## Infinitival Complements –A Preliminary Study of 'Restructuring' and Causative Constructions in Italian

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Causative and 'restructuring' verbs in Italian share certain properties that make them appear to form a syntactic unit with their complement infinitive. The goal of this paper is to argue for dual subcategorization possibilities for 'restructuring' verbs and to show that similarities and differences between 'restructuring' and causative constructions follow from the proposed analysis. On the basis of the distribution of the perfect auxiliary verbs and clitic placement, the paper argues that 'restructuring' verbs can take as their complement either a VP as in the case of the causative verb, or an IP. The analysis proposed in this paper can account for some peculiar properties of 'restructuring' constructions that have not always been given a satisfactory explanation in other approaches such as those involving incorporation. In particular, it makes correct predictions about the auxiliary switch and clitic placement in sentences where two or more 'restructuring' verbs appear in sequence.

Key words: restructuring, causative, clitic, auxiliary switch, dual subcategorization

#### 0. Introduction

A fairly restricted class of verbs in Italian and other Romance languages shows certain syntactic phenomena that suggest that they appear to be integrated with their complement infinitive. The goal of this paper is to argue that the presence and absence of transparency effects in 'restructuring' constructions are due to dual subcategorization possibilities of VP and IP for 'restructuring' predicates. This paper proposes that when 'restructuring' verbs take a VP complement, they are all raising predicates. The characteristic properties of 'restructuring' constructions such as long DP-movement, clitic climbing and the auxiliary switch will be shown to follow from the VP-complement analysis. The analysis will also account for similarities and differences between 'restructuring' and causative constructions, and the differences between these verbs in terms of argument structure and categorial selectional properties.

## 1. The Structure and Properties of Causative Sentences in Italian

With most verbs taking an infinitival complement, the clitic referring to the direct object of the embedded infinitive must follow the infinitive. The clitic cannot be placed before these verbs in the matrix clause.

- (1) a. Francesco odia leggere il libro. Francescp hate-pres-3sg read the book
  - b. Francesco odia leggerlo. read+it-mas-acc
  - c. \*Francesco lo odia leggere.

A striking difference of causative constructions from the above examples is that the former constructions permit clitic climbing. In (2.b), the clitic originated in the embedded infinitive 'climbs' out of it and is placed before the finite matrix causative verb<sup>1</sup>.

- (2) a. Francesco fa reparare la macchina a Antonella. Francesco make-pres-3sg repair the car to Antonella
   'Francesco makes Antonella repair the car.'
  - b. Francesco la fa reparare a Antonella. Francesco it-fem-sg-acc make-pres-3sg repair to Antonella

Not only is the clitic climbing possible in causatives, but it is obligatory as shown in the following example.

(3) \*Francesco fa repararela a Antonella. Francesco make-pres-3sg repair-it-fem-sg-acc to Antonella

The contrasts observed between causative sentences and the ones in (1) in terms of clitic climbing seem to suggest that the causative verb and the infinitive verb in its complement behave as a single unit like a complex verb.

Passivization is another instance of the causative verb *fare* in which it appears to form a single unit with its complement infinitive. When the causative verb is passivized, the object of the complement infinitive behaves as the object of the causative verb and can be promoted to its subject position.

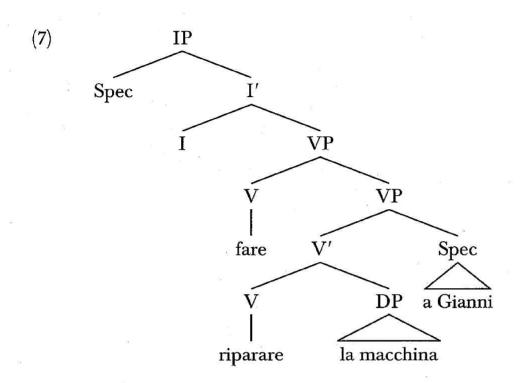
(4) La macchina è stata fatta riparare a Francesco.
 the car is been made repair to Francesco.
 'The car was made to repair by Francesco.'

The following examples adopted from Guasti (1997) show that the infinitival complement of the causative V may not contain the negative marker or an aspectual auxiliary, whose presence reflects the presence of the category such as NegP and TP in the clause.

(5)

\*Ciò fa non leggere mai molti fumetti a Gianni. this makes neg read never many comic strips to Gianni \*Marco farà aver letto il libro a Gianni per domani. Marco make-fut have read the book to Gianni by tomorrow

On the basis of these observations, Guasti proposes that the infinitival complement in Romance causatives is a bare VP without layers of functional projections as illustrated in  $(7)^2$ .



