

A Cartesian dream:
A geometrical account of syntax
In honor of Andrea Moro

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A CARTESIAN DREAM

A geometrical account of syntax

In honor of Andrea Moro

Edited by

Matteo Greco & Davide Mocci



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To our *Maestro*
(Matteo and Davide)

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Suonano le campane – Es läuten die Glocken – ‘Z laütan=da di klokkn. On rightward agreement with a post-verbal subject

Alessandra Tomaselli

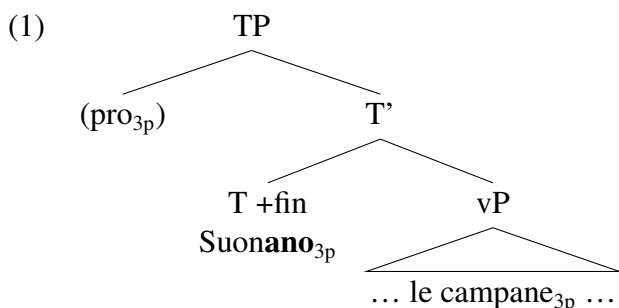
UNIVERSITÀ DEGLI STUDI DI VERONA

In the “old” GB framework the subject-agreement relation was defined structurally and was strongly connected with both nominative case assignment and EPP.¹ In order to explain rightward subject agreement in both a pro-drop language like Italian and a V2 language like German, an adequate syntactic analysis should be able to define: (i) the height within the clausal spine where the agreement relation is realized; (ii) the role of the expletive elements; (iii) the special status of the specifier position. Cimbrian syntax perfectly fits into the scenery. The data we are going to discuss clearly show that this Germanic dialect of Bavarian origin presents both a V2 expletive (‘Z) and the lexical counterpart of expletive *pro* (i.e.: *-da*) which imply rightwards agreement at a different structural height.

1. The “old” GB framework” refers -at least from my point of view- to the period which started at the beginning of the 80ies, cf. Chomsky 1981, 1982 and ended with the new perspective opened in Chomsky 1995.

The height within the clausal spine

In a Null Subject Language (NSL) like Italian the finite verb always moves out of the vP to a (high) position within the T domain. Morphological agreement with a post-verbal Subject implies a relation with either a pre-verbal *pro* or directly with the finite verb in T (depending on the theoretical assumption or rejection of null expletives):²



In the traditional G&B approach the projection of [Spec, TP] was required by the Extended Projection Principle (EPP). EPP played 3 different roles: i) it provided a structural Subject position independently of the verbal theta-grid; ii) it was the position for structural case assignment (either Nominative by T or Accusative by a higher/matrix verb in ECM constructions); iii) it played the role of “closing” up the root declarative sentence or -saying it in other words- it provided the roof of the sentential unit. In a NSL like Italian these three roles are subsumed by finite verbal morphology which either licenses *pro* in [Spec, TP] or directly (i) satisfies EPP, (ii) realizes nominative case and (iii) enters an agreement relation with the post-verbal subject within vP. As a matter of fact in a *pro*-drop language like Italian a V initial word order pattern satisfies both EPP and Nominative Case assignment to the DP which agrees with the finite verb independently of both its position and its lexical realization:³

2. Cf., among others, Haider 2019 for the hypothesis that positional expletives are lexical items “by definition”.

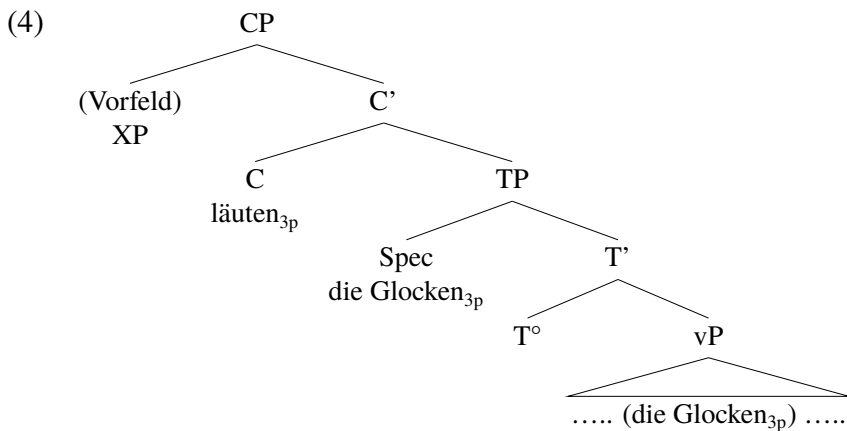
3. I consider the sentence as a grammatical unit. Different (grammatical) word order patterns imply different informational structures but these should remain for the moment on a different level of analysis.

