

Epistemic Predicative Clauses and the IL/SL Distinction

A View from Romance

Nicola Munaro
(Università Ca' Foscari Venezia, Italia)

Abstract In this article I explore the internal structure of predicative clauses selected by an epistemic main verb exploiting the notion of 'predicate inversion' and the distinction between *Individual Level* and *Stage Level* predicates. On the basis of evidence from Romance, I argue that epistemic predicative clauses are made up by at least three different layers of structure: the predicative link between subject and predicate can be expressed either in lowest head P° , which can be lexicalized as a prepositional element, or in the higher heads V° and T° , which can be lexicalized as infinitival copulas. The attested restrictions on the relative order of subject, copular verb and predicate inside the copular clause complement in Italian are accounted for by postulating with SL predicates the need for the copula to raise to the head T° in order to license an abstract spatio-temporal topic which contextualizes the property denoted by the predicate.

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Keywords Epistemic verb. Copular clause. Predicate inversion. Individual level predicate. Stage level predicate.

1 Introduction

The aim of this work is to provide some insights on the internal structure of predicative clauses selected by epistemic predicates, adding a new contribution to a long standing debate (cf. for example the essays collected in Cardinaletti, Guasti 1995).¹

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In my analysis I will make crucial reference to the by now standard distinction between Individual Level (IL) and Stage Level (SL) predicates (cf. Kratzer 1995) and to the notion of 'predicate inversion' as defined in den Dikken (2006). Mainly on the basis of data from Romance, I will argue, following previous proposals on this topic, for a layered internal structure of epistemic predicative clauses including – at least – one functional head which encodes the predicative link between subject and predicate and two further layers of structure; I will highlight the relevance of the IL/SL nature of the predicate in determining the relative order of the two constituents inside the copular clause as well as the overt realization of the functional heads linking them.

The article is organized as follows: in section 2 I present a detailed summary of the derivation of predicate inversion as formulated by den Dikken (2006); in section 3 I discuss the importance of the IL/SL predicate distinction for the lexicalization of the copula in epistemic small clauses in Italian, sketching a first structural proposal; in section 4 I briefly describe a verbless predicative structure attested in Romance, providing additional evidence for the relevance of the IL/SL predicate divide for the application of predicate inversion; in section 5 I turn to the relevance of information structural factors, presenting the lexicalization patterns of the infinitival copula in Italian with respect to the informational role of the subject; in section 6 I propose a more detailed structural layout of copular clauses selected by a main epistemic verb, providing crosslinguistic evidence for the lexicalization of the lowest prepositional head and of the higher heads and a possible formal account of the attested word order restrictions; section 7 concludes the paper.

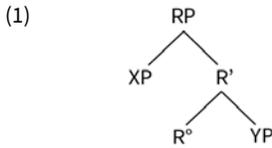
2 On the Notion of 'Predicate Inversion'

In this article I will adopt, as a working hypothesis, an approach to predicative structures defended by various scholars over the last two decades (cf. Bowers 1993; Adger, Ramchand 2003; Baker 2003; den Dikken 2006; among others), according to which every predicational relation is mediated by an intervening functional element working as a connective between the subject and the predicate.² Under this view, the basic template for predica-

2 A first possible approach to the internal structure of predicative structures is based on the analysis according to which predicational relations can be structurally represented as bare small clauses like in (i), along the lines of the seminal work by Williams (1975) and Stowell (1981):

(i) [_{sc} NP XP]

tion relationships is syntactically represented by the following structural configuration:



For example, den Dikken (2006) – building on Moro (1997)’s seminal intuition that the copular verb can take as a complement a small clause – proposes that a sentence like (2a) is derived as represented in (2b), that is, by raising the subject XP to Spec,TP to satisfy the EPP feature (in minimalist terms, this would be the most economical solution towards a converging derivation, as the subject XP is closer to T than the predicate YP):

- (2) a. Brian is the best candidate.
 b. $[_{TP} [_{XP} \text{Brian}]_i [_{T'} \text{is}] [_{RP} t_i [_{R'}]] [_{YP} \text{the best candidate}]]]$

Raising of the predicate YP to Spec,TP across the subject – that is, predicate inversion as provisionally sketched in (3b) – is characterized as movement to subject position triggered by the need to license an empty predicate head:

- (3) a. The best candidate is Brian.
 b. $[_{TP} [_{YP} \text{The best candidate}]_i [_{T'} \text{is}] [_{RP} [_{XP} \text{Brian}] [_{R'}] t_i]]]$

This kind of analysis has been adopted by Moro (1997) for copular constructions; he proposes that the structure in (i) can be embedded under a copular predicate and that the surface linear order of canonical and inverse copular constructions is derived by raising either the subject or the predicate to a small clause external position:

- (ii) a. $[\text{These pictures}]_i \text{ are } [_{SC} t_i [\text{the cause of the riot}]]$
 b. $[\text{The cause of the riot}]_i \text{ is } [_{SC} [\text{these pictures}] t_i]$

Moro (2000) develops further the analysis of copular constructions in terms of dynamic antisymmetry; building on Kayne’s (1994) antisymmetric approach to syntactic structure, he claims that the trigger for the raising of the subject or the predicate lies in the necessity to break the structural symmetry between the two constituents inside the small clause and to produce an asymmetric structure exactly by raising either noun phrase to the precopular position. For a reinterpretation of Moro’s dynamic antisymmetry approach to copular structures in terms of labelling, the reader is referred to Chomsky 2013. I will not adopt this view here as it is clearly incompatible with the hypothesis that, as will be discussed below, the predicational relation existing between subject and predicate can be lexicalized – in small clauses selected by an epistemic verb – by the overt realization of a connective element or of a copular verb, which entails the existence of a functional head linking the two constituents within the nuclear small clause.

On the assumption that small clauses such as the RP in (1) qualify as phases, an obvious question arises as to how the predicate YP in (1) can be accessible to an external probe.³ Den Dikken (2006) treats predicate inversion in terms of A-movement of the predicate facilitated by *phase extension*, defined as follows:

- (4) Movement of the head of a phase to a higher head F extends the phase to FP.