Notice that by assuming that clitics in Italian attach to I, the position of clitics in causatives follows immediately. Since the complement infinitive is a bare VP without I, clitics must attach to I associated with the higher predicate. Also, since no clausal boundary exists between the causative verb and its infinitival complement, possibility of long DP-movement out of the infinitive follows from this analysis.

#### 2. 'Restructuring' Constructions

Italian (like other Romance languages) has structures other than causatives in which the clausal domain of the infinitival complement appears to be transparent and the matrix V and its complement

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(6)

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infinitive V appear to form a single complex predicate. These structures are often referred to as 'restructuring' constructions. The predicates involved in restructuring constructions belong to fairly closed semantic classes, and Rizzi (1982) identifies three classes of restructuring verbs in Italian.

(8) Restructuring verbs:

modal verbs

(e.g. *dovere* 'must', *potere* 'can', *volere* 'want')

aspectual verbs

(e.g. *cominciare* 'to begin', *finire* 'to finish', *continuare* 'to continue')

motion verbs

(e.g. andare 'to go', tornare 'to return', venire 'to come').

Rizzi proposes that these predicates can undergo the process of restructuring with the embedded infinitive to form a complex verb. In this section, it will be argued that the properties of 'restructuring' constructions are not due to a structure-changing operation of restructuring, but due to the monoclausal structure of these constructions. Although the analysis to be proposed does not involve a restructuring operation to syntactically amalgamate two clauses into one, the term 'restructuring' will be used throughout this paper to refer to the constructions and properties commonly associated with the process of restructuring. The properties shared by 'restructuring' and causative constructions will be shown to follow their parallel structures. Some differences between these two types of construction will be shown to be predictable from the proposed lexical differences between 'restructuring' and causative verbs, and others can be accounted for on independent grounds. Among the properties typically associated with restructuring phenomena, I will first discuss the ones parallel to those observed in causatives, and then discuss the differences between the

two types of construction.

#### 2.1 Similarities between 'Restructuring' and Causative Constructions

One notable characteristic of 'restructuring' verbs is that they allow clitic climbing. As in causatives, the clitic originated in the embedded infinitival complement of a 'restructuring' verb can be placed before the matrix finite predicate.

9)	a.	Francesco dovrebbe leggere il libro.				
		Francesco	must-cond-3sg	read	the	book
		'Francesco	would have	to re	ad	the book

- b. Francesco lo dovrebbe leggere  $ec_{cl}$ .
- (10) a. Francesco comincia a scrivere la lettera. Francesco start-pres-3sg to write the letter
   'Francesco will start to write the letter.'
  - b. Francesco la comincia a scrivere  $ec_{cl}$ .

Note that clitic climbing is not restricted to pronominals as shown in the following sentence.

(11) Mario ci sarebbe proprio voluto andare. Mario there be-cond-3-sg really wanted go

'Mario would have really wanted to go there.'

As in causatives, long DP-movement is also possible out of the infinitival complement of 'restructuring' verbs. In the constructions known as 'reflexive passive', the object of the complement infinitive can move to the subject position of a 'restructuring' verb as shown in (12.b).

(12) a. Si voleva proprio leggere questi libri. SI want-past-3sg really read these books

'We really wanted to read these books.'

b. Questi libli si volevano proprio leggere. these books SI want-past-3pl really read

In contrast, as shown in (13.b) below, long-distance movement of the object is not allowed from the infinitive complement of non-'restructuring' verbs.

(13) a. Si odiava proprio leggere questi libri. SI hate-past-3sg really read these books
'We really hated to read these books.'
b. \*Questi libri si odiavano proprio leggere.

As we have seen, 'restructuring' constructions have properties similar to those of causative sentences. Among various approaches to restructuring, Napoli (1981), Rochette (1990), Wurmbrand (2001) and Cinque (2004), for instance, pursue a monoclausal approach to 'restructuring'. Their proposals differ from one another in analyzing 'restructuring' predicates as lexical verbs, auxiliary verbs, or ones belonging to a functional category, but they all regard the infinitive complement of 'restructuring' predicates as a bare VP. If these analyses are on the right track, the structure of 'restructuring' and that of causative sentences are at least partly parallel in taking a VP complement.

