* champán  
 Gabriel not drank beer but champagne

For such sentences Vicente assumes the structure in (8), where the corrective *but* implies an (elided) full clausal structure in its second conjunct. In this structure, the negation marker is embedded under the first conjunct. Given this representation, negation is not able to take scope over the second conjunct simply due to a lack of c-command.



Consequently, according to him, corrective 'but' coordination of smaller constituents without the involvement of ellipsis is banned and a derivation such the one represented below in (9) is impossible (cf. also Arsenijević 2011: 204, for a similar proposal concerning the syntax of Serbo-Croatian adversatives). Conversely such structure is perfectly licit for counterexpectational *but*, as well as 'standard' *and* coordination.



Vicente provides many arguments to support his claim. For instance, he shows the fact that corrective *adversatives* (against standard and counterexpectational *but*, in which DP coordination is allowed) cannot coordinate two preverbal subjects, as shown in (10), the fact that attributive adjectives cannot be coordinated with corrective *but* (to be ascribed to an infelicitous

<sup>4</sup> Vicente (2010) assumes an analysis of ellipsis along the lines of Merchant (2001, 2004), which basically consists of movement of the remnant of ellipsis to the left periphery plus PF deletion of the IP/TP.

combination of backward and forward ellipsis at the clausal level), as in (11), the fact that the remnant cannot originate inside an island, as shown in (12) for the Coordinate Structure Constraint (Ross 1967) and in (13) for adjunct islands (from Vicente 2010: 394–398 and Toosarvandani 2013: 834). Agreement patterns, considered by Vicente as crucial to justify the derivation in (8) for corrective adversatives, will be discussed in details in Section 3.

- (10) \*Two mathematicians but seven astrophysicists didn’t get their papers published  
*Preverbal subjects coordination*
- (11) \* I didn’t read a short but long book  
*Attributive adjective coordination*
- (12) \* Alfonso didn’t cook rice and beans, but potatoes  
*Coordinate Structure Constraint*
- (13) \* Jasper didn’t choke when he saw Sally, but John.  
*Adjunct islands ban*

In a recent paper Toosarvandani (2013), considering as a key fact the distinction between anchored correctives and basic correctives illustrated in (3)–(4), convincingly shows that also basic form corrective sentences – together with *counterexpectational* ones – allow coordination of sub-clausal constituents with no ellipsis involved. In particular in basic correctives coordinating DP/NP, the negative element in the first coordinate cannot be interpreted as sentence-level negation (which standardly occurs at the left edge of the verb phrase), but constituent negation, adjoined to the first conjoint, as shown in the possible derivation for the example (3a) given in (14).<sup>5</sup>

- (14)
- 
- ```

graph TD
    TP --> Mark
    TP --> T_prime[T']
    T_prime --> T
    T_prime --> VP
    VP --> eats
    VP --> DP1[DP]
    DP1 --> DP2[DP]
    DP1 --> amp[&]
    DP1 --> DP3[DP]
    DP2 --> Neg[Neg]
    DP2 --> DP4[DP]
    Neg --> not[not]
    DP4 --> pear[a pear]
    DP3 --> but[but]
    DP3 --> apple[an apple]
  
```
- (adapted from Toosarvandani 2013: 831)

<sup>5</sup> For the sake of the present discussion we can remain agnostic toward the exact syntactic nature of coordination and we assume, following Toosarvandani (2013), a very basic ternary structure (cf. Gazdar *et al.* 1985). Note however that within the generative enterprise it has been often proposed that the syntax of coordination is binary branching (as in Vicente 2010).

Indeed, many authors assume that coordination consists in a phrase headed by Boolean operator which takes the first conjunct as its specifier and the second one as its complement (Kayne 1994, Johannessen 1998, den Dikken 2006, among others). Other proposals include the one put forth by Munn (1993) where coordination consists in an adjunction operation onto a Boolean phrase and the one recently defended in Zhang (2010) with original and interesting arguments, where coordination involve a phrase which inherits its categorial status by its complement.

As arguments for the derivation in (14), Toosarvandani presents a series of tests in which basic correctives behave differently from anchored correctives. For instance, he shows that island sensitivity is not exhibited by basic correctives, as shown in (15) and (16) for the coordinate structure constraint and adjunct islands. These examples are perfectly grammatical, *contra* the ‘anchored’ ones illustrated above in (12) and (13) (cf. Toosarvandani 2013: 834).

- (15) Alfonse cooked rice and not beans but potatoes     *Coordinate Structure Constraint*  
 (16) Jasper choked when he saw not Sally but John.     *Adjunct islands*

Clearly, the assumption is that coordination is done at the DP level in basic correctives and that Vicente’s proposal is valid only in the context of anchored sentence negation. Actually, there is no island to be violated at all in sentences like (15) and (16).

Furthermore, Toosarvandani shows that no problems arise when basic correctives involving DPs are parsed as subjects, as illustrated in (17), *contra* what is assumed in Vicente (2010), who follows Bianchi and Zamparelli’s (2004) characterization of these kinds of sentences as ADJACENT INITIAL – EDGE COORDINATIONS, namely as underlying full-clause coordination structures that look like sub-clausal coordination structures because they have been reduced through the mechanism of movement.