- (2) a. Suonano (a festa)
 Ring_{3p} (in celebration)
- b. Suonano (a festa) **le campane**
 Ring_{3p} (in celebration) the bells
- c. **Le campane** suonano (a festa)
 The bells ring (in celebration)

In the Germanic tradition, at least since den Besten 1983, the analysis of the root clauses of a V2 language like German always implies mandatory finite verb movement to the C-domain resulting in linear Subject - finite Verb inversion, hence rightwards agreement. In order to maintain the declarative modality the pre-verbal position (i.e.: [Spec, CP]) must be realized, either by the Subject (3b) or by an adverbial complement (3c) or by a “positional expletive” (3d):

- (3) a. *Yes/no question: V1 word order pattern*
 Läuten **die Glocken** (um Mitternacht)?
 Ring_{3p} the bells (at midnight)?
- b. *Root declarative sentence: V2 word order pattern*
 Die Glocken läuten (um Mitternacht)
 The bells ring_{3p} (at midnight)
- c. Um Mitternacht läuten **die Glocken**
 At midnight ring_{3p} the bells
- d. Es läuten **die Glocken** (um Mitternacht)
 It ring_{3p} the bells (at midnight)

In the traditional analysis of German the preverbal position of the root declarative clause does not correspond to the subject position but rather to the so-called “Vorfeld” whose realization versus non-realization determines the difference between “Satztypen”: V1 versus V2. The structural translation of the topological model (*Feldanalyse*) is represented by the following diagram, where the finite verb occurs in C (in complementary distribution with the lexical complementizer):



The simplified sentence structure proposed in (4) highlights two crucial aspects of German syntax:

- I) the structural subject position (which is relevant for nominative case assignment) corresponds to [Spec, TP];
- II) the relation between the finite verb in C and the structural subject position implies *per se* rightwards agreement (i.e.: agreement with a lower subject), exactly as in relation with a vP internal Subject.

The different height of the post-verbal subject could be detected only taking into consideration the relative order with either the negative adverb “nie” (never) or a frequency adverb like “oft” (*often*):

- (5) a. In dieser Stadt läuten **nie** die Glocken
 In this city ring never the bells
- b. In dieser Stadt läuten die Glocken **nie**
 In this city ring the bells never

A vP internal DP Subject does not require in German a lexical expletive in [Spec, TP]. Rather on the contrary this represents exactly one of two contexts, together with the impersonal passive construction, where [Spec, TP] is projected either to host an expletive *pro* or is not

projected at all exactly as assumed for Italian (cf. the structure in (1)) with one crucial difference: the finite verb lexicalizes the head of a higher domain (i.e.: C versus T).⁴

The role of lexical expletives

The availability of expletives in the lexicon of a given language represents the most evident correlate/sign/indication of the negative value of the Null Subject Parameter (NSP): English present 2 lexical expletives, i.e.: *it* and *there*, German just one, i.e.: *es*, Italian none.

In the GB framework lexical expletives fulfilled three (overlapping) syntactic tasks: i) the satisfaction of the EPP; ii) the lexicalization of the structural subject position; iii) nominative case assignment/realization. In a prototypical non pro-drop language like English all these three tasks involve [Spec, TP] independently of the lexical choice between *it* and *there*:

- *it* lexicalizes [Spec, TP] in two contexts: a) with weather verbs assuming the status of quasi-argument; b) in the matrix clause of a complex sentence in correlation with the following argumental clause;
- *there* lexicalizes [Spec, TP] in sentences which allow a post-verbal (not raised) DP subject (typically with unaccusative verbs).⁵

4. The licensing conditions of expletive *pro* in German is an old topic of my field of research from the first published article -cf. Tomaselli 1986- to the recent interest on Cimbrian syntax -cf. Bidese & Tomaselli 2018. See also Tomaselli 1994 and Donati & Tomaselli 2009 for the role of Agr as either functional feature or functional head with respect to both verb movement and *pro* licensing.