He assumes that movement of the head R° up to an external functional head F extends the RP phase up to FP. Merging a functional head outside the small clause RP in (1) provides a landing site both for the R° head and for either phrasal constituent of the small clause (in the corresponding specifier position Spec,FP). According to den Dikken, movement of the predicate YP to Spec,FP will not illegitimately cross a phase boundary, as movement of R° up to F° shifts the phase up to FP, which dominates the first available landing site of the raised predicate.⁴

Applying this derivational path to small clauses selected by epistemic main predicates, den Dikken (2006) proposes that the linear order in (5b) is derived from the basic order in (5a) by predicate inversion, that is, by raising of the small clause predicate – across the subject – to the specifier of a higher functional projection as a consequence of *phase extension*, produced by adjunction of the small clause internal Relator R° to a higher functional head F°, which provides a possible escape hatch for the predicate, as represented in (6b):⁵

- (5) a. I consider Brian (to be) the best candidate.
 b. I consider the best candidate *(to be) Brian.
- (6) a. [_{TP} I consider [_{RP} [_{XP} Brian] [_{R°} to be] [_{YP} the best candidate]]]
 b. [_{TP} I consider [_{FP} [_{YP} the best candidate]_i] [_{F°} [to be]_j] [_{RP} [_{XP} Brian] [_{R°} t_j] t_i]]]

3 Given the *Phase Impenetrability Condition* as defined in Chomsky 2001:

- (i) In a phase α with a head H, the domain of H is not accessible to operations outside α , but only H and its edge.

4 On the other hand, A-movement of the predicate across the subject does not incur a minimality violation because there is some minimal domain such that it contains both the small-clause subject and the first available landing site for the moved small-clause predicate; being members of the same minimal domain, those two positions would then be *equidistant*, so that movement of the predicate around its subject complies with the Minimal Link Condition.

5 From Spec,FP, subject and predicate are attractable from external probes, among which T°, producing respectively (ia) and (ib), where the lexicalization pattern of the copula is the same as in (5), as originally observed by Heycock (1994):

- (i) a. Brian is considered (to be) the best candidate.
 b. The best candidate is considered *(to be) Brian.

Under his view, the obligatoriness of the copula in (5b) – as opposed to its optionality in (5a) – is a straightforward consequence of the application of predicate inversion; in other words, the copula is obligatorily lexicalized whenever predicate inversion applies.⁶

3 The Relation Between the Lexicalized Copula and SL Predicates

Standard Italian provides clear evidence that, at least at a relatively high stylistic level, under an epistemic verb like *ritenere* ‘consider’ SL predicates, as opposed to IL predicates, require the overt realization of the copula.⁷

In a rather high stylistic register, the infinitival copula can optionally appear before the subject of a small clause containing an IL predicate:

- (7) a. Ritengo (essere) Gianni un amico affidabile.
I consider (to be) John a reliable person.
b. Ritengo (essere) Roberto una persona intelligente.
I consider (to be) Robert an intelligent person.
c. Ritengo (essere) Carlo un collega competente.
I consider (to be) Charles a valuable colleague.

6 The functional head F° to which the *relator* R° raises is referred to as the *linker*, the head that provides the *link* between the raised predicate and the small clause it comes from. Raising the *relator* to the *linker* creates a minimal domain that includes Spec,FP and Spec,RP, thereby enabling the predicate to raise to Spec,FP in conformity with the minimalist locality theory.

7 The situation is much more controversial in English; in small clauses selected by the epistemic predicate *consider* and containing SL predicates the copula is preferably realized, while with IL predicates the lexicalization of the copula is optional:

- (i) a. I consider John to be sad/tired/worried.
b. I consider John (to be) intelligent/foolish/reliable.

If we take into account predicative constructions with *seem* or *look* the situation changes, because in this case the overt realization of the copula tends to become optional even with SL predicates:

- (ii) He seems/looks (to be) sad/tired/worried.

Moreover, nominal predicates, which are generally IL predicates, in many varieties of English require the use of the copula under *seem*; the example (iiia) is grammatical in British varieties but generally disliked by American speakers, who prefer to insert the infinitival copula, like in (iiib):

- (iii) a. He seems a nice guy.
b. He seems to be a nice guy.

On the other hand, SL predicates, to the extent that they are compatible with an epistemic matrix verb, require the overt realization of the infinitival copula:

- (8) a. Ritengo *(essere) Gianni intenzionato a partire.
I consider (to be) John willing to leave.
b. Ritengo *(essere) Roberto preoccupato per il loro arrivo.
I consider (to be) Robert worried about their arrival.
c. Ritengo *(essere) Carlo stanco di questa situazione.
I consider (to be) Charles tired of this situation.

Interestingly, the copula must appear even when IL predicates are turned into SL predicates by the addition of some contextual restriction on the validity of the property expressed:

- (9) a. Ritengo *(essere) Gianni un amico affidabile solo in alcune situazioni.
I consider (to be) John a reliable friend only in some situations.
b. Ritengo *(essere) Roberto un prezioso alleato in questa circostanza.
I consider (to be) Robert a precious ally in this circumstance.

On the basis of the contrast between (7) and (8)-(9), we can conclude that in high style standard Italian the presence of the copular verb in infinitival complements of epistemic verbs may be regulated by other intervening factors beside the application of predicate inversion, such as the IL/SL nature of the predicate involved. In particular, the crucial factor in this respect seems to be the transitory vs permanent character of the property denoted by the predicate, to the effect that non-permanent properties need to be anchored to a spatio-temporal situation in a way that will be formalized more precisely below.⁸

8 One might in principle object that the relevant distinction, at least for English, should be between evaluative/gradable predicates and other predicates on the basis of Lasnik (2009)'s observation that *consider* has a property that distinguishes it from other small-clause taking verbs, namely that the predicate must be either evaluative (judge-dependent) or gradable; if this requirement is satisfied, even SL predicates can appear in epistemic small clauses (possibly without the lexicalization of the copula), like in the following examples:

- (i) a. John considers Bill (to be) ready for the competition.
b. Most people considered the clown sad.
c. The police didn't consider John in any trouble.

While the above mentioned distinction may well be adequate for English, it does not appear to be appropriate for the Italian examples discussed in the text: both the predicates in (7) and the ones in (9) are evaluative, but only in (9) is the copula required; moreover, while the

In the spirit of den Dikken (2006), it is extremely tempting to analyze the infinitival copula *essere* as the lexicalization of the functional head R° raised to F° , as represented below in (11b).⁹

Let me consider however a potential alternative analysis for examples like (10a), namely the standard Aux-to-Comp analysis proposed by Rizzi (1982), according to which the infinitival auxiliary verb raises to the head C° around the subject and assigns case to it under government from this higher position, as represented in (10b):

- (10) a. Ritengo essere Gianni un amico affidabile.
I consider to be John a reliable friend.
b. [_{TP} Ritengo [_{CP} [_{C'} essere]_j] [_{IP} [_{XP} Gianni] [_{I'} t_j] [_{VP} un amico affidabile]]]

predicates in (8) are not gradable, the ones in (9) are gradable, but the copula is obligatorily lexicalized in both cases. In fact, the choice of the verb *ritenere* in (7)-(9) is due precisely to the peculiar selectional requirements of this verb, which, unlike *credere* or *considerare*, can select both for a small clause and for a clausal complement:

- (ii) a. Ritengo Gianni un amico affidabile.
I consider John a reliable friend
b. Ritengo che Gianni sia un amico affidabile.
I consider that John is a reliable friend

On the other hand, *consider* selects for a small clause complement, while *credere* selects for a clausal complement:

- (iii) a. Considero/*Credo Gianni un amico affidabile.
I consider/*believe John a reliable friend
b. Credo/*Considero che Gianni sia un amico affidabile.
I believe/*consider that John is a reliable friend

9 In (8) predicate inversion has not applied, which suggests that the obligatoriness of the copula is not necessarily tied to the application of predicate inversion. Notice that the occurrence of the copula between the subject and the predicate is grammatical at least for some speakers:

- (i) Ritengo Gianni essere un amico affidabile / intenzionato a partire.