- (17) Not a mathematician but a physicist discovered the neutron.  
 (Vicente 2010: 400)

Basically, according to Bianchi and Zamparelli, in sentences like (17) coordination would apply at the level of Focus projection(s) in the left periphery of the clause (cf. also Steindl 2013).<sup>6</sup> Nevertheless, Toosarvandani convincingly shows that there is a problem with this kind of argumentation. Actually, we can show that in a sentence like (18), the string ‘not a mathematician but a physicist’ does not occupy a left-peripheral position. Basic correctives can contain a focused element in the focus position (here, *THE NEUTRON*) so that corrective morpheme and two DPs linked by it do not occur in sentence-initial position.

- (18) THE NEUTRON, not a mathematician but a physicist discovered.  
 (Toosarvandani 2013: 839)

As shown in Rizzi (1997), it is likely that all clauses contain only one Focus Projection, and if the specifier of that Focus Projection in (18) is already hosted by the item *THE NEUTRON* it is difficult to support an analysis in which also the constituents ‘not a mathematician’ and ‘a physicist’ occupy the same dedicated position. A simpler (and more plausible) account is the one defended in Toosarvandani (2013: 839), where basic

<sup>6</sup> Specifically, Bianchi and Zamparelli (2004) assume that corrective *but* coordinates two Focus Projections (FPs). The derivation they assume is roughly as follows: (i) the two DPs raise to SpecFP of their respective coordinates; (ii) the two TPs are moved in SpecGroundP, where GroundP (GP) is a projection hosting background information, by a mechanism of across-the-board movement (cf. Williams 1978, cf. Wilder 1994); (iii) this constituent is moved into a sentence-initial position in the left periphery of the clause above the FP and GP projections (cf. also Toosarvandani 2013: 838; Vicente 2010: 400).

correctives coordinate sub-clausal constituents. No movements are required and the two DP coordinates are merged exactly where it appears at PF, namely in SpecTP as *canonical* subject(s), following standard minimalist assumptions.

Finally, concerning the behaviour of attributive adjectives (cf. example (11) above) Toosarvandani (2013) argues that these kinds of sentence are ungrammatical because they contain/imply sentence negation, namely they represent again instances of ‘anchored’ correctives in the sense of McCawley (1991). Specifically, these “sentences do not have parses with subclausal coordination available, since they would not satisfy corrective but’s requirement for a negative element in its first coordinate. Consequently, they are ill-formed” (Toosarvandani 2013: 837).

The facts listed above represent only a selected set of the sharp arguments provided by Toosarvandani against a clausal-only syntax for corrective adversatives, as originally proposed in Vicente (2010). Our aim was, nonetheless, to give a rough sketch of the debate on the structural derivation of adversative coordination, highlighting the main aspects of the competing proposals put forth in the recent literature. In the next section, we will provide novel evidence for a sub-clausal syntax of (basic) correctives coming from the agreement patterns of Italian.

### 3. AGREEMENT (A)SYMMETRIES IN ITALIAN

Vicente (2010: 392) shows that in Spanish, when the corrective *sino* (cf. ex. (6)) links two clause final subjects, a first conjunct agreement effect arises, as illustrated in the example in (19).

- (19) No se { ✓ presentó/\*presentaron} un pianist sino tres  
 not SE showed.up.3sg/showed.up.3pl a pianist but three  
 trombonistas  
 trombone players  
 ‘A pianist didn’t show up but three trombone players did.’

The first conjunct agreement effect doesn’t manifest itself when the connective ‘and’ is employed in the same contexts as shown in (20), taken again from Vicente (2010: 392).

- (20) No se { \*presentó/✓ presentaron} un pianist y tres  
 not SE showed.up.3sg /showed.up.3pl a pianist and three  
 trombonistas  
 trombone players  
 ‘A pianist and three trombone players didn’t show up.’

The agreement pattern in (20) can be attributed to the fact that with the item for ‘and’ we get regular (full) conjunct agreement. More specifically, in (20) we have DP-level coordination, which only admits verbal agreement with the whole DP coordinate structure. From the different agreement behaviour in (19) vs. (20), Vicente deduces that *sino* cannot coordinate sub-clausal constituents.

Toosarvandani (2013: 843), addressing agreement as a possible counterargument against a sub-clausal analysis of correctives, only says that agreement patterns cannot give us any clear indication concerning the syntactic configuration of the conjuncts, due to the fact that not all coordinators behave identically. For instance, in English, *and* controls plural agreement, but *or* and *neither...nor...* control singular agreement, as shown below in (21):

- (21) a. A boy and a girl \*is/are sunbathing on the lawn.  
 b. A boy or a girl is/\*are sunbathing on the lawn.  
 c. Neither a boy nor a girl is/\*are sunbathing on the law.

A partially similar state of affairs is registered in Italian where *e* (and) allows only plural agreement<sup>7</sup> on the verb and *o* (or) can optionally target both singular and plural agreement (cf. Scorretti 1988, Gaeta 2010 among others), as shown in (22).

- (22) a. Un ragazzo e una ragazza \*sta/stanno prendendo il sole  
 A boy and a girl \*is/are sunbathing  
 b. un ragazzo o un ragazza sta/?stanno prendendo il sole  
 A boy or a girl is/are sunbathing

Nevertheless, in what follows we will show that in Italian – given the opposite behaviour of anchored and basic correctives – agreement patterns can give clear indications on the nature of the syntactic configuration involved. Namely, we will show that the basic *vs.* anchored corrective distinction assumed to reflect a sub-clausal *vs.* clausal syntax in Toosarvandani (2013) is *sensitive* to agreement in Italian. Hence, while Toosarvandani provides only negative evidence (see example (21) above) *contra* the counterargument empirically provided by examples like (19), we will instead provide positive evidence concerning the role of agreement in disentangling different syntactic structures.

