

# INFINITIVAL RELATIVE CLAUSES AND ITALIAN CLEFTS\*

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**Abstract:** This paper addresses the issue of the licensing of infinitival subject relative clauses by clefts. I claim that infinitival subject relatives are licensed by a contrastive focus. I assume that in Italian clefts always express a contrastive focus, which makes them licensors of infinitival subject relative clauses as opposed to English and French in which a cleft does not necessarily have to be contrastive. I furthermore claim that the infinitival relative clause is a complement, which would account for the fact that it allows extraction.

**Keywords:** cleft, infinitival relative clause, contrastive focus, Italian

## 1. Introduction

Infinitival relatives are relative clauses containing an infinitive instead of an inflected verb. With infinitival subject relatives, the head noun is interpreted as the subject of the relative clause. The infinitive in the subject relative clause can be an active or a passive verb. In the literature it is shown that infinitival subject relatives are licensed by a head noun modified by a superlative or a comparable modifier, such as *only* or the superlative ordinals *first* or *last* (Kjellmer 1975, Geisler 1995, Bhatt 2006):

- (1) At age 60 years, Dolly Parton became the oldest woman to have a no. 1 song on the Billboard Hot Country Songs.
- (2) Pauling remains the only person to have been awarded two unshared Nobel Prizes, one for chemistry in 1954 and one for peace in 1962.
- (3) The ancient Greeks were the last to have true democracy.

Infinitival subject relatives are not only licensed by superlatives and comparable modifiers in English, but also in French (4-6) and Italian (7-9):

- (4) Il est le soliste le plus jeune à avoir joué avec cet orchestre.  
'He is the youngest soloist to have played with this orchestra.'
- (5) Suis-je le seul à avoir ce problème?  
'Am I the only one to have this problem?'
- (6) Armstrong fut le premier à avoir marché sur la lune.  
'Armstrong was the first to have walked on the moon.'
- (7) Il più giovane a raggiungere la cima è stato un giovane di 11 anni.  
'The youngest one to reach the top was an 11 year old child.'

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- (8) Non sono il solo a pensare così.  
'I am not the only one to think so.'
- (9) Il primo a entrare è il primo a uscire.  
'First in, last out.'

According to Kjellmer (1975: 325), superlatives and equivalent modifiers are able to license infinitival subject relatives because of their selective function: *the oldest woman* in (1) selects one out of many women, *the only person* in (2) selects one out of many men, and *the last* in (3) selects one nation out of many nations. Kjellmer furthermore notes that superlatives mark the end of a scale.

However, infinitival subject relative clauses are not only licensed by superlatives and equivalent modifiers, which have a selective function and mark the end of scale. In Italian, but not in English or French, clefts are also able to license infinitival subject relatives:

- (10) È stato Gianni a darmi la chiave.  
is been Gianni to give-me the key  
'It was Gianni who gave me the key.'
- (11) \*It was John to have given me the key.
- (12) \*C'est Jean à m'avoir donné la clé.

The licensing of the infinitival relative by the cleft in (10) raises two questions :

- (i) Why is the cleft in (10) able to license the infinitival subject relative?  
(ii) Why is the cleft able to license the infinitival relative in Italian, but not in English or French?

Sleeman (submitted) claims that superlatives and equivalent modifiers license infinitival subject relatives because they express a contrastive focus, which is a reinterpretation of Kjellmer's notions of "selective function" and "end of the scale". In this paper I do the same for Italian clefts. On the basis of answering strategies used by Italian, English and French native speakers to answer a wh-question (Belletti forthcoming), I argue that in Italian (but not necessarily in English or French) clefts express a contrastive focus, which makes them able to license infinitival relatives. I argue furthermore that the constituents licensing infinitival relative clauses, including clefted constituents in Italian, are in a high position. I analyze the infinitival relative clause as their complement, showing that it allows extraction from it.

The paper is organized as follows. In section 2, I argue that infinitival subject relatives are licensed by a contrastive focus. In section 3, it is shown that Italian clefts, but not English or French clefts, express a contrastive focus. In section 4, I argue that the constituents licensing infinitival relative clauses are in a high position in the clause (or the DP). In section 5, I discuss the syntactic relation between the clefted constituent and the coda. Finally, in section 6, the results of this paper are summarized.

## 2. Licensing of infinitival subject relatives by contrastive focus

In the previous section we saw that infinitival subject relatives are licensed by superlatives, *only* and the superlative ordinals *first* and *last*. We saw furthermore that according to Kjellmer (1975), superlatives and equivalent modifiers have a "selective function", selecting one or a subset of elements out of a larger set. Kjellmer notices furthermore that superlatives and equivalent modifiers "mark the end of a scale". Sleeman

(submitted) identifies the first property with Kiss' (1998) notion of "identificational focus" and the second property with her notion of "contrastive focus".