I consider John to be a reliable friend / willing to leave

Under the present approach, the sequence in (i) can be interpreted as resulting from the raising of the subject to Spec,FP. Being base generated at the edge of the RP phase, the subject, unlike the predicate, can freely raise to a small clause external position. As will be discussed in the main text, the subject can indeed be easily extracted to an external position by A'-movement:

- (ii) a. Gianni, che ritengo essere intenzionato a partire, va avvisato al più presto.
John, that I consider to be willing to leave, should be informed as soon as possible.
b. Gianni, che ritengo (essere) una persona affidabile, stavolta ha sbagliato.
John, that I consider (to be) a reliable person, this time has failed.

There are some theory-internal considerations which suggest that this analysis should be updated in order to make it compatible with standard current assumptions: first, if Bošković (1997) is correct in claiming that all infinitival complements that are not introduced by an overt complementizer have IP status, there is in fact in the structure under analysis no CP layer (hence no C° head) to which the infinitival verb can raise (cf. also Castillo 2001 on ECM constructions in Spanish for a similar proposal); secondly, the notion of government, which is crucial in Rizzi's original account, has been shown to be problematic over the years and should preferably be eliminated from the theory of grammar (cf. Bošković 1997, among others).¹⁰

Hence, on the basis of theory-internal conceptual grounds, I will not adopt an Aux-to-Comp analysis for structures like (11a), and will rather propose the structural representation in (11b) – in line with den Dikken (2006)'s approach – where the infinitival copula lexicalizes the functional head F° and the subject remains in its basic, small clause internal position:

- (11) a. Ritengo essere Gianni un amico affidabile / intenzionato a partire.
I consider to be John a reliable friend / willing to leave.
- b. [_{TP} Ritengo [_{FP} [_{F°} essere]_j] [_{RP} [_{XP} Gianni] [_{R°} t_j] [_{VP} un amico affidabile / intenzionato a partire]]]]

This analysis also offers a possible explanation for the contrast pointed out by Rizzi (1982) for Italian between (12a) and (12b), namely the fact that in Romance – cf. Kayne (1981) for French and Castillo (2001) for Spanish – under an epistemic verb the nominal subject cannot generally precede the infinitival copula (although, as we have seen, some speakers accept this sequence), while the sentence is perfectly grammatical if the subject is A'-extracted:

- (12) a. *Ritengo poche persone essere in grado di pagare il riscatto.
I believe few people to be able to pay the ransom.
- b. Quante persone ritieni essere in grado di pagare il riscatto?
How many people do you believe to be able to pay the ransom?

¹⁰ Moreover, there are at least some speakers of standard Italian who accept the word order in which the lexical subject precedes the infinitival auxiliary, which shows that case assignment to the subject must be independent of verb raising, although the case assigned to the subject is presumably different in the two positions, as witnessed by the following examples containing a pronominal subject:

- (i) a. Ritengo essere tu/*te una persona affidabile.
b. Ritengo te/*tu essere una persona affidabile.

As can be seen from the contrast between (ia) and (ib), in postcopular position we find the nominative form of the pronoun, while in precopular position (for the speakers who accept this sequence) the accusative form is attested.

Under the present approach, this contrast could be made to follow from the hypothesis that only raising of R° to F° extends the phase RP, providing a possible landing site for (either the subject or) the predicate, namely Spec,FP. If R° does not raise to F° , only the subject, located at the edge of the RP phase, can be extracted. If on the other hand R° raises to F° , the subject will either stay in Spec,RP, like in (11a), or will undergo A'-extraction to the main Spec,CP position, like in (12b); crucially, subject extraction must proceed through Spec,FP, which qualifies as an intermediate landing site provided only by raising of R° to F° , with the associated lexicalization of F° as the infinitival copula *essere*.¹¹

4 On the Relevance of the IL/SL Distinction for Predicate Inversion

This section contains a short digression on a verbless predicative structure attested throughout Romance: in this type of reduced clause the predicate linearly precedes the subject and is separated from it by a clear intonational break, while the missing verb is interpreted as a silent copula; crucially, the preposed predicate must belong to the IL class.

Vinet (1991) underlines that in French only predicates expressing permanent or inherent properties can occur in a verbless predicative clause, and not predicates referring to a transitory situation; the two types reflect the distinction between IL and SL predicates. The predicate can acquire a character of permanence – thereby making the sentence acceptable – through the insertion of a lexical element which triggers a generic interpretation:

- (13) a. *Disponible, ce papa!
Available, this dad!
b. Jamais disponible, ce papa!
Never available, this dad!
- (14) a. *Les memes, ces mecs!
The same, these guys!
b. Tous les memes, ces mecs!
All the same, these guys!

Similarly, Hernanz and Suñer (1999) point out for Spanish that the preposed predicate must express properties not undergoing change or evolution, so that no SL predicates are admitted; still, the insertion of elements

¹¹ Incidentally, this analysis overcomes a problematic aspect of Boskovic (1997)'s account, namely the necessity to postulate, for these cases of A'-extraction, a null complementizer through whose specifier the subject would raise to the Spec,CP of the main clause.

which can modify or limit the transitory character of the predicate can make the sequence grammatical:

- (15) a. *¡Cansado, tu jefe!
Tired, your boss!
b. ¡Eternamente cansado, tu jefe!
Eternally tired, your boss!
- (16) a. *¡Averiado, el maldito ascensor!
Out of order, the damned lift!
b. ¡Siempre averiado, el maldito ascensor!
Always out of order, the damned lift!