Consider first the case of post-verbal subjects. Italian allows sentences matching the Spanish examples provided in (19) and (20) above. In the examples below, we provide minimally different sentences, involving respectively anchored sentential negation, basic constituent negation and ‘standard’ *and*-like coordination. Note in particular the behaviour of verbal agreement, respectively for anchored forms in (23) and basic forms/standard coordination in (24)–(25).<sup>8</sup>

<sup>7</sup> Notice however that In Old Italian, it was also possible to find patterns in which the coordinator *and* controlled singular agreement, as illustrated in (i):

- (i) era grande il romore e il tumulto  
 be.ipfv.3sg big the noise and the turmoil

‘Noise and turmoil were big.’ (Boccaccio, *Decameron*, Serianni 1989: 462, cf. also Gaeta 2010)

<sup>8</sup> Grammatical judgements have been provided/confirmed by eight native speakers of Italian. My informants are linguistically naïve, namely they are not linguists. This choice has been made to avoid any possible biases (cf. the debate in the recent literature on the reliability of grammatical judgements made by linguistically trained individuals, i.e. Gibson and Fedorenko 2013 *vs.* Sprouse and Almeida 2013).

Interestingly while none of my informants admit plural agreement on the verb in (23), two informants admit singular agreement both in (24) and (25), possibly due to a linear adjacency effect – triggered by the singular DP *un pianista*, a *pianist* immediately following the verb – in parsing (cf. e.g. Sobin 1997). Further note that three of my informants says that a basic corrective sentence in which the two singular DP are coordinated by *ma* (but) can show plural agreement on the verb, leading to a slightly degraded result but not to complete ungrammaticality, despite the odd semantics, as shown in (i).

- (i) (#) ?? Arrivarono non un pianista ma un violinista  
 arrive.pst.3pl not a pianist but a violinist

‘A pianist didn’t arrive but a violinist did.’ *Basic form*

These facts are somewhat parallel to the behaviour of the Italian disjunction operator *o* (or), illustrated above in (22b). In any case, the data collected are fairly robust in supporting a parallelism between basic corrective adversatives and *and*-coordination in Italian.

- (23) Non arrivò/?\*arrivarono un pianista ma tre violinisti  
 not arrive.pst.3sg /arrive.pst.3pl a pianist but three violinists  
 ‘A pianist didn’t arrive but three violinists did.’ *Anchored form*
- (24) Arrivarono/?\*arrivò non un pianista ma tre violinisti  
 arrive.pst.3pl /arrive.pst.3sg not a pianist but three violinists  
 ‘A pianist didn’t arrive but three violinists did.’ *Basic form*
- (25) Arrivarono/?\*arrivò un pianista e tre violinisti  
 arrive.pst.3pl /arrive.pst.3sg a pianist and three violinists  
 ‘A pianist and three violinists arrived.’ *and-coordination*

The example in (23) shows the same pattern of Spanish (19), with the presence of a first conjunct agreement effect. Crucially (23) is an anchored corrective with sentential negation. On the contrary, in basic correctives, as shown in (24), such effect is not present and the agreement pattern is the same as in the ‘standard’ *and*-coordination, as illustrated in (25).

Similar agreement mismatches between basic and anchored correctives are available in other contexts in Italian. Consider now the case of depictive secondary predication.<sup>9</sup> Firstly, we have to bear in mind that in Italian there exists a ‘gender hierarchy’ by which the male value ‘wins’, namely it is assumed as the unmarked one so that (predicative) adjectives modifying all the components of a sequence of two (or more) coordinated nouns with different gender values (male *vs.* female) have to take unequivocally male value, as shown in the bracketed examples in (26) (cf. Heycock and Zamparelli 2005).

- (26) a. [[[Le lepri] e [i cani]] lenti/\*lente]]  
 the.f.pl hare.f.pl and the.m.pl dog.m.pl slow.m.pl/slow.f.pl  
 ‘The slow hares and the slow dogs’
- b. [[[I cani] e [le lepri]] lenti/\*lente]]  
 the.m.pl. dog.m.pl and the.f.pl. hare.f.pl slow.m.pl/slow.f.pl  
 ‘The slow dogs and the slow hares’

If female values are assigned to modifiers, they are interpreted as modifying only one of the conjuncts (the female one), as shown in the example in (27), in which bracketing notably differs from that of (26).

- (27) [[i cani] e [[le lepri] lente]]  
 the.m.pl. dog.m.pl and the.f.pl hare.f.pl slow.f.pl  
 ‘The dogs and the slow hares.’

Given these preliminary notes on predicative attributes / depictive secondary predication, consider the Italian examples in (28) and (29), where the relevant agreement facts concerning anchored *vs.* basic corrective coordination are illustrated.

- (28) Non mangio il pesce ma la carne  
 not eat.prs.1sg the fish.m but the meat.f

<sup>9</sup> Basically, a depictive predicate specifies a state pertaining to an argument of the main predicate (cf. Williams 1980, Rothstein 2006, Schultze-Berndt and Himmelmann 2004, among others).