Kiss distinguishes "identificational focus" from "information focus". Whereas information focus merely conveys non-presupposed information, identificational focus is a quantification-like operation, it "represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold" (Kiss 1998: 245). Kiss notices furthermore that an identificational focus "is identified as the exhaustive subset of the set for which the predicate phrase can potentially hold". An information focus does not express exhaustive identification.

Kiss uses a test to determine whether a focus expresses exhaustivity. A non-exhaustive focus can be part of an enumeration, whereas an exhaustive focus cannot. In the context of (13a), the answer (13b) contains an information focus, whereas (13c) contains an identificational focus. Kiss claims that the English cleft construction, as in (13c), always expresses identificational focus and not information focus:

- (13) a. Where did you go in the summer?  
 b. I went to Italy (among other places).  
 c. It was to Italy where I went (and nowhere else).

Besides the cleft, *only*-phrases also function as identificational foci. Kiss argues that *only*-phrases are scalar: the elements of the set on which exhaustive identification is performed are ordered along a scale, and the element identified as that for which the predicate exclusively holds represents a low value on this scale.

A third notion that Kiss defines is that of "contrastive focus". Kiss considers an identificational focus to be contrastive "if it operates on a closed set of entities whose members are known to the participants of the discourse" (Kiss 1998: 267). The identification of a subset of a given set also identifies the contrasting complementary subset, as in (14):

- (14) a. I heard you invited John and Mary.  
 b. I only invited John (and not Mary).

A non-contrastive identificational focus, on the other hand, operates on an open set of entities. It does not identify a contrasting complementary subset:

- (15) a. Who wrote War and Peace?  
 b. It was Tolstoy who wrote War and Peace.

Sleeman (submitted) argues that superlatives and equivalent modifiers licensing infinitival subject relatives are identificational foci, because they "have a selective function". They identify a subset from a scalar set of elements: the highest or the lowest subset. Sleeman (submitted) argues furthermore that the constituents licensing infinitival subject relatives, "marking the end of a scale", express a [+contrastive] identificational focus. Superlatives and equivalent modifiers can also express a [-contrastive] identificational focus, but they only license infinitival subject relatives in their [+contrastive] use. A superlative is taken to be a [+contrastive] focus, if it identifies an (empty) contrasting complementary set consisting of members that represent a still higher or lower value than the end of the scale. Since superlatives represent the end of the scale, a still higher or lower value on the scale is naturally excluded. They express a [-contrastive], i.e. simply identificational focus, if only

their selective function is stressed, but not the exclusion of an (empty) set of elements that represents a still higher or still lower value on the scale.

One might wonder what distinguishes my use of this notion “contrastive focus” and Kiss’ use of the notion “identificational focus”. We saw that Kiss associates “identificational focus” with exhaustivity. By exhaustivity Kiss means that there is no other element within the set of alternatives for which the predicate phrase holds: the identification of a subset goes together with the exclusion of the complementary subset. In my use of the notion “contrastive focus” a complementary subset is also excluded. There is, however, a difference. Sleeman (submitted) assumes, following Kampers-Manhe (1991) for French, that in languages such as Italian or French only subjunctive clauses, but not indicative clauses, can replace infinitival subject relatives:<sup>1</sup>

- (16) C’ est la femme la plus âgée à avoir eu un enfant.  
 this is the woman the most old to have had a child  
 ‘She is the oldest woman to have given birth.’
- (17) a. C’est la femme la plus âgée qui ait eu un enfant. (= 16)  
 this is the woman the most old who has-SUBJ had a child  
 b. C’est la femme la plus âgée qui a eu un enfant. (≠ 16)  
 this is the woman the most old who has-IND had a child

I take a contrastive focus therefore to imply that there is domain widening and to exclude any possible alternative.

This interpretation is supported by the following fact. Besides stating that superlatives “have a selective function” and “mark the end of a scale”, Kjellmer (1975) points out that the adverb ‘ever’ can be used in infinitival subject relative clauses. Kjellmer states that ‘ever’ is normally non-assertive, occurring in negative and/or interrogative clauses. Kjellmer observes that (18) means ‘I haven’t ever tasted a better wine than this’, and states that it is therefore natural that ‘ever’ should be found in infinitival relative clauses depending on head nouns modified by a superlative:

- (18) This is the best wine I’ve ever tasted.

Sleeman (submitted) claims that it is the negative interpretation entailed by the superlative and equivalent modifiers that makes it a [+contrastive] identificational focus, a contrast being expressed with an empty complementary set, which is entailed by the meaning of the superlative denoting the extreme value on a scale and which is therefore known to the participants of the discourse (see Kiss’ definition of contrastive focus above).