5. The traditional description of *there* as a positional expletive for [Spec, TP] which always requires rightwards agreement with a post-verbal, i.e.: not raised subject, is coherent with Moro's analysis of *there* as a predicate (cf. Moro 1997) as we will explicitly discuss in the next paragraph devoted to "copular sentences and rightwards agreement".

In a prototypical V2 language like German, the expletive *es* lexicalizes two different syntactic positions, with two different functions:

- the lexicalization of [Spec, CP] satisfying the V2 restriction (cf. 3d and 3a repeated below in 6):⁶

- (6) a. Es läuten **die Glocken** (um Mitternacht)
 It ring_{3p} the bells (at midnight)
- b. Läuten **die Glocken** (um Mitternacht)?
 Ring_{3p} the bells (at midnight)

- the lexicalization of [Spec, TP] exactly in the two contexts already mentioned above for English *it*: as quasi-arguments with weather verbs (7a) and as pronominal correlate of a subjective clause (7b):⁷

- (7) a. Heute hat es den ganzen Tag geregnet
 Today has it the whole day rained
- b. Klar ist es gar nicht, ob er kommen wird
 Clear is it not at all, if he come will

Rather on the contrary English *there* does not find a lexical correspondence in German, where a not raised DP Subject (a vP internal Subject) is incompatible with a lexical expletive in [Spec, TP]:

- (8) a. Um Mitternäch läuten *pro* nie/oft die Glocken
 At midnight ring *pro* never/often the bells
- b. Um Mitternacht läuten (*es) nie/oft die Glocken
 At midnight ring (it) never/often the bells

6. “Das syntaktische *es*” in Brugmann’s terminology (cf. Brugmann 1917), which corresponds to the notion of “grammatical *es*” in Curme 1905

7. “Freie” versus “gebundene” Impersonalia in Brugmann 1917.

- (9) a. Nach Verona kommen *pro* immer viele Touristen
 To Verona come *pro* always many tourists
 b. Nach Verona kommen (*es) immer viele Touristen
 To Verona come (it) always many tourists

This rough comparison between English and German confirms two rather traditional assumptions about both the definition of the NSP and the correlation between verb movement and EPP:

- I) the decomposition of the NSP in different subtypes (since, at least, Rizzi 1986, but cf., among others, Biberauer & Roberts 2010). Italian is a canonical NS language which allow all kind of *pro* (argumental, quasi-argumental, expletive); German doesn't allow either argumental or quasi-argumental *pro*, but requires expletive *pro*; English doesn't allow any kind of *pro* in [Spec, TP].
- II) the extension of the EPP (the requirement of a specifier) to the CP domain in V2 languages (cf. Vikner 1995 and literature cited there) which explains the occurrence of a positional expletive in [Spec, CP].

The distinction between a class of CP expletives versus a class of TP expletives is well represented in Cimbrian, a German dialect still spoken in small enclaves in both Trentino and Veneto, here exemplified by the variety of Luserna/Lusern (TN). This variety displays three different types of lexical expletives: i) 'z, which corresponds to German "Vorfeld"-es; ii) 'z/-z, which correspond to the impersonal subject and must occur either to the left or to the right of the finite verb and iii) -da, which is always required when the DP Subject does not occur in preverbal position:

- (10) a. 'Z laütan=da di klokkn⁸
 b. Haüt laütan=da di klokkn
 c. Laütan=da di klokkn?

8. The example is taken from Grewendorf & Poletto 2011 who first noted the possible co-occurrence of the preverbal expletive 'z with the particle -da.

- (11) a. 'Z regat haüt
 b. Haüt regat=z
 c. Regat=z haüt?