- ?\*crudi/cruda/\*crudo  
 raw.pl/raw.f/raw.m  
 ‘I don’t eat the fish but the meat raw’ *Anchored form*
- (29) Mangio non il pesce ma la carne  
 eat.prs.1sg not the fish.m but the meat.f  
 crudi/cruda/\*crudo  
 raw.pl/raw.f/raw.m  
 ‘I eat not the fish but the meat raw’ *Basic form*

There is a clear agreement mismatch between (28) and (29)<sup>10</sup>. Indeed, the anchored corrective in (28) does not allow the two conjuncts to be modified together/as a whole, suggesting that a gapping analysis *à la* Vicente is on the right track for such constructions. On the contrary, basic corrective coordination do allow a more ‘standard’ configuration in which co-indexing of the secondary predicate/predicative adjective with both conjuncts is possible, suggesting – in this context – the availability of DP level coordination. Indeed, in (30) as expected, you may see that *and*-coordination patterns with basic corrective coordination when a secondary predicate is involved.

- (30) Mangio il pesce e la carne crudi/cruda/\*crudo  
 eat.prs.1sg the fish.m and the meat.f raw.pl/raw.f/raw.m  
 ‘I eat fish and meat raw’

Further relevant data come from the passive voice, again with the presence of post-verbal subjects. We can see that voice alternation does not influence the differential agreement patterns. The ‘anchored’ passive in (31) displays agreement with the first conjunct, as described in Vicente for Spanish (cf. example (19)). The basic passive in (32) does not display such effects. This also patterns with *and*-coordination in (33).

- (31) Non sono allevate/?\*allevati da  
 not be.3pl breed.pst-ptcp.f.pl/breed.pst-ptcp.m.pl from  
 migliaia di anni le zebre  
 thousands of years the.f.pl zebra.f.pl  
 ma i cavalli  
 but the.m.pl horse.m.pl  
 ‘Zebras have not been bred but horses have been for thousand of years.’  
*Anchored form*

<sup>10</sup> The grammaticality judgements from my consultants do not show substantial deviations in this case, and are thus quite robust. Only two informants out of eight find that the plural form of the adjective (*crudi*) in the anchored corrective in (28) is sensibly degraded but not completely ungrammatical. Interestingly, an informant finds the basic form in (29) slightly degraded, preferring a version of it like the one in (i) below, in which a quantifier such *solo* (only) follows the negation *non*. The meaning of the sentence in (i) does not overlap the one of example (29), in that it have a corrective/additive value, quite close to that of ‘and’.

- (i) mangio non solo il pesce ma (anche) la carne  
 eat.prs.1sg not only the fish.m but also the meat.f  
 crudi/cruda/\*crudo  
 raw.pl/raw.f/raw.m  
 ‘I eat not only fish but (also) meat raw’

- (32) Sono allevati/??allevate da migliaia di anni  
 be.3pl breed.pst-ptcp.f.pl/breed.pst-ptcp.m.pl from thousands of years  
 non le zebre ma i cavalli  
 not the.f.pl zebra.f.pl but the.m.pl horse.m.pl  
 ‘Zebras have not been bred but horses have been for thousand of years.’  
*Basic form*
- (33) sono allevati/??allevate da migliaia di  
 be.3pl breed.pst-ptcp.f.pl/breed.pst-ptcp.m.pl from thousands of  
 anni le zebre e i cavalli  
 years the zebra.f.pl and the horse.pl.m  
 ‘Zebras and horses have been bred for thousand of years.’ *and-coordination*

The same effect is visible with impersonal *si* constructions (for which see the classic works of Cinque 1988 and Manzini 1986; cf. also Manzini and Savoia 2007), as shown in the examples below.<sup>11</sup>

- (34) Non si erano allevate/\*allevati  
 Not SI be.ipfv.3pl breed.pst-ptcp.f.pl/breed.pst-ptcp.m.pl  
 zebre ma cavalli  
 zebras but horses  
 ‘We had not bred zebras but horses.’ *anchored form*
- (35) si erano ??allevate/allevati non zebre ma  
 SI be.ipfv.3pl breed.pst-ptcp.f.pl/breed.pst-ptcp.m.pl not zebras but  
 cavalli  
 horses  
 ‘We had bred not zebras but horses.’ *basic form*
- (36) si erano ??allevate/allevati zebre e  
 SI be.ipfv.3pl breed.pst-ptcp.f.pl/breed.pst-ptcp.m.pl zebras and  
 cavalli  
 horses  
 ‘We had bred not zebras but horses.’ *and-coordination*

Hence, different voices do not show different patterns of verbal agreement (i.e. with subjects *vs.* ‘promoted’ objects), pointing once more to the conclusion that a different syntax is involved in anchored *vs.* basic correctives. Note that the clear-cut data from impersonal *si* are particularly interesting due to the commonly recognized instability of (person) agreement in such forms as shown in (37), where either 3<sup>rd</sup> person singular or 3<sup>rd</sup> person plural agreement are allowed.

- (37) Si alleva/allevano zebre e cavalli  
 SI breed.prs.3sg/breed.prs.3pl zebras and horses  
 ‘We breed zebras and horses’

<sup>11</sup> The grammatical judgements provided by my informants substantially replicate ‘canonical’ post-verbal subject contexts (cf. examples (23)–(25)), both in the case of passive and impersonal constructions.