In the introduction to this paper I showed that not only in English, but also in Italian and French, superlatives and equivalent modifiers license infinitival subject relative clauses. Some examples are repeated below:

<sup>1</sup> Just as in French (and in English), in Italian non-modal infinitival relative clauses are licensed by adjectives that represent the end of a scale. Just as in French, in Italian only subjunctive clauses can replace infinitival subject relatives:

- (i) E’ la donna più anziana a aver partorito.  
 She-is the woman most old to have given-birth.  
 ‘She is the oldest woman to have given birth.’
- (ii) E’ la donna più anziana che abbia partorito. (= i)  
 ‘She is the oldest woman that has-SUBJ given birth.’
- (iii) E’ la donna più anziana che ha partorito. (≠ i).  
 ‘She is the oldest woman that has-IND given birth.’

- (19) Il più giovane a raggiungere la cima è stato un giovane di 11 anni.  
 ‘The youngest one to reach the top was an 11 year old child.’
- (20) Armstrong fut le premier à avoir marché sur la lune.  
 ‘Armstrong was the first to have walked on the moon.’

However, in the introduction I also showed that whereas in Italian clefts can license infinitival subject relatives, in English and French they cannot do so. The relevant examples are repeated below:

- (21) a. È stato Gianni a darmi la chiave.  
 is been Gianni to give-me the key  
 ‘It was Gianni who gave me the key.’
- b. \*It was John to have given me the key.
- c. \*C’est Jean à m’avoir donné la clé.

Kiss argues that there is parametric variation in the feature content of identificational focus. In English, identificational focus is [ $\pm$ contrastive]. The *only*-phrase in (14b) expresses a [+contrastive] identificational focus, but in another context it can also express a [–contrastive] focus. The cleft in (15b) expresses a [–contrastive] identificational focus. However, if the interpretation as [+contrastive] depends on the possibility of the identification of a complementary subset, which is possible within a closed set of elements, as Kiss states, the cleft can also express a [+contrastive] focus:

- (22) a. Who wrote War and Peace: Tolstoy or Dostoyevsky?
- b. It was Tolstoy who wrote War and Peace (and not Dostoyevsky).

For Italian Kiss claims that identificational focus is always [+contrastive]. I assume that it is the necessarily [+contrastive] interpretation of the cleft in Italian which allows it to license infinitival subject relative clauses. In the next section I provide support for the claim that the Italian cleft, as opposed to the English and French cleft, expresses a [+contrastive] identificational focus, allowing it to license infinitival subject relatives.

### 3. Parametric variation in the feature content of clefts

In the previous section we saw that in Italian, but not in English or French, the cleft is able to license an infinitival subject relative clause. The question is why this should be so: why is the cleft able to license the infinitival relative in Italian, but not in English or French? In the previous section I claimed that if the cleft licenses an infinitival relative clause in Italian, it does so because it expresses a [+contrastive] focus. In English and French the cleft expresses an identificational focus that is [ $\pm$ contrastive].

Evidence for these claims is provided by preferred answering strategies used to answer questions concerning the identification of the subject of the clause (Belletti forthcoming). Belletti states that in order to answer questions about a video they had seen native speakers of Italian, French and English used different answering strategies. In order to answer the question in (a) formulated below, native speakers of Italian used a subject inversion strategy, native speakers of French used a truncated cleft or a full cleft, and native speakers of English used an SV order with a pitch accent on the subject. According to Belletti, although a

(truncated) cleft is the preferred option in French, an SV order with a pitch accent on the subject is not excluded. Although a pitch accent on the subject is the preferred option in English, the cleft is not excluded either:

(23)

- |    |    |                                     |  |
|----|----|-------------------------------------|--|
| A. | a. | Chi è partito/ha parlato?           | Italian: VS (“free inversion”)                     |
|    | b. | E’ partito/ha parlato Gianni.       |  |
| B. | a. | Qui est parti/a parlé?              | French: ((reduced) cleft, also C)                  |
|    | b. | C’est Jean (qui est parti/a parlé). |  |
| C. | a. | Who came/spoke?                     | English: SV/( <i>in situ</i> focalization, also B) |
|    | b. | <i>John</i> came/spoke.             |  |
|    | c. | <i>John</i> did.                    |  |

According to Belletti, a (reduced) cleft, normally disfavored, is possible in Italian and may become the preferred option when either a cleft is contained in the question, as in (24), or with agentive predicates expressing a somewhat negative presupposition, as in (25):

- (24) a. Chi è (stato) che ha rotto il vaso?  
‘Who is it that broke the vase?’  
b. E’ (stato) Gianni  
‘It is (has been) Gianni.’
- (25) a. Chi ha urlato?  
‘Who screamed?’  
b. E’ stato Gianni  
‘It has been Gianni.’

Belletti shows that with object questions, Italian, French and English do not manifest any difference in the answering strategies, when answers are provided with a full clause:

- (26) Italian  
a. Che cosa hai comprato?  
‘What have you bought?’  
b. Ho comprato un libro  
‘I bought a book.’
- (27) French  
a. Qu’as-tu acheté /Qu’est-ce-que tu as acheté?  
b. J’ai acheté un livre
- (28) English  
a. What have you bought ?  
b. I have bought a book

Belletti shows that with object questions a cleft can also be used, with a contrastive meaning (examples are from Italian, where ‘-’ indicates the base position of the moved constituent):

- (29) E’ Gianni [che (Maria) ha incontrato (Maria) –]  
‘It is Gianni that Maria has met –.’
- (30) E’ con Gianni [ che Maria ha parlato – ]  
‘It is with Gianni that Maria has spoken –.’