The same restriction seems to hold for Italian, where non-evaluative predicates can appear provided that an adequate lexical item is added that turns the SL predicate into a permanent property:

- (17) a. *Di corsa, i giovani di oggi!
In a hurry, nowadays young people!
b. Tutti di corsa, i giovani di oggi!
All in a hurry, nowadays young people!
- (18) a. *Spento, questo computer!
Turned off, this computer!
b. Sempre spento, questo computer!
Always turned off, this computer!

Munaro (2016) argues that the structure under analysis should be viewed as the result of two movement steps: the first step is to be identified with predicate inversion, that is, extraction of the predicate from the complement position of the predicative small clause to a higher specifier position thanks to phase extension (produced by raising of the small clause internal relator R° to the higher functional head F°); subsequently, we have further raising of the predicate to the specifier of the left-peripheral projection FocusP in order to check a focus feature. This analysis, which captures the basic properties of the relevant structure, is based on the crucial, and independently motivated assumption, that the process of phase extension can obtain without the lexicalization of the copula only in small clauses associated with IL predicates, thereby accounting for the fact that verbless predicative structures are crosslinguistically attested only with this kind of predicates.¹²

¹² If Munaro (2016)'s analysis is on the right track, the examples reported in this section provide robust evidence for the availability of predicate inversion with adjectival predicates in Romance. In particular, Munaro suggests that in the structure under analysis the

Interestingly, as we have seen in the previous section, the possibility for IL predicates to occur without an overtly lexicalized copula is attested also in predicative clauses embedded under epistemic verbs, which reinforces the hypothesis that the IL/SL predicate distinction is relevant for the application of predicate inversion and the lexicalization of the copula.

5 The Role of Information Structure

Raposo and Uriagereka (1995), studying the apparent differences between small clauses with an individual and a stage level interpretation, argue that these are best expressed by way of purely syntactic devices; in particular, they are reduced to differences in information structure to the extent that IL predicates involve categorical constructions, while SL predicates are *thetic*;¹³ according to them, subjects of IL predicates must be forced out of the predicate projection in the course of the derivation. A similar proposal has been put forward by Jiménez-Fernández (2012), who claims that subjects of IL predicates are topics, while subjects of SL predicates may not be.

As a preliminary generalization, we can observe that in standard Italian the unmarked word order in epistemic small clauses is the one exemplified in (7), with the subject preceding the predicate, regardless of the IL/SL nature of the predicate. In an out of the blue statement, if the predicate precedes the subject like in (19a), the sequence sounds odd, independently of the presence of an overt copula; the only possibility is for the subject to be contrastively focalized, like in (19b):¹⁴

predicative linker discussed by Park (1997) should be assimilated to the head R° in den Dikken 2006, as they both function as mediators between the predicate and its associated subject. This amounts to saying that whenever, in main predicative clauses, R° selects an IL predicate, R° is bound to raise to a higher functional head, thereby extending the phase RP up to (at least) FP and providing a possible landing site for the predicate YP, which becomes then eligible by an external probe; alternatively, if the subject raises to Spec,FP, we get the standard copular structure. If, on the other hand, R° selects a SL predicate, no raising of R° will obtain, hence no phase extension will take place, and no possible landing site for the predicate will be provided; the only possible derivation will entail raising of the subject.

As discussed in detail in the next sections, the situation seems to be only partially similar in predicative small clauses embedded under an epistemic verb: in this case the predicative relator R° is invariably represented by an abstract (or lexically realized) prepositional element which raises and incorporates onto the next higher head F° , thereby making predicate inversion to Spec,FP possible with IL predicates; exactly as in main contexts, SL predicates require instead the overt realization of the copula (which must raise to the embedded T° head in order to provide the appropriate spatio-temporal anchoring of the SL predicate).

13 For relevant discussion concerning the relation between the dichotomy *thetic*/categorical and the stage/individual distinction the reader is referred to Ladusaw 1994.

14 The fact that the same position can be easily occupied by quantifiers, which in general cannot be topicalized, like in (i), suggests that the relevant position is indeed associated with a slight focalization of the constituent:

- (19) a. # Ritengo affidabile Gianni.
I consider reliable John.
b. Ritengo affidabile GIANNI, (non Roberto).
I consider reliable John, (not Robert).

Given that in this case we have a contrastive focalization of the subject, I will propose that (19b) is derived through raising of the small clause subject to the left-peripheral specifier of FocP, with subsequent raising of the remnant material to a higher position.

However, the subject of an epistemic small clause may also have the informational function of a new information focus, when it provides the answer to a *wh*-question, like in (20b) and (20c), for which I would like to put forth an alternative analysis, namely raising of the predicate to Spec,FP with the default stress falling on the most embedded constituent, the small clause subject, along the lines of Cinque (1993):

- (20) a. Chi ritieni (essere) una persona affidabile?
Whom do you consider (to be) a reliable person?
b. Ritengo una persona affidabile (?essere) Gianni, ad esempio.
I consider a reliable person (to be) John, for example.
c. Ritengo (essere) una persona affidabile Gianni, ad esempio.
I consider (to be) a reliable person John, for example.

Notice that with an IL predicate like *una persona affidabile*, the copula can appear on either side of the predicate.¹⁵ In both (20b) and (20c) predicate inversion has applied, with the predicate occupying Spec,FP; but while in (20b) the copula occupies the head F°, in (20c) the infinitival copula can be overtly realized at the left of the predicate, arguably lexicalizing a functional head higher than F° (sticking to den Dikken's terminology).¹⁶

- (i) Non ritengo affidabile nessuno.
I consider reliable noone.

15 As pointed out to me by some native speakers, another possible answer to (20a) is the following, with the focalized subject *Gianni* appearing in its unmarked position, immediately preceding the predicate:

- (i) Ritengo (essere) Gianni una persona affidabile, ad esempio.
I consider (to be) John a reliable person, for example.

In this case subject and predicate of the small clause are taken to occupy their base generation position, while the copula lexicalizes the functional head F°.

16 There is an alternative structural analysis for (20c), namely one in which the subject has undergone heavy NP shift. In my view such an analysis is not tenable on both conceptual and

Again, the presence of a SL predicate imposes the overt realization of the infinitival copula, as witnessed by the examples in (21):

- (21) a. Chi ritieni essere preoccupato per la situazione?
Whom do you consider to be worried about the situation?
- b. *<sub>[TP Ritengo [_{FP} [preoccupato per la situazione]_i [_{F'} essere]_j [_{RP} Gianni [_{R'}] t_i]]]], ad esempio.
I consider worried about the situation to be John, for example.</sub>
- c. <sub>[TP Ritengo [_{XP} [_{X'} essere] [_{FP} [preoccupato per la situazione]_i [_{F'}] [_{RP} Gianni [_{R'}] t_i]]]], ad esempio.
I consider to be worried about the situation John, for example.</sub>

Interestingly, in this case the copula must precede the preposed predicate, like in (21c), and cannot intervene between the predicate and the subject, as shown by the ungrammaticality of (21b), a contrast to which I will return below.