Finally, consider the data from object clitics in Italian, which give again a sharp opposition between anchored and basic adversative coordination. In Italian, if coordinated objects are displaced above (to the left of) the VP – possibly in a low Topic position in the Inflectional field, if we follow a cartographic model *à la* Belletti 2004, 2005 – a resumptive (doubling) third person accusative clitic in its plural form is present and obligatorily agrees with the past participle, as illustrated in (38). The corresponding sentences with basic and anchored correctives are given respectively in (39) and (40).<sup>12</sup>

- (38) a. non ho visto i pinguini e i  
not have.prs.1sg see.pst-ptcp the penguins and the  
rinoceronti allo zoo  
rhinos at.the zoo  
'I did not see penguins and rhinos at the zoo.'
- b. i pinguini e i rinoceronti non *li* ho  
penguins and the rhinos not cl.acc.pl have.prs.1sg  
visti allo zoo  
see.pst-ptcp.pl at.the zoo
- (39) a. ho visto non i pinguini ma i  
have.prs.1sg see.pst-ptcp not the penguins but the  
rinoceronti allo zoo  
rhinos at.the zoo  
'I saw not penguins but rhinos at the zoo'
- b. non i pinguini ma i rinoceronti *li*  
not the penguins but the rhinos cl.acc.pl  
ho visti allo zoo  
have.prs.1sg see.pst-ptcp.pl at.the zoo *basic corrective*
- (40) a. non ho visto i pinguini ma i  
not have.prs.1sg see.pst-ptcp the penguins but the  
rinoceronti allo zoo  
rhinos at.the zoo  
'I did not see penguins but rhinos at the zoo'
- b. \*i pinguini ma i rinoceronti non *li*  
the penguins but the rhinos not cl.acc.pl  
ho visti allo zoo  
have.prs.1sg see.pst-ptcp.pl at.the zoo *anchored corrective*

Notably, the basic correctives in (39) match the behaviour of 'standard' coordination in (38). The interesting thing is that in such 'displaced' contexts only basic correctives are licit, and the anchored corrective in (40b) turns out to be ungrammatical.

The problem, already noted in Toosarvandani (2013: 837), is that sentences in which *but* appears to coordinate preverbal DPs (e.g. *\*Two mathematicians but seven*

<sup>12</sup> The judgements provided in these contexts are again pretty robust. Nevertheless, we have to notice that one of my eight informants completely rejects the example in (36b). For her, the only possible dislocated construction is a *focalized* one without the presence of the resumptive clitic and with the past participle in the 'default' male singular value (cf. example (38)). All other consultants find the basic corrective sentence with a doubling clitic perfectly grammatical.

*astrophysicists didn't get their papers published*, cf. Vicente 2010: 387-388), as in (40b), do not have parses with sub-clausal coordination available. Indeed, these kinds of sentences cannot be derived from underlying clausal coordination because, according to Vicente (2010: 389), they have to display backward ellipsis within a coordinate structure, a fact that is not considered possible. Moreover, the sentences in (40) have sentence negation (*vs.* constituent negation in the basic form in (38)) and since displaced objects do not satisfy corrective adversative's requirement of a negative element in its first conjunct (cf. the discussion in Section 2), object left dislocation leads to ungrammaticality. Crucially the same fact, which holds for preverbal subject DPs, also holds for preverbal object DPs. A different scope of negation is thus essential in disentangling different syntactic derivations.

The data on left-dislocated objects given above can be also seen as a further argument against Bianchi and Zamparelli's proposal that corrective *but* coordinates Focus Projection(s) (cf. fn. 5). Indeed, if we assume cartography as a framework, as the two authors did, we must admit that basic correctives can involve a Topic position (possibly a low IP Topic, as already sketched above), given that the presence of a resumptive object clitic, as in (39b), is a clear hint of left dislocated topic constituent (cf. Rizzi 1997, Belletti, 2004, Bocci 2013, among many others). On the contrary, a focused object displaced in the left periphery cannot be resumed by a clitic morpheme, as shown below in (41).

- (41) a. I LEONI ho visto, non le tigri  
 the lions, have.prs.1sg see.pst-ptcp not the tigers  
 'LIONS I saw, not tigers'
- b. \*I LEONI li ho visti, non le tigri  
 the lions, cl.acc.pl have.prs.1sg see.pst-ptcp not the tigers

As an interim summary, we may say that in the present section we have given evidence for a sub-clausal syntax of basic correctives coming from a series of agreement patterns of Italian. In different terms, we have demonstrated that the basic *vs.* anchored corrective distinction assumed to reflect a sub-clausal *vs.* clausal syntax in Toosarvandani (2013) is sensitive to agreement in Italian.<sup>13</sup>

In Italian both *and* and basic corrective *but* seem to allow DP-level coordination, which triggers agreement with the whole coordinate structure. Hence, agreement facts sharply confirm the existence of distinct parses for the two structures under consideration. Anchored correctives have clausal coordination only, while basic correctives can have a sub-clausal (*and*-like) parse. In what follows we will give further evidence coming from a different pattern available crosslinguistically.

<sup>13</sup> An important point has been left implicit in the discussion. Italian does not exhibit any kind of closest conjunct agreement (CCA) with regular *and*-coordination, as shown in (i).

- (i) i cammelli e le tigri sono stati/  
 the.pl.m camels.m and the.pl.f tigers.f be.3pl.prs be-pst-ptcp.m.pl  
 \*state uccisi/\*uccise dalla carestia  
 be-pst-ptcp.f.pl killed.pl.m/killed.pl.f from.the famine  
 'Tigers and camels were killed by the famine'

CCA has gained much attention in Slavic languages such as Serbo-Croatian or Slovenian (see Bōšković 2009, Puškar and Murphy 2014; Marušič *et al.* 2015). Italian does not seem to have CCA at work in any context.