Belletti's discussion of answering strategies shows thus that in Italian both object clefts and subject clefts, both involving a negative presupposition, have a contrastive interpretation:

- (31) a. E' MARIA che ha parlato con Gianni (non Francesca).  
 'It is Maria that has spoken with Gianni (not Francesca).'
- b. E' MARIA che Gianni abbracciava (non Francesca).  
 'It is Maria that Gianni kissed (not Francesca).'
- c. E' CON GIANNI che Maria ha parlato (non con Piero).  
 'It is with Gianni that Maria has spoken (not with Peter).'

In English and French, only object clefts have a contrastive interpretation. In French a subject cleft is the canonical strategy used to answer a *wh*-question. In English it can also be used, although a pitch accent on the subject is the preferred strategy. In both languages, a subject cleft is thus not necessarily contrastive.

This discussion of answering strategies supports my claim that in Italian (subject) clefts are able to license infinitival subject relatives, because they express a [+contrastive] focus. Since, in French and English, subject clefts express a [±contrastive] focus, they cannot license infinitival relative clauses.

In this section and the preceding one, I have argued that, in Italian, a cleft is able to license infinitival subject relative clauses because it expresses a [+contrastive] focus. In the next section, I provide syntactic evidence for my claim.

#### 4. Syntactic evidence for the feature [+contrastive]

As Kiss (1998) shows, a non-contrastive identificational focus is in a high position in Hungarian:

- (32) Mari **egy kalapot** nézett ki magának.  
 Mary a hat-ACC picked out herself-ACC  
 'It was a hat that Mary picked for herself.'

Kiss claims that the English realization of identificational focus is the cleft construction. Kiss adopts Brody's (1990, 1995) analysis of the cleft construction. IP in the main clause is filled by expletive *it* and the copula *be*. I<sup>o</sup> takes the subordinate clause as its complement. The subordinate clause is dominated by FocusP to the Spec of which the clefted constituent moves:

- (33) [CP [IP it [I iSi [FocusP me<sub>j</sub> [Focus<sup>o</sup> t<sub>i</sub> [CP t<sub>j</sub> [C' [C that [IP t<sub>j</sub> is sick ]]]]]]]]]]

Kiss (1998) states that in many languages a focus in a high position in the sentence is a [+contrastive] focus. Belletti (forthcoming) claims that this is also the case in Italian. Whereas in Sicilian, a sentence-initial focus is not necessarily [+contrastive] (Cruschina 2004), in standard Italian it is, according to Belletti.

In Belletti's analysis, contrastive clefts involve the left peripheral focus position of the CP complement of a copula:

- (34) E' [CP [FocusP MARIA] ....[che [pro ha parlato – con Gianni]]]

- (35) a. E' [CP [FocP MARIA] ...[che [ Gianni abbracciava – ]]]  
 b. E' [CP [FocP con GIANNI] ....[che [ Maria ha parlato – ]]]

According to Belletti, it might be that there is no real semantic difference between sentences like (36) and (37), where the crucial distinction between the two pairs is that the latter instantiates left peripheral contrastive focalization in a root clause with no overt copula:

- (36) a. E' MARIA che Gianni abbracciava.  
 'It is Maria that Gianni kissed.'  
 b. E' con GIANNI che Maria parlava.  
 'It is with Gianni that Maria spoke.'  
 (37) a. MARIA Gianni abbracciava.  
 'Maria kissed Gianni.'  
 b. Con GIANNI Maria parlava.  
 'Maria spoke with Gianni.'

In Belletti's analysis, a [+contrastive] focus occupies thus a high position in the complement clause of the copula, just as in Brody's analysis of the English [ $\pm$ contrastive] cleft in (33). In Belletti's analysis, a [ $\pm$ contrastive] focus, however, occupies a low position in the clause. In her analysis of the French subject cleft (23B), the [ $\pm$ contrastive] cleft involves the low new information focus position in the periphery of the vP domain. Since, in English, instead of a (more preferred) SV construction with a subject bearing a pitch accent, as in (23C), a cleft can also be used, this analysis would also hold for the English cleft construction.<sup>2</sup> In Belletti's analysis, the copula in vP takes a small clause (sc) as its complement. The small clause is a subject – predicate structure, where the predicate is a (relative like) CP:

- (38) [TP Ce ... [ TopP [ FocP [TopP [vP être [sc Jean [ CP qui a parlé ] ]]]]]]  
 (39) [TP Ce être [ TopP [ FocP Jean [TopP[vP t<sub>être</sub> [sc t<sub>Jean</sub> [ CP qui a parlé ] ]]]]]]  
 (40) [TP It be [ TopP [ FocP John [TopP[vP t<sub>be</sub> [sc t<sub>John</sub> [ CP that spoke ] ]]]]]]

In Belletti's analysis, the clefted constituent in French (and English) occupies the same position as the postverbal subject in Italian, viz. the low focus position in the periphery of the vP domain:

- (41) [CP ..[ TP *pro* ..è..partito/ha parlato [TopP [FocP Gianni [TopP [vP ....]]]]]]