6 The Internal Layering of the Copular Clause Complement of Epistemic Verbs

6.1 On the Categorical Status of the Copular Clause

If the predicate has raised to Spec,FP in (20c) and (21c), the copular verb preceding it must lexicalize the head of a higher functional projection, a third layer of structure above RP and FP. As a consequence, I will analyze *essere* in these examples as the spelling out of a higher functional head,

empirical grounds; adopting Kayne (1994)'s antisymmetry approach to phrase structure, I will exclude the possibility of rightward movement in general; moreover, even if we admitted rightward movement, the subject *Gianni* in (20c) cannot be considered heavy in any sense.

Consider the following Italian example taken from Massam (1985):

- (i) ?Ritengo poter risolvere il problema tutti gli studenti di questa classe.
I believe to be able to solve the problem all the students in this class.

The example is reported as slightly deviant, but to the extent that it is acceptable, its grammaticality status does not differ from the following, where the subject is not as heavy, showing that the crucial factor is not the heaviness of the subject:

- (ii) ?Ritengo poter risolvere il problema tutti gli studenti.
I consider to be able to solve the problem all the students.

Notice furthermore that in this example, unlike in (20c), the predicate is not represented by an auxiliary verb; in fact, as stated explicitly by Massam (1985), (i) is judged as less acceptable than the corresponding example containing an infinitival copula, like the following:

- (iii) Ritengo essere in grado di risolvere il problema tutti gli studenti di questa classe.
I consider to be able to solve the problem all the students in this class.

unrelated with the nuclear predicational structure *stricto sensu*.

At this point it becomes crucial to investigate in greater detail the internal structure of the infinitival complement of epistemic verbs and to determine more precisely its categorial status.

Capitalizing on Zanuttini (1996)'s proposal according to which the presence of a NegP is parasitic on the presence of a TP projection, I will use the test of sentential negation to ascertain whether the complement of an epistemic verb is indeed a small clause or should rather be analyzed as an infinitival TP (as suggested for example by Castillo 2001). As witnessed by the following examples (example (22b) is taken from Rizzi 1982), the sentential negation *non* can appear in these structures, suggesting that the complement of the epistemic verb is in fact a TP (independently of the type of predicate it contains):

- (22) a. Ritengo non essere Gianni una persona affidabile / intenzionato a partire.
I consider not to be John a reliable person / willing to leave.
- b. Suppongo non essere la situazione suscettibile di ulteriori miglioramenti.
I suppose not to be the situation susceptible of further improvements.

This conclusion leads me to suggest that the internal structure of infinitival complements of epistemic verbs can be expanded to include at least three different layers of structure:¹⁷ we can distinguish a nuclear projection PP headed by a low head P° linking subject and predicate, an intermediate projection VP headed by the head V° and activated by the application of predicate inversion, and a third projection TP headed by the highest head T° which is lexicalized whenever the copular verb precedes the inverted predicate.

6.2 Lexicalizing the Different Heads

6.2.1 On the Lexicalization of the Prepositional Head

The data discussed up to now clearly indicate that in predicative clauses selected by an epistemic main verb SL predicates – as opposed to IL predicates – require the overt realization of the copula, independently of the application of predicate inversion.

Adopting a decompositional approach, Gallego and Uriagereka (2009) develop an analysis of IL/SL predicates as involving the incorporation of

¹⁷ In the rest of the paper I will replace den Dikken's labels R°/RP and F°/FP with more familiar ones, such as P°/PP and V°/VP respectively; in fact, as will become clear below, the use of these labels will turn out to be more transparent also with respect to the elements which happen to lexicalize the two heads P° and V°.

different types of prepositions. The basic idea is that in Spanish the structure of *estar* is more complex than that of *ser*, and in particular that the copula *estar*, associated with SL predicates, results from the incorporation of the copula *ser* with a terminal-coincidence preposition:

- (23) a. Obama es/*está americano.
Obama is American
b. Obama *es/está preocupado.
Obama is worried

The function of the preposition is to contextualize the property denoted by the SL predicate in (23b), anchoring it to a spatio-temporal situation; under this view, the type and number of prepositions present in their lexical syntax is crucial to determine the choice between *ser* and *estar*.¹⁸ What is relevant here is that Gallego and Uriagereka's analysis suggests that the copular verb occurring with SL predicates is intrinsically endowed with a prepositional component.

Jiménez-Fernández (2012) adopts their approach applying it to small clause complements and suggests explicitly that small clause predicates have a prepositional component. He discusses examples such as the following, pointing out that argument small clauses differ with respect to the type of predicate selecting the subordinate clause:

- (24) a. Considero a Jimena inteligente.
I consider Jimena intelligent
b. *Considero a Jimena triste.
I consider Jimena sad
(25) a. Espero el coche reparado para esta tarde.
I expect the car fixed by this afternoon
b. *Espero el coche veloz pare esta tarde.
I expect the car fast by this afternoon

Following an original idea of Kitagawa (1985), he observes that verbs like *considerar* are more easily combined with a small clause whose predicate denotes a permanent property (an IL predicate), whereas verbs like *esperar* require rather a small clause containing a predicate which denotes

¹⁸ In particular, Gallego and Uriagereka (2009) refer to Hale and Keyser's (2002) ontological distinction between *central-coincidence* (prepositions) expressing *stativity* (and therefore associated with IL predicates) and *terminal-coincidence* (prepositions) expressing *perfectivity* (and therefore associated with SL predicates). An important consequence of their decompositional analysis is that Kratzer's (1995) IL/SL distinction cannot be considered as an inherent lexical property of predicates, but in fact a semantic consequence of a specific syntactic derivational path, in line with recent exoskeletal approaches to lexical items.

a transient property (an SL predicate); he assumes that in (24a) the adjectival small clause combines with a central-coincidence preposition, giving rise to the IL interpretation that the main verb *considerar* requires, while in (25a) the adjectival small clause merges with a terminal-coincidence preposition, producing an SL reading compatible with the selectional properties of the matrix verb *esperar*.

According to him, the central-coincidence prepositional element spelling out the lowest functional head which connects subject and IL predicate is lexicalized in examples like the following:

- (26) a. Tildò a Juan *de* inexperto en esos asuntos.
He branded Juan as unskilled in those affairs.
b. Juan tomò a ese político *por* tonto.
Juan took this politician for a fool.