#### 4. SYMMETRICAL CORRECTIVES

In recent work, Jasinskaja (2012) has shown that in some languages, like for instance English, there is a semantic-pragmatic contrast between the sentence in (42) and the sentence in (43).

- (42) John isn't going to Paris, but to Berlin.  
 (43) John is going to Berlin, but not to Paris.

The sentence in (42) is an instance of (anchored) 'correction' and we have already illustrated some of its relevant features in the preceding discussion. In particular, from the viewpoint of interpretation, following Jasinskaja (2012), we may say, that (42) is appropriate in a context in which we expected that John went to Paris on a given occasion, but actually Paris has been *replaced* (i.e. corrected) by another city as the target of John's trip. On the contrary the sentence in (43), where negation takes scope over the second conjunct, has a different interpretation, a "restrictive" one. In the words of Jasinskaja (2012: 1901) (43) is "more appropriate in a context where one would have expected John to go both to Berlin and Paris, or where going to Paris has a higher value than going to Berlin. In both cases, the effect is that John is doing "less" than was expected, i.e. the second conjunct of but has a restrictive rather than replacive function, and therefore does not instantiate correction". So, in English, if negation takes scope on the second conjunct normally we have a 'counterexpectational' *but* (cf. also Vicente 2010). Again, we have already illustrated the basic characteristics of counterexpectational *but* in the introduction of this work.

Nevertheless, Jasinskaja notes a further interesting thing: in English, there is another way to express correction (i.e. replacement) when negation takes scope over the second conjunct, namely to use the conjunction *and* (instead of *but*) as in (44a), or omit the conjunction at all as in (44b). Both examples are taken from Jasinskaja (2012:1901).

- (44) a. John is going to Berlin, and not to Paris.  
 b. John is going to Berlin, not to Paris.

Thus, in English if negation takes scope over the first conjunct corrective interpretation is rendered by the item *but*, while if negation precedes the second conjunct a corrective value can be retrieved/rescued *via* the conjunction *and*. In cross-linguistic perspective, however, things are not so clear-cut: indeed, there exist languages in which correction items (of the type of *but*, and marginally *and* as we have seen in (44a)) are 'symmetric' and imply a corrective interpretation independently of which of the two conjuncts are embedded under the scope of negation.

Actually, English adversative particle *but* patterns differently from symmetric items and allows a corrective interpretation only when negation takes scope over the sentence or the first conjunct. With the reverse order such interpretation is ruled out, as we have seen in (43) where a restrictive/counterexpectational interpretation arises. In this precise sense, English *correction* is asymmetric.

Jasinskaja (2012: 1902) cites Russian as an instance of 'symmetric' language.<sup>14</sup> In

<sup>14</sup> Other 'symmetric' languages cited by Jasinskaja (2012) include Ukrainian, Bulgarian and Japanese. Another item mirroring the behaviour of Russian *a* is the Chechen morpheme *tq'a*, described in Jeschull (2004: 261).

Russian the correction marker *a* expresses correction “regardless of the order of the negative and the positive conjunct”.<sup>15</sup> Consider the examples in (45), adapted from Jasinskaja (2012:1903). They both encode a ‘replacive/corrective’ meaning.

- (45) a. Oleg edet ne v Pariž, *a* v Berlin  
 Oleg is going not to Paris conj to Berlin  
 ‘Oleg isn’t going to Paris, but to Berlin.’  
 ✓ corrective / # counterexpectational
- b. Oleg edet v Berlin, *a* ne v Pariž  
 Oleg is going to Berlin conj not to Paris  
 ‘Oleg is going to Berlin, and not to Paris.’  
 ✓ corrective / # counterexpectational

The existence of symmetrical languages is interesting from the viewpoint of syntax.<sup>16</sup> The corrective item employed in such languages doesn’t block/restrict the scope of negation, namely we can have a corrective interpretation roughly as  $[(\neg p) \wedge q]$  independently of the position of the negative item. The crucial thing here is that it is impossible to derive corrective coordination as clausal coordination when the second conjunct is embedded under negation. Namely, the recourse to clausal ellipsis in order to derive sentences like (45b) is simply impossible due to the presence of the negation before the second conjunct, a thing that is unexpected and not licit along the lines of an (ellipsis-based) clausal account.

The solution, in our perspective, is to assume (at least for sentences like (45b)) a sub-clausal model as the one represented in (14), assuming, for symmetrical languages, that constituent (*vs.* sentential) negation, despite being adjoined to the second conjoint still allows a corrective/replacive (*vs.* counterexpectational/restrictive) interpretation. Furthermore, the fact that a corrective value can be ‘rescued’ in English by the coordination *and* when negation takes scope over the rightmost conjunct is another clear indication of a possible sub-clausal syntax involved when a corrective interpretation is at work (independently of the lexical inventories/lexical strategies of the various natural languages).

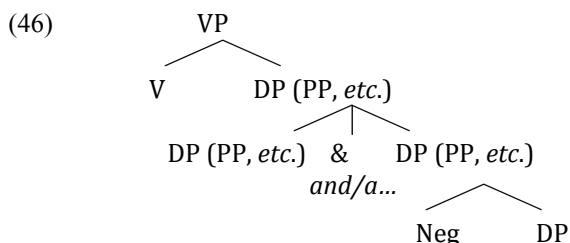
<sup>15</sup> From a typological viewpoint, Jasinskaja argues that items like Russian *a* are more close to additive than adversative particles. In particular, *a* does not show the counter expectational use normally available with adversatives (cf. also Mauri 2008 for a comprehensive cross-linguistic characterization of additive items). Consider the Russian sentence in (i), taken from Malchukov (2004: 183) where the item *a* has a clear additive value (cf. Haspelmath 2004).