For the English SV construction Belletti claims that focalization of the preverbal subject is brought about by activation of a DP internal (new information) focus position (Aboh 2004).

Belletti claims thus that Italian clefted constituents, being [+contrastive], occupy a position in the left periphery of the clause, which is the complement of the copula, whereas French and English clefted constituents (at least subjects), being [ $\pm$ contrastive], occupy the left periphery of the vP phase.

<sup>2</sup> Since in English and French object clefts are contrastive, just as in Italian, they would occupy a high peripheral position in Belletti's analysis. In her view, Brody's analysis of clefts would only hold for object clefts:

(i) [CP [IP it [I WAS<sub>i</sub> [FocusP to John<sub>j</sub> [Focus' [Focus° t<sub>i</sub> [CP t<sub>j</sub> [C' [C that [IP I spoke t<sub>j</sub> ]]]]]]]]]].

In this paper I claim that Italian clefted constituents license infinitival subject relatives because they are [+contrastive]. If Belletti's analysis of Italian clefts is correct, this would mean that Italian clefted constituents licensing infinitival subject relatives are in a high position in the clause. There is indeed evidence for this hypothesis, which I will present next.

Besides clefted DPs, there are two other clefted constituents in Italian that can license infinitival subject relatives, both involving quantifiers:<sup>3</sup>

- (42) Sono molte le persone a farne uso in Italia.  
 are many the persons to make-of it use in Italy  
 'Many people in Italy use it.'
- (43) Siamo in molti a pensare questo.  
 We-are in many to think this  
 'Many people believe it.'

The construction in (42) can be used with preposed 'many' or 'few':

- (44) Sono poche le persone a conoscere la storia di questa città.  
 are few the persons to know the story of this city  
 'There are few persons who know the story of this city.'

When the quantifier is not preposed, the use of the infinitival relative is ungrammatical:

- (45) \*Le persone a farne uso in Italia sono molte.  
 (46) \*Le persone a conoscere la storia di questa città sono poche.

It is only possible to leave the quantifier in its base position if a finite relative clause is used instead of an infinitival relative clause:

- (47) Le persone che ne fanno uso in Italia sono molte.  
 the persons that of-it make use in Italy are many  
 'Many people in Italy use it.'
- (48) Le persone che conoscono la storia di questa città sono poche.  
 the persons that know the story of this city are few  
 'There are few persons who know the story of this city.'

Departing slightly from Brody's (33) and Belletti's (34) analyses of the clefted DP-construction, I propose that the quantifier in (42) and (44) moves to a FocusP in the left

<sup>3</sup> In French (but not in English) preposed quantifiers can also license infinitival subject relative clauses, see Sleeman (submitted):

- (i) Nombreux sont ceux à avoir voulu tenter l'expérience.  
 numerous are those to have wanted try the experiment  
 'Those who have wanted to try the experiment are numerous.'
- (ii) Rares sont les personnes à avoir les trois quarts des produits.  
 rare are the persons to have the three quarters of-the products  
 'The persons that have three quarters of the products are rare.'
- (iii) Elles sont trois à avoir remporté les premiers prix.  
 they are three to have taken the first prizes  
 'Three have taken the first prizes.'

The distinction between French and English suggests that the proposed analysis needs be refined. I will leave this for future research.

periphery of the clause (Rizzi 1997) and that the copular verb moves to a position dominating FocusP.<sup>4</sup>

(49) Sono [<sub>FocusP</sub> molte [<sub>vP</sub> t<sub>essere</sub> [<sub>SC</sub> le persone a farne uso in Italia [t<sub>molte</sub>]]]].

The quantifiers that license the use of the infinitival subject relative, i.e. ‘many’ and ‘few’, are proportional quantifiers. They denote high or low values on the scale. I suggest that preposing, i.e. focalization, makes their position on the scale even “more peripheral”. Just like superlatives, they have a contrastive interpretation, asserting that there is (almost) no one or nothing else (not) having the property under consideration, which licenses the infinitival clause.

The second type of cleft quantificational constituent that licenses infinitival subject relatives, as in (43), does not necessarily denote the end of a scale:

- (50) Siamo in tre a sapere la verità.  
We-are in three to know the truth.  
‘Three of us know the truth.’
- (51) Sono in diversi a voler lottare.  
They-are in several to want fight.  
‘Several want to fight.’
- (52) Siete in troppi a visitare il sito.  
you-are in too-many to visit the site  
‘Too many of you visit this site.’
- (53) Molte persone sono sole a gestire una famiglia.  
many persons are only to manage a family  
‘Many people manage a family on their own.’