On the other hand, in the following example the relevant functional head is lexicalized by a terminal-coincidence preposition which triggers an SL interpretation of the predicate:

- (27) Convirtió a Juan *en* un gran artista.
He turned Juan into a big artist.

Also in Italian, in small clauses containing IL predicates the lowest head P° can be overtly lexicalized as a prepositional element:¹⁹

19 As for English, den Dikken (2006, 63-4) explicitly admits the possibility for the Relator R° (in our terms P°) of the tenseless small-clause complement of a verb to be overtly lexicalized as a (pseudo-)prepositional element connecting subject and predicate, like in the examples in (ia), to which I assign the structural representation in (ib):

- (i) a. Imogen treats/takes/regards him *(like/for/as) a fool.
b. [_{TP} Imogen treats/takes/regards [_{TP} [_{VP} [_{PP} him [_{P°} like/for/as] a fool]]]]

The overt realization of the Relator can in some cases be optional, like in the following example:

- (ii) Imogen considers him (as) a fool.

As pointed out by den Dikken, the choice between the connectives *as*, *for* and *like* as a lexicalization of the lowest head R°/P° and its obligatoriness/optionality are entirely dependent on the lexical specifications of the selecting verb.

The existence of a functional element linking subject and predicate in predicative constructions is challenged by Marelj and Matushansky (2015), who investigate the validity of the theory of mediated predication by examining one of the proposed overt realizations of the alleged functional head; on the basis of evidence from English, Russian and Serbo-Croatian they argue that the element *for* that looks like the predicative head Pred° is in fact a real preposition, claiming that cases of apparently predicative interpretation result from

- (28) a. Considero Gianni *come* una persona affidabile.
I consider John as a reliable person.
b. Mia sorella ha preso Gianni *per* un pazzo.
My sister took John for a fool

The data discussed in this section suggest that while the prepositional elements can lexicalize the lowest head P° , the copula is always a lexicalization of the intermediate head V° (or of the highest head T°).²⁰

6.2.2 On the Lexicalization of the Higher Heads

Independently of the application of predicate inversion, I take the infinitival copula to lexicalize the intermediate head V° , while (abstract or) overt prepositional relators are invariably generated within the lowest head P° .²¹ In particular, as proposed in the previous section, I will assume that SL predicates always entail the base generation of a (terminal-coincidence) prepositional element in the head P° , which raises and incorporates into the intermediate head V° and is spelled out in this higher position as a copular verb.²²

Jiménez-Fernández (2012) analyses in detail the information structure of small clauses and the *ser/estar* alternation and argues that there is

the interplay between the meaning of that preposition and the metaphorical reinterpretation of motion and locative verbs that *for*-PPs combine with.

20 If the view that the copular verb invariably lexicalizes the intermediate head V° (or the highest head T°) is on the right track, then the structural representation of the English examples in (i) should be the one reported under (ii):

- (i) a. I consider Brian as the best candidate.
b. I consider Brian to be the best candidate.
(ii) a. [_{TP} I consider [_{VP} [_{V'}] [_{PP} [_{NP} Brian] [_{P'} as] [_{DP} the best candidate]]]]
b. [_{TP} I consider [_{VP} [_{NP} Brian]_i [_{V'} to be]_j [_{PP} _{t_i} [_{P'} _{t_j}] [_{DP} the best candidate]]]]]

21 At this point an important question arises as to whether, and, if so, how the copular verb and the prepositional element could cooccur; in other words, one could a priori expect the copula to take a complement headed by *as/for* followed by a non-verbal predicate, like in the following example:

- (i) a. *I consider Brian to be as/for the best candidate.
b. [_{TP} I consider [_{VP} [_{NP} Brian]_i [_{V'} to be]_j [_{PP} _{t_i} [_{P'} as/for] [_{XP} the best candidate]]]]].

I speculate that the ungrammaticality of (i) is due to the fact that the lexicalization of the copular verb is produced precisely by the raising and the incorporation of the abstract preposition onto the intermediate head, so that the lowest head will be occupied by its trace, which will prevent the overt realization of the prepositional element in that position.

22 For the relation between the two auxiliary verbs *be* and *have* and the idea that auxiliary verbs can result from the incorporation of prepositions to some functional head the reader is referred to Benveniste 1966 and Kayne 1993 respectively.

a crucial correlation between IL/SL constructions and their information structure: more precisely, as anticipated above, he claims that subjects of IL predicates are always topics (and enter into a categorial construction), while subjects of SL predicates may not be topics (their construction being *thetic*); capitalizing on the idea that *estar*-constructions contain a spatio-temporal event, he proposes that with SL predicates the topic may be represented by this spatio-temporal argument, in the sense that the content of *thetic* constructions is predicated about a spatio-temporal situation, while this is not the case with *ser*-constructions, as in categorial IL constructions a property is predicated of a subject.²³

Building on this analysis, I will adopt here the view that with SL predicates the copular verb (lexicalized in V°) must raise to T° in order to license a silent spatio-temporal topic in the corresponding specifier in a spec-head agreement configuration; the presence of the silent topic in Spec,TP will prevent the raising of the SL adjectival predicate to that position (under the additional assumption that there are no multiple specifiers, cf. Kayne 1994); hence the ungrammaticality of (21b) - repeated here as (29) for convenience - as an answer to (21a):

- (29) * $[_{TP}$ Ritengo $[_{AP}$ preoccupato per la situazione] $_i$ $[_{T^{\circ}}$ essere] $_j$ $[_{VP}$ t $_i$ $[_{V^{\circ}}$ t $_j$] $[_{PP}$ Gianni $[_{P^{\circ}}$ t $_i$ t $_j$]]]], ad esempio.
I consider worried about the situation to be John, for example.

But if the lexicalized copula raises obligatorily from the intermediate head V° to the highest head T° , licensing the silent topic in the corresponding specifier position Spec,TP, the specifier of VP will remain a free landing site for the inverted SL predicate, with the subject sitting in its basic position, as represented in (30):

- (30) $[_{TP}$ Ritengo $[_{TP}$ top $[_{T^{\circ}}$ essere] $_j$ $[_{VP}$ $[_{AP}$ preoccupato per la situazione] $_i$ $[_{V^{\circ}}$ t $_j$] $[_{PP}$ $[_{NP}$ Gianni] $[_{P^{\circ}}$ t $_i$]]]]]], ad esempio.
I consider to be worried for the situation John, for example.