(i) vremja uxodit bystro a s nim uxodjat ljudi  
 time passes quickly conj with it pass people  
 ‘time passes quickly and with it people pass (away).’

Also notice that Malchukov (2004: 183), providing other relevant examples, argues that among the three basic Russian coordinators *i, no* and precisely *a*, the latter is semantically ‘hybrid/versatile’ and correlated both to the adversative morpheme *no* and to the ‘standard’ and-like morpheme *i*.

<sup>16</sup> Note that the basic assumption/generalization of Jasinskaja (2012) is that if a language standardly employs a specialized (additive) item to express correction (e.g. an item of the type of the Russian morpheme *a*), the order of the negative and the positive conjunct does not affect its corrective interpretation.

Indeed *and*, as shown both in Vicente (2010) and Toosarvandani (2013), is employed without any doubts at various sub-clausal levels. A possible rough representation for such kind of derivation is given below in (46).



## 5. CONCLUSION

In this paper, we have provided novel evidence for the availability of a sub-clausal syntax of ‘corrective’ adversative coordination. We have reviewed the competing proposals on the syntactic behaviour of corrective ‘but’ put forth in the recent generative literature (cf. Vicente 2010, Toosarvandani 2013) and we have illustrated the agreement patterns of Italian, which represent clear evidence in favour of a possible sub-clausal (i.e. phrase level) coordination structure for the *basic-constituent negation* sub-set of corrective adversatives. Then, we have introduced the so-called ‘symmetric languages’ (Jasinskaja 2012) with respect to corrective contexts, arguing that the variable scope of negation between conjuncts militate against a clause-only account of correctives *à la* Vicente (2010, cf. also McCawley 1991). The main goal of this article has been to give two new independent arguments in favour of Toosarvandani’s analysis of corrective coordination. The first argument involved observed agreement asymmetries between basic and anchored correctives in Italian. We have provided a number of different data patterns from Italian, which indicate that agreement in basic correctives generally patterns with agreement facts in regular and-coordination, whereas agreement in anchored correctives crucially behaves differently. In anchored correctives, a first conjunct agreement pattern arises whereas in basic correctives, ‘standard’ agreement is obligatory. This asymmetry holds with adjectival as well as with verbal agreement. Moreover, it has been shown, that, with anchored coordination, a focussed coordination structure cannot leave a clitic in object position behind. With basic correctives as well as with regular and-coordination, this is possible. Based on these asymmetries, we have shown that Toosarvandani’s analysis can derive the observed facts whereas Vicente’s analysis cannot. The second argument involved so-called symmetrical correctives. It is shown, that unlike English and Romance languages some languages such as Russian can have a corrective meaning in adversative conjunction even if the negation is contained in the second conjunct. Crucially, this is not expected under an ellipsis account.

## REFERENCES

- Arsenijević, B., 2011, “Serbo-Croatian coordinative conjunctions at the syntax-semantics interface”, *The Linguistic Review*, 28, 175–206.
- Barwise, J., R. Cooper, 1981, “Generalized quantifiers and natural language”, *Linguistics and Philosophy*, 4, 159–219.