This construction comes close to the clefted DP construction:<sup>5</sup>

- (54) Siete voi a decidere.  
you-are you to decide  
‘You may decide.’

Whereas in the construction in (49) the copula agrees with the overt subject after its movement to Spec, IP, both in (54) and in (50-53) there is an empty pronoun or an overt DP in the specifier position preceding the copula with which it agrees. For these clefts I propose a structure similar to structure (49). In this construction there is thus also movement of the focalized constituent to a FocusP in the left periphery of the clause (Rizzi 1997):

<sup>4</sup> In Belletti’s (forthcoming) analysis of the Italian cleft, as in (34), FocusP is in the left periphery of the subordinate clause, whereas in Brody’s analysis of the cleft presented in (33) it is on top of the subordinate clause. I rather assume that the focalized constituent moves to a position outside its (small) clause, which is more in line with Brody’s analysis.

<sup>5</sup> In both cases a relative clause with an inflected verb instead of an infinitive can also be used:

- (i) Siamo in tre che sappiamo la verità.  
we-are in three that know the truth.  
‘The three of us know the truth.’
- (ii) Siete voi che decidete.  
you-are you that decide  
‘You decide.’

(55) pro siamo [<sub>FocP</sub> in tre [<sub>vP</sub> t<sub>essere</sub> [<sub>SC</sub> t<sub>pro</sub> a sapere la verità [<sub>t<sub>in tre</sub>]]]]]</sub>

If it is correct to claim that syntactically the construction in (50-53) comes close to the cleft construction in (54), there should also be a semantic correspondence. We have seen that a clefted DP in Italian can be interpreted as [+contrastive]. I suggest that the same holds for the clefted quantificational expression in (50-53). The focalization of the quantificational expression entails that other numbers than three are excluded:

(56) Siamo in tre a sapere la verità (e non in quattro).  
 We-are in three to know the truth (and not in four).  
 ‘Three of us know the truth (and not four).’

In this section I have shown that there is syntactic evidence for my claim that infinitival subject relatives are licensed by a [+contrastive] focus. We have seen that infinitival subject relatives are not only licensed by canonical DP-clefts, but also by clefted quantifiers, moving all to a position in the left periphery in the clause. In the next section I discuss the syntactic relation between the clefted constituent and the coda.

### 5. Syntactic analysis of the cleft constructions

In the previous section we saw that three types of cleft constructions license infinitival subject relative clauses. The relevant examples are repeated below for convenience:

- (57) È stato Gianni a darmi la chiave.  
 is been Gianni to give-me the key  
 ‘It was Gianni who gave me the key.’
- (58) Siete voi a decidere.  
 you-are you to decide  
 ‘You may decide.’
- (59) Sono molte le persone a farne uso in Italia.  
 are many the persons to make-of it use in Italy  
 ‘Many people in Italy use it.’
- (60) Siamo in tre a sapere la verità.  
 We-are in three to know the truth.  
 ‘Three of us know the truth.’

For all three constructions there exists a cleft construction with an inflected verb instead of an infinitive (cf. 31a, 47 and fn. 5):

- (61) È stato Gianni che mi ha dato la chiave.  
 is been Gianni that me has given the key  
 ‘It was Gianni who gave me the key.’
- (62) Siete voi che decidete.  
 you-are you that decide  
 ‘You decide.’
- (63) Molte sono le persone che ne fanno uso in Italia.  
 Many are the persons that of-it make use in Italy  
 ‘Many people in Italy use it.’

- (64) Siamo in tre che sappiamo la verità.  
 we-are in three that know the truth.  
 ‘The three of us know the truth.’

In the previous section I presented two analyses of clefted DPs (with an inflected verb) that have been made in the literature. In both analyses the cleft sentence consists of a main and a subordinate clause. In the analysis Kiss adopts the clefted DP is on top of the subordinate clause (65) and in Belletti's analysis it is in the left periphery of the subordinate clause (66):<sup>6</sup>

- (65) [<sub>CP</sub> [<sub>IP</sub> [<sub>I</sub> è<sub>i</sub> [<sub>FocusP</sub> MARIA<sub>j</sub> [<sub>Focus'</sub> [<sub>Focus°</sub> t<sub>i</sub> [<sub>CP</sub> t<sub>j</sub> [<sub>C'</sub> [<sub>C</sub> che [<sub>IP</sub> pro ha parlato – con Gianni]]]]]]]]]]]  
 (66) E' [<sub>CP</sub> [<sub>FocusP</sub> MARIA] ...[che [<sub>IP</sub> pro ha parlato – con Gianni]]]

In both analyses, the relative clause is a complement, in line with Kayne's (1994) Antisymmetry theory, and not an adjunct, as in, e.g., Clech-Darbon et al. (1999) analysis. In this section I argue that infinitival relative clauses provide indeed evidence for the assumption that the coda of clefted constituents is a complement.