23 This proposal endorses and updates the traditional analysis of Kratzer (1995), according to which SL predicates contain a bindable variable for the appropriate spatio-temporal restriction of the property denoted by the predicate to the relevant situation. An anonymous reviewer points out that it is rather strange to insert a null topic into a Spec,TP position, the typical surface subject position, but the proposal becomes more plausible if one considers that the null topic under discussion should be regarded in fact as an empty spatio-temporal argument of the SL predicate. For a detailed analysis of the relation between the topic-comment structure and the SL/IL predicate contrast the reader is referred to Jäger (2001), who argues against a uniform SL/IL distinction, suggesting that a unified explanation of the linguistic phenomena that are considered to be sensitive for this distinction is neither possible nor desirable.

On the other hand, with IL predicates the silent prepositional element generated within the lowest head P° is taken to raise by head movement up to V° (and to T°), but does not necessarily lexicalize as a copular verb (arguably because of the central-coincidence nature of the preposition involved). Consequently, as an answer to (20a), we can have a structure like (31a) without any copular verb and the predicate crossing over the subject; alternatively, if the copula is overtly realized and remains in V° we get (31b), which sounds slightly marginal to native speakers, while if the copular verb raises further up to T° we get (31c), a fully grammatical sequence:

- (31) a. Ritengo una persona affidabile Gianni, ad esempio.
I consider a reliable person John, for example.
- b. $?[{}_{TP} \text{Ritengo} [{}_{VP} [{}_{DP} \text{una persona affidabile}]_i [{}_{V'} \text{essere}]_j [{}_{PP} [{}_{NP} \text{Gianni}] [{}_{P'} t_j] t_i]]]$, ad esempio.
I consider a reliable person to be John, for example.
- c. $[{}_{TP} \text{Ritengo} [{}_{TP} [{}_{T'} \text{essere}]_j [{}_{VP} [{}_{DP} \text{una persona affidabile}]_i [{}_{V'} t_j] [{}_{PP} [{}_{NP} \text{Gianni}] [{}_{P'} t_j] t_i]]]$, ad esempio.
I consider to be a reliable person John, for example.

The grammaticality status of (31b) – as opposed to the ungrammaticality of (29) – can be attributed to the fact that with IL predicates the infinitival copula does not (need to) license any spatio-temporal topic in Spec,TP and can therefore be merged and stop in the intermediate head V° ; on the other hand, if the copula raises to the highest head T° , we get the grammatical sequence in (31c), with the inverted predicate sitting in Spec,VP.²⁴

24 Moro (1995) observes that neither the subject nor the predicate DP can be realized by a *pro* in a nominal small clause in Italian. However, he notes that there seems to be no intrinsic prohibition against the subject or the predicate of a nominal small clause being *pro*; hence, he concludes, it must be the local environment within the small clause that blocks the licensing of *pro*. According to Rizzi (1986), a case of V-licensed *pro* not involving an *arbitrary* interpretation is precisely the null expletive subject of small clauses. Cases of subject inversion, as exemplified in (i), are analyzed by Rizzi (1986) postulating rightward movement of the nominal subject and an expletive *pro* preceding the predicate:

- (i) Ritengo [*pro* più intelligente suo fratello]
I consider *pro* more intelligent his brother

Updating his analysis and making it compatible with the present approach, there is no need to postulate a *pro* in these cases, assuming that in (i) the relative order of the two constituents has been affected by the application of predicate inversion, to the effect that the adjectival predicate has crossed over the subject, which remains in its base position (and, being the most embedded constituent, receives the default stress, cf. Cinque 1993):

- (ii) $[{}_{TP} \text{Ritengo} [{}_{VP} [{}_{AP} \text{più intelligente}]_i [{}_{V'}] [{}_{PP} [{}_{NP} \text{suo fratello}] [{}_{P'} t_j]]]$

Notice that in (i) no copula is present between the inverted predicate and its subject, as expected with an IL predicate like *intelligente*; in fact, the copular verb, if present, can appear only before the adjectival predicate (that is, under the present analysis, as the lexicalization of the highest head T°). In English, unlike in Italian, AP predicates do not generally invert

7 Summary

Building on some recent proposals, in this article I have argued, on the basis of evidence from Romance, for the idea that epistemic predicative clauses are made up by at least three different layers of structure. The lowest projection, PP, hosts the basic generation position of subject and predicate, and its head P° can lexicalize as a prepositional element functioning as relator between them. The intermediate projection VP can host in its specifier the raised predicate, while its head V° can lexicalize as a copular verb, which results from the raising and the incorporation of an abstract prepositional element generated in the lower head position. The highest projection TP can equally host the copular verb in its head T°, which, with SL predicates, can license by spec-head agreement an abstract spatio-temporal topic in the corresponding specifier.

with their subjects via predicate inversion within the complement of verbs like *consider*; the cases under discussion in the present paper mostly involve AP predicates, which raises the question as to why in Italian AP predicates can apparently invert with their subjects under epistemic verbs. I will leave this question open for future research. Another case in which Rizzi postulates the presence of a *pro* is the one of clausal subjects, as exemplified in (iiia):

- (iii) a. Ritengo [*pro* improbabile [che Gianni parta]]
I consider *pro* unlikely that John leaves
b. Ritengo che Gianni parta estremamente improbabile
I consider that John leaves extremely unlikely

For these cases, given the grammaticality of (iiib), the presence of *pro* is probably justifiable and an alternative structural representation of (iiia), according to the theory developed here, would be the following, where the adjectival predicate optionally crosses over the clausal subject which is coindexed with the *pro* located in Spec,TP:

- (iv) [_{TP} Ritengo [_{TP} *pro*_j [_{VP} [_{AP} improbabile]_i [_{V°}] [_{PP} [_{CP} che Gianni parta]_j [_{P°}] t_i]]]]]

Finally, I have hypothesized above that with SL predicates the raising of P° to V° has as a consequence the obligatory lexicalization of the copula. The minimal pair in (v), that is, the different position of the subject in English and Italian with respect to the copula in the unmarked word order, could be easily traced back to (some version of) the null subject parameter, under the hypothesis (cf. Rizzi 1986) that only in Italian can the epistemic verb license an expletive *pro* within the copular clause, as represented in (vib):

- (v) a. I consider John/him *to be* willing to leave.
b. Ritengo *essere* Gianni/tu intenzionato a partire.
(vi) a. [_{TP} I consider [_{TP} [_{NP} John/him]_i [_{VP} [_{V°} to be]_j [_{PP} t_i [_{P°} t_j] [_{AP} willing to leave]]]]]]
b. [_{TP} Ritengo [_{TP} *pro*_i [_{VP} [_{V°} essere]_j] [_{NP} Gianni/tu]_i [_{P°} t_j] [_{AP} intenzionato a partire]]]]]]

Notice that the structural representation reported in (via) might be valid also for the Italian example, grammatical for some speakers, where the copular verb intervenes between the subject and the predicate.