As for German, the positional expletive for [Spec, CP] only occurs to the left of the finite verb in the root declarative clause (cf. examples in 10a) differently from the impersonal subject of weather verbs whose occurrence is not limited to the preverbal position (cf. examples in 11b, c).

On the other hand *-da*, which doesn't find a lexical correspondence in German, only occurs on the right of the finite verb (as an enclitic particle) and it is always required with a post-verbal (not raised) DP Subject much like *there* in English but without any kind of restrictions (*-da* is required with all post-verbal DP Subject independently of either the verbal class or the definiteness of the DP).⁹ Rather on the contrary a pre-verbal subject is fully incompatible with *-da*:

- (12) a. di klokkn laütan (haüt)
 b. *di klokkn laütan=da (haüt)

Cimbrian data provide clear evidence to a rather naïve assumption on sentence structure:

- both [Spec, TP] in non-pro-drop languages and [Spec, CP] in V2 languages allow a positional expletive which does not require subject agreement with the finite verb but imply, rather on the contrary, rightward agreement with a post-verbal (/lower) DP subject.

9. Enclitic *-da* occurs in complementary distribution with the enclitic pronominal subject:

- (i) a. Haüt laütan=*da* di klokkn *versus*
 b. Haüt laütan=*sa*

For a detailed discussion of Cimbrian subject syntax see, among others, Bidese & Tomaselli 2018, Bidese, Padovan & Tomaselli 2020, Poletto & Tomaselli 2021.

The special status of the specifier position: copular sentences and rightwards agreement

So far we have discussed rightwards agreement in connection with two well-known macro-parameters, namely V2 and pro-drop (NSP). A third well studied configuration which require rightwards agreement is represented by copular sentences. Since Moro 1997 the following couples of examples are analyzed as cases of “inverted” /not raised subject:

- (13) a. there are [two men ~~there~~ (in the garden)]
 b. ci sono [due uomini ~~ei~~ (in giardino)]
- (14) a. it is [me, ~~it~~]
 b. pro sono [io ~~prø~~]
- (15) a. the cause of the riot is [two picture of the wall ~~the-cause of the riot~~]
 b. la causa della rivolta sono [le foto del muro ~~la-cause della rivolta~~]

In Italian the raising of the predicate in the pre-verbal position always implies rightward agreement with the low/not raised subject DP (exactly as we have seen for the CP expletive in a V2 language like German, modulo the different height of the relevant sentence domain).¹⁰

In English rightward agreement is always required by the expletive predicate *there* (cf. 13a). Rather on the contrary the raising of the DP predicate (either “nominal” as in 15a or “pronominal” as in 14a) disrupts rightwards agreement with the not-raised subject and forces leftwards agreement with the predicative DP raised in [Spec, TP].

Moro’s analysis of subject inversion in terms of raising of predicate, together with the hypothesis that movement (i.e. internal merge) must apply in order to disrupt the symmetry of the subject-predicate relation (cf. Moro 2000) represent a strong challenge to the old traditional system based on EPP and the assumption of [Spec, TP] as

10. Cf. Moro 2006 for an explanation based on the NSP.

dedicated/structural position for the Subject DP and imply a revision of what we can assume as “conditions on structure building”.¹¹

Nevertheless there is at least one fundamental point of convergence between the traditional and the new perspective opened by the analysis of copular sentences: the projection of the specifier (of a given functional head) remains an essential ingredient of structure building: in the GB framework it provided the proper agreement configuration (the “old” Spec-head relation), in Moro’s perspective it (simply) represents an essential aspect of internal merge (a raised DP requires the projection of a Specifier-like position to move into).

Rightwards agreement with a low (not raised) subject implies that something else must move to a higher Specifier position. As a matter of fact the same mechanism is at work in both copular sentences and V2 structures (if the DP subject is not raised on the left of the finite verb in C, another constituent must be raised in order to respect V2).

The assumption of a CP expletive (i.e.: “Vorfeld-es”) represents the other side of the coin and hints at a radical revision of the notion of expletives in terms of placeholders for a not raised XP (cf. Moro 2017).

11. The reference to Chomsky 1973 and its impact at that time on the theoretical framework should be rather explicit.

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