In the introduction to this paper I showed that infinitival subject relative clauses are not only licensed by clefts, but also by a head noun modified by a superlative or an equivalent modifier.<sup>7</sup> The infinitival subject relative can be replaced by a relative clause containing an inflected (subjunctive) verb:

- (67) Gianni è stato il solo a parlare con la stampa.  
 ‘Gianni was the only one to speak with the press.’  
 (68) Gianni è il solo che abbia raggiunto un risultato vero.  
 Gianni is the only that has-SUBJ obtained a result true  
 ‘Gianni is the only one that has obtained a true result.’

Sleeman (2005) analyzes both the inflected relative clause and the infinitival relative clause as a complement, but shows that extraction is only possible from the infinitival relative clause:

- (69) Con chi Gianni è stato il solo (giornalista) a parlare –?  
 ‘With whom was Gianni the only (reporter) to speak?’  
 (70) \*Con chi Gianni è stato il solo (giornalista) che abbia parlato?  
 with whom Gianni is been the only (reporter) that has.SUBJ spoken

Sleeman (2005) claims that the prepositional complementizer *a* is located, within the C-domain, in Fin°. The relation between the subordinate clause and the DP is established by ForceP (Rizzi 1997). The noun or empty pronoun moves to the Spec of FinP, leaving Spec, ForceP empty so that another constituent can move through this position:

- (71) [<sub>ForceP</sub> Con chi<sub>j</sub> Gianni è stato il solo [<sub>ForceP</sub> t<sub>j</sub> [<sub>FinP</sub> giornalista<sub>i</sub> / pro<sub>i</sub> a parlare t<sub>i</sub> t<sub>j</sub>]]]?

<sup>6</sup> In line with my analysis of the clefted quantifier-construction in (42) and (49), I rather assume that the focalized DP in (65-66) moves to a FocusP in the left periphery of the clause (Rizzi 1997) and that the copular verb moves to a position dominating FocusP.

<sup>7</sup> If infinitival subject relatives are licensed by a ‘high’ focus, it might be assumed that in (67)-(68) the superlative or equivalent modifier moves to a (maybe ‘high’) DP-internal focus position (Aboh 2004, Corver and van Koppen 2006), probably at LF (Sleeman submitted).

For the full relative Sleeman (2005) assumes that it is also dominated by ForceP, but this time the (empty) noun has to move to Spec, ForceP, which contains the complementizer *che* in its head position. This means that there is no empty Spec left that could be used for the extraction of a constituent out of the relative clause, which is the complement of *solo*, just as in (72):

- (72) \*Con chi<sub>j</sub> G. è stato il solo [<sub>ForceP</sub> giornalista<sub>i</sub> / *pro*<sub>i</sub> [<sub>Force'</sub> *che* [<sub>FinP</sub> abbia parlato t<sub>i</sub> t<sub>j</sub>]]]?

For the three types of clefts I assume that the infinitival relative clause and the finite clause occupy the same position. The following examples show that extraction from the finite clause is excluded:

- (73) \*l' orchestra strabiliante che è stato lui che ha plasmato  
 the orchestra extraordinary that is been he that has modeled  
 (74) \*un lusso che siamo in pochi che ci possiamo permettere  
 a luxury that we-are in few that us-can permit  
 (75) \*una storia che sono poche le persone che conoscono  
 a story that are few the persons that know

Extraction from the infinitival relative corresponding to (73-74), however, is much better:

- (76) l' orchestra strabiliante che è stato lui a plasmare  
 the orchestra extraordinary that is been he to model  
 'the extraordinary orchestra that he has modeled'  
 (77) un lusso che siamo in pochi a poterci permettere  
 a luxury that we-are in few to can-us permit  
 'a luxury that few can afford'

Assuming Kayne's (1994) raising analysis of relative clauses, we can account for the difference between (73) and (76) in the following way. In (73), both *lui* and *l'orchestra strabiliante* have to pass through the most embedded Spec, ForceP: when *lui* has moved to Spec, ForceP, this position cannot be used anymore for the movement of *l'orchestra strabiliante* (78). In (79), however, *a* occupies Fin° and Spec, FinP can be used for the movement of *lui*, leaving Spec, ForceP available for the movement of *l'orchestra strabiliante*:

- (78) \*l'orchestra strabiliante<sub>j</sub> che è stato lui<sub>i</sub> [<sub>ForceP</sub> t<sub>i</sub> che ha plasmato t<sub>i</sub> t<sub>j</sub> ]  
 (79) l'orchestra strabiliante<sub>j</sub> che è stato lui<sub>i</sub> [<sub>ForceP</sub> t<sub>j</sub> [<sub>FinP</sub> t<sub>i</sub> a [<sub>plasmare</sub> t<sub>i</sub> t<sub>j</sub> ]]]

For (74) I assume a structure as in (80). Since *pro* moves to the Spec of the embedded ForceP, this position cannot be used to move *un lusso*. In (81), however, Spec,FinP is used for the movement of *pro*, and Spec, ForceP is available for the movement of *un lusso*:

- (80) \*un lusso<sub>j</sub> che siamo [<sub>FocusP</sub> in pochi [<sub>vP</sub> t<sub>essere</sub> [<sub>SC</sub> [<sub>ForceP</sub> *pro*<sub>i</sub> che ci possiamo permettere t<sub>i</sub> t<sub>j</sub> ] [<sub>t<sub>in</sub> pochi</sub>]]]]].  
 (81) un lusso<sub>j</sub> che siamo [<sub>FocusP</sub> in pochi [<sub>vP</sub> t<sub>essere</sub> [<sub>SC</sub> [<sub>ForceP</sub> t<sub>j</sub> [<sub>FinP</sub> *pro*<sub>i</sub> a poterci permettere t<sub>i</sub> t<sub>j</sub> ] ] [<sub>t<sub>in</sub> pochi</sub>]]]]].

Extraction from the infinitival relative clause corresponding to the third type of *che*-cleft, (75), is, however, ungrammatical:

- (82) \*una storia che sono poche le persone a conoscere  
 a story that are few the persons to know  
 ‘a story that few people know’

The difference between (79) and (81) on the one hand, and (82) on the other, is that in (79) there is a trace in Spec, FinP and that there is *pro* in Spec, FinP in (81), whereas in (82) an overt DP fills Spec, FinP.<sup>8</sup>

- (83) \*una storia<sub>j</sub> che sono [<sub>FocusP</sub> poche [<sub>vP</sub> t<sub>essere</sub> [<sub>SC</sub> [<sub>ForceP</sub> t<sub>j</sub> [<sub>FinP</sub> le persone<sub>i</sub> a conoscere t<sub>i</sub> t<sub>j</sub> ] ] [t<sub>poche</sub>]]]].

I propose that (83) is ruled out by the Minimal Link Condition, i.e. Shortest Move (Chomsky 1995), which is incorporated in Attract: Spec, ForceP of the main clause should attract the closest overt DP, which is *le persone*, and not *una storia*, which is not the closest overt DP.

In this section I have claimed that the subordinate clauses in *a*-clefts and *che*-clefts do not differ with respect to their position in the sentence. In principle extraction is possible from both, but in *che*-clefts movement through Spec, ForceP is not possible because this position is used for the movement of another constituent. In *a*-clefts, Spec, ForceP is available for movement, because Spec, FinP is used for movement of another constituent. An overt DP in Spec, FinP, however, can block movement because of the Minimal Link Condition. For all cases I have adopted an analysis in which the clefted constituent moves to a position dominating the subordinate clause.

## 6. Conclusion

In this paper, I have claimed that infinitival subject relatives are licensed by clefted constituents if these express a [+contrastive] focus, which I have taken to mean “excluding any possible alternative”. I have shown that whereas in English and especially in French the use of clefts is a normal strategy used to answer a question concerning the identification of the subject of the clause, in Italian the use of a cleft in this case is associated with a somewhat negative presupposition and expresses thus a [+contrastive] focus (Belletti forthcoming).

I have shown that three types of clefts license infinitival subject relative clauses: the canonical cleft with a clefted DP, and two types of clefts with a clefted quantificational expression. I have argued that all three types express a [+contrastive] focus. For all three types of clefts, I have adopted a structure in which the clefted constituent, being a [+contrastive] focus, is located in the left periphery of the clause. Following Belletti (forthcoming), I have assumed that clefted constituents in English and French, expressing a [±contrastive] focus, are in a low focus position, viz. in the left periphery of the vP phase.

For the coda, i.e. the infinitival relative clause, I have assumed that, just like the finite relative clause, it is a complement rather than an adjunct, in line with Kayne’s (1994) Antisymmetry theory. I have shown that extraction is possible from the infinitival relative clause with the canonical DP-cleft and with one type of quantifier-cleft. I have argued that

<sup>8</sup> I assume that *pro* in (81) moves to the main clause, leaving a trace, see (55).

extraction is possible because Spec, ForceP is available as an extraction site. I have attributed the impossibility of extraction from the second type a quantifier-cleft, a type involving subject inversion, to Chomsky's (1995) Minimal Link Condition.

In this paper I have shown that, besides clefts, infinitival subject relatives are licensed by a head noun modified by a superlative or an equivalent expression, not only in Italian, but also in English and French. I have argued that the superlative or the equivalent expression expresses a [+contrastive] focus and I have assumed that it moves to a FocusP in the left periphery of the DP, probably at LF. I have also argued that a superlative does not necessarily have to express a [+contrastive] focus, but I have claimed that in that case it does not license an infinitival subject relative. In line with Belletti's distinction between a high and a low focus position in the clause, a question that comes to mind is whether two types of focus position can be motivated within the DP: a high focus position in the left periphery of the DP and a low focus position just dominating NP. I leave this question for future research.

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