The attested word order restrictions follow straightforwardly from the assumption that SL predicates, unlike IL predicates, require the overt realization of an infinitival copula which must raise to the head T° in order to be able to restrict the validity of the property denoted by the predicate, anchoring it to a specific spatio-temporal situation.

Bibliography

- Adger, David; Ramchand, Gillian (2003). "Predication and Equation". *Linguistic Inquiry*, 34, 325-59.
- Baker, Mark (2003). *Lexical Categories: Verbs, Nouns and Adjectives*. Cambridge: Cambridge University Press.
- Benveniste, Emile (1966). *Problèmes de linguistique générale*. Paris: Editions Gallimard.
- Bošković, Željko (1997). *The Syntax of Nonfinite Complementation: An Economy Approach*. Cambridge (MA): The MIT Press.
- Bowers, John (1993). "The Syntax of Predication". *Linguistic Inquiry*, 24, 591-656.
- Cardinaletti, Anna; Guasti, Maria Teresa (eds.) (1995). *Syntax and semantics*, vol. 28, *Small Clauses*. New York: Academic Press. .
- Castillo, Concha (2001). "The Configuration of ECM Structures". *Studia Linguistica*, 55, 113-40.
- Chomsky, Noam (2001). "Derivation by Phase". Kenstowicz, M. (ed.), *Ken Hale: A Life in Language*. Cambridge (MA): The MIT Press, 1-52
- Chomsky, Noam (2013). "Problems of Projection". *Lingua*, 130, 33-49.
- Cinque, Guglielmo (1993). "A Null Theory of Phrase and Compound Stress". *Linguistic Inquiry*, 24, 239-97.
- den Dikken, Marcel (2006). *Relators and Linkers. The Syntax of Predication, Predicate Inversion, and Copulas*. Cambridge (MA): The MIT Press.
- Gallego, Angel; Uriagereka, Juan (2009). "Estar = Ser + P". Talk delivered at the XIX Colloquium on Generative Grammar (Vitoria-Gasteiz, April 2009).
- Hale, Ken; Keyser, Samuel Jay (2002). *Prolegomenon to a Theory of Argument Structure*. Cambridge (MA): The MIT Press.
- Hernanz, Maria Lluïsa; Suñer, Avel.lina (1999). "La predicación: la predicación no copulativa. Las construcciones absolutas". Bosque, Ignacio; Demonte, Violeta (eds.), *Gramática descriptiva de la lengua española*, vol. 2, *Las construcciones sintácticas fundamentales - Relaciones temporales, aspectuales y modales*. Madrid: Espasa Calpe, 2525-60.
- Heycock, Caroline (1994). "The Internal Structure of Small Clauses: New Evidence from Inversion". Beckman, J. (ed.), *Proceedings of NELS 25*, vol. 1, *Papers from the Main Sessions*. Amherst: GLSA, 223-38.

- Jäger, Gerhard (2001). "Topic-Comment Structure and the Contrast Between Stage Level and Individual Level Predicates". *Journal of Semantics*, 18, 83-126.
- Jiménez-Fernández, Angel (2012). "What Information Structure Tells Us About Individual/Stage Level Predicates". *Borealis: An International Journal of Hispanic Linguistics*, 1, 1-32.
- Kayne, Richard (1981). "On Certain Differences Between French and English". *Linguistic Inquiry*, 12, 349-71.
- Kayne, Richard (1993). "Toward a Modular Theory of Auxiliary Selection". *Studia Linguistica*, 47, 3-31.
- Kayne, Richard (1994). *The Antisymmetry of Syntax*. Cambridge: The MIT Press. Linguistic Inquiry Monographs 25.
- Kitagawa, Yoshihisa (1985). "Small but Clausal". *Regional Meeting of the Chicago Linguistic Society*, 21, 210-20.
- Kratzer, Angelika (1995). "Stage-Level and Individual-Level Predicates". Carlson, Gregory N.; Pelletier, Francis Jeffrey (eds.), *The Generic Book*. Chicago: The University of Chicago Press, 125-75.
- Ladusaw, William A. (1994). "Thetic and Categorical, Stage and Individual, Weak and Strong". Harvey, Mandy; Santelmann, Lynn (eds.), *SALT IV*, Ithaca (NY): Cornell University, 220-9.
- Lasersohn, Peter (2009). "Relative Truth, Speaker Commitment, and Control of Implicit Arguments". *Synthese*, 166, 359-74.
- Marelj, Marijana; Matushansky, Ora (2015). "Mistaking For: Testing the Theory of Mediated Predication". *Linguistic Inquiry*, 46(1), 43-76.
- Massam, Diane (1985). *Case Theory and the Projection Principle* [PhD Dissertation]. Cambridge (MA): MIT.
- Moro, Andrea (1995). "Small Clauses with Predicative Nominals". Cardinaletti, Guasti 1995, 109-32.
- Moro, Andrea (1997). *The Raising of Predicates: Predicative Noun Phrases and the Theory of Clause Structure*. Cambridge: Cambridge University Press.
- Moro, Andrea (2000). *Dynamic Antisymmetry*. Cambridge (MA): The MIT Press.
- Munaro, Nicola (2016). "Verbless Predicative Structures Across Romance". *Journal of Linguistics*, 52, 609-37.
- Park, Myung-Kwan (1997). "Small Clauses in English and the Stage-Level and Individual-Level Predicate Distinction". *Studies in Generative Grammar*, 7, 255-92.
- Raposo, Eduardo; Uriagereka, Juan (1995). "Two Types of Small Clauses (Toward a Syntax of Theme/Rheme Relations)". Cardinaletti, Guasti 1995, 179-206.
- Rizzi, Luigi (1982). *Issues in Italian Syntax*. Dordrecht: Foris Publications.
- Rizzi, Luigi (1986). "Null Objects in Italian and the Theory of *pro*". *Linguistic Inquiry*, 17, 501-57.

- Stowell, Tim (1981). *Origins of Phrase Structure* [PhD Dissertation]. Cambridge (MA): MIT.
- Vinet, Marie-Thérèse (1991). "French Non-Verbal Exclamative Constructions". *Probus*, 3(1), 77-100.
- Williams, Edwin (1975). "Small Clauses in English". Kimball, John (ed.), *Syntax and Semantics*, vol. 4. New York: Academic Press, 249-73.
- Zanuttini, Raffaella (1996). "On the Relevance of Tense for Sentential Negation". Belletti, Adriana; Rizzi, Luigi (eds.), *Parameters and Functional Heads*. Oxford: Oxford University Press, 181-207.