- Belletti, A., 2004, “Aspects of the low IP area”, in: L. Rizzi (ed.), *The structure of CP and IP. The cartography of Syntactic Structures, Vol. 2*, Oxford, Oxford University Press, 16–51.
- Belletti, A., 2005, “Extended Doubling and the vP periphery”, *Probus*, 17, 1–35.
- Bianchi, V., R. Zamparelli, 2004, “Edge coordinations: Focus and conjunction reduction”, in: D. Adger, C. de Cat, G. Tsoulas (eds), *Peripheries: Syntactic edges and their effects*, Dordrecht, Kluwer, 313–327.
- Bocci, G., 2013, *The Syntax–Prosody Interface*, Amsterdam, John Benjamins.
- Bösković, Z., 2009, “Unifying first and last conjunct agreement”, *Natural Language and Linguistic Theory*, 27, 455–496.
- Cinque, G., 1988, “On *Si* constructions and the theory of Arb”, *Linguistic Inquiry*, 19, 521– 581.
- Crisma, P., 2012, “Quantifiers in Italian”, in: E. L. Keenan, D. Paperno (eds), *Handbook of Quantifiers in Natural Language*, Berlin, Springer, 467–534.
- den Dikken, M., 2006, *Relators and Linkers: The Syntax of Predication, Predicate Inversion, and Copulas*, Cambridge, MA, MIT Press.
- Gaeta, L., 2010, “Accordo”, in: R. Simone (ed.), *Enciclopedia dell’italiano*, Istituto della Enciclopedia italiana Giovanni Treccani, 11–14.
- Gazdar, G., E. Klein, G. Pullum, I. Sag, 1985, *Generalized Phrase Structure Grammar*, Cambridge, MA: Harvard University Press.
- Gibson, E., E. Fedorenko, 2013, “The need for quantitative methods in syntax and semantics research”, *Language and Cognitive Processes*, 28, 88–124.
- Giuliani, M. V., 1976, “Ma e altre avversative”, *Rivista di grammatica generativa*, 1, 25– 56.
- Haspelmath, M., 2004, “Coordinating constructions: an overview”, in: M. Haspelmath (ed.), *Coordinating constructions*, Amsterdam, John Benjamins, 3–39.
- Heycock, C., R. Zamparelli, 2005, “Friends and colleagues. Plurality, coordination and the structure of DP”, *Natural Language Semantics*, 13, 201–270.
- Jasinskaja, K., 2012, “Correction by adversative and additive markers”, *Lingua*, 122, 1899–1918.
- Jaspers, D., 2006, *Operators in the Lexicon On the Negative Logic of Natural Language*, University of Leiden, PhD thesis.
- Jeschull, L., 2004, “Coordination in Chechen”, in: M. Haspelmath (ed.), *Coordinating Constructions*, Amsterdam, John Benjamins, 241–265.
- Johannessen, J. B., 1998, *Coordination*, Oxford, Oxford University Press.
- Kayne, R., 1994, *The Antisymmetry of Syntax*, Cambridge, MA, MIT Press.
- Keenan, E. L., L. M. Falz, 1985, *Boolean Semantics for Natural Language*, Dordrecht, Reidel.
- Malchukov, A. L., 2004, “Towards a semantic typology of adversative and contrast marking”, *Journal of Semantics*, 21, 177–198.
- Manzini, M.R., L.M. Savoia, 2007, *A Unification of Morphology and Syntax. Investigations into Romance and Albanian dialects*, London, Routledge.
- Manzini, M.R., 1986, “On Italian *si*”, in: H. Borer (ed.), *The syntax of pronominal clitics. Syntax and Semantics*, 19, New York, Academic Press, 241–262.
- Marušič, F., A. Nevins, W. Badecker, 2015, “The Grammars of Conjunction Agreement in Slovenian”, *Syntax*, 18, 39–77.
- Mauri, C., A. Giacalone Ramat, 2012, “The development of adversative connectives: stages and factors at play”, *Linguistics*, 50, 191–239.
- Mauri, C., 2008, *Coordination Relations in the Languages of Europe and Beyond*, Berlin, Mouton de Gruyter.
- McCawley, J.D., 1991, “Contrastive negation and metalinguistic negation”, *Chicago Linguistic Society (CLS)*, 27, 189–206.
- Merchant, J., 2001, *The syntax of silence: Sluicing, islands, and the theory of ellipsis*, Oxford, Oxford University Press.
- Merchant, J., 2004, “Fragments and ellipsis”, *Linguistics and Philosophy*, 27, 661–738.
- Munn, A., 1993, *Topics in the Syntax and Semantics of Coordinate Structures*, University of Maryland, PhD thesis.

- Puškar, Z., A. Murphy, 2014, "Conjunct agreement in Serbo-Croatian: a rule ordering account", in: A. Assmann, S. Bank, D. Georgi, T. Klein, P. Weisser, E. Zimmermann, (eds), *Topics at Infl*, Linguistische Arbeits Berichte, 92, Universität Leipzig, 441–482.
- Rizzi, L., 1997, "The fine structure of the left periphery", in: L. Haegeman (ed.), *Elements of grammar*, Dordrecht, Kluwer, 281–337.
- Ross, J. R., 1967, *Constraints on variables in syntax*, PhD diss., Massachusetts Institute of Technology.
- Rothstein, S., 2006, "Secondary predication", in: M. Everaert, H. van Riemsdijk (eds), *The Blackwell Companion to Syntax*, Vol. IV, Blackwell, Oxford, 209–233.
- Schultze-Berndt, E., N. Himmelmann, 2004, "Depictive secondary predicates in crosslinguistic perspective", *Linguistic Typology*, 8, 59–131.
- Scorretti, M., 1988, "Le strutture coordinate", in: L. Renzi, G. Salvi, A. Cardinaletti (eds), *Grande grammatica italiana di consultazione vol. 1°* (La frase. I sintagmi nominale e preposizionale), Bologna, Il Mulino, 3 voll, 241–284.
- Serianni, L., 1989, *Grammatica italiana. Italiano comune e lingua letteraria*, Torino, UTET.
- Sobin, N., 1997, "Agreement, Default Rules, and Grammatical Viruses", *Linguistic Inquiry*, 28, 318–343.
- Sprouse, J., D. Almeida, 2013, "The empirical status of data in syntax: A reply to Gibson and Fedorenko", *Language and Cognitive Processes*, 28, 222–228.
- Steindl, U., 2013, "Corrective coordination with 'but' across languages", talk presented at CGSW 28, October 4th.
- Toosarvandani, M., 2013, "Corrective but coordinates clauses not always but sometimes", *Natural Language and Linguistic Theory*, 31, 827–863.
- Toosarvandani, M., 2014, "Contrast and the structure of discourse", *Semantics & Pragmatics*, 7, 4, 1–57.
- Vicente, L., 2010, "On the syntax of adversative coordination", *Natural Language and Linguistic Theory*, 28, 381–415.
- Wilder, C., 1994, "Coordination, ATB and ellipsis", *Groninger Arbeiten zur germanistischen Linguistik*, 37, 291–331.
- Williams, E., 1978, "Across-the-board rule application", *Linguistic Inquiry*, 9, 31–43.
- Williams, E., 1980, "Predication", *Linguistic Inquiry*, 11, 203–238.
- Zhang, N. N., 2010, *Coordination in Syntax*, Cambridge, Cambridge University Press.