Despite the similarities mentioned above, the parallelism between causative and 'restructuring' constructions is not complete, and 'restructuring' and causative constructions contrast to each other in some important respects. Although the differences might first appear to suggest that 'restructuring' constructions cannot be analyzed as structurally analogous to causatives, it will be argued in the following sections that both causative and restructuring verbs take a VP complement and the differences between the two can be accounted for on independent grounds.

#### 2.2 VP Complement in 'Restructuring' Constructions

One important difference between 'restructuring' and causative constructions concerns the distribution of the aspectual auxiliaries. While the perfect auxiliaries, *avere* and *essere*, cannot appear in the causative complement, they are allowed in restructuring infinitives. Consider the following examples.

 (14) a. Deve essere sucesso quello che mi aspettavo. must be happened that which myself expect-pst

 'What I expected must have happened.'

b. Noi vorremmo **essere** già andati. we want-1pl-con be already gone-pl

'We would want to have already gone.

- c. A quell'ora doveva essere già arrivato a casa.
  at that time must-pst be already arrived to house
  'He must have already arrived home at that time.'
- (15) a. Giovanni lo sembrava **aver** gradito. Giovanni it seem-pst have liked

'Giovanni seemed to have liked it.'

b. Li vorrei aver già letti. them want-cond-1sg have already read-pl

'I would want to have already read them.'

The appearance of a perfect auxiliary in 'restructuring' complement does not necessarily suggest the presence of independent Tense in the complement. Bruzio (1986) shows that while either the matrix 'restructuring' verb or the infinitive verb in its complement can take a perfect auxiliary, it is impossible for both verbs to take one at the same time.

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## (16) \*Giovanni lo **avrebbe** voluto **aver** già letto. Giovanni it have-cond wanted have already read

'Giovanni would have wanted to have already read it.'

If the infinitival complement of a 'restructuring' verb projects TP, and 'restructuring' constructions are biclausal, the multiple appearance of a perfect auxiliary should not be problematic, which is contrary to the fact. Let us suppose that restructuring verbs take VP, not TP as their complement, and thus no independent Tense is available within the complement to license a perfect auxiliary. Then, a prediction is made that a perfect auxiliary in the complement can be licensed by Tense only when there is no other perfect auxiliary associated with the matrix predicate. The prediction is borne out as the grammaticality of the sentences in (14) and (15) above suggests.

Based on the distribution of perfect auxiliaries, I propose that 'restructuring' verbs take VP, not TP, as their complement as illustrated in (17).

(17)  $[_{IP} DP [_{VP} V_{restructuring} [_{VP} V_{inf} ]]]$ 

If the complement of 'restructuring' verbs is a bare VP, the structure of 'restructuring' constructions is similar to that of causative sentences. Then, clitic climbing and the long DP-movement phenomena observed in 'restructuring' constructions can be accounted for basically in the same way as those observed in causatives. The clitic associated with the complement verb climbs up the matrix clause because it must attach to Infl, which is absent in 'restructuring' complements is possible since it does not cross a clausal boundary.

Bok-Bennema (2005) discusses several problems for analyzing 'restructuring' complements as a category smaller than a clause. One problem concerns the fact that some Italian 'restructuring' verbs are followed by an infinitival particle (or a prepositional complementizer (cf. Kayne (1981), Rizzi (1982)) such as *a* and *di*.

(18) a. Francesco lo va **a** prendere. Francesco it goes **a** bring

'Francesco goes to bring it.'

b. Francesco lo finisce **di** leggere domani. Francesco it finish **di** read tomorrow

'Francesco will finish reading it tomorrow.'

The presence of a/di in these examples seems to indicate that there is a position above VP in the 'restructuring' complements. But, their presence does not necessitate a full clausal projection. If the infinitive form of a verb enters the derivation with a feature that must be checked by a preposition, the complement of the 'restructuring' verbs such as *cominciare*, *finire*, *venire*, etc., can be taken as PP or a prepositional infinitive<sup>3</sup>.

There is still another possible analysis. In Kayne's (2000) proposal, a prepositional complementizer enters into the derivation not as sister to an infinitive, but above the higher VP (i.e., V+infinitive). In his proposal, the surface word order is derived through a series of featuredriven movement operations. Thus, these alternative analyses suggest that the presence of a/di does not have to be a problem for the VP-complement analysis<sup>4</sup>.

#### 2.3 Restructuring Verbs as Raising Predicates

Rizzi (1982) analyzes some restructuring verbs as raising verbs and others as control verbs.

(19) a.  $[_{IP} DP_i [_{VP} V_{restructuring} [_{VP} PRO_i V_{inf} ]]]$ b.  $[_{IP} DP_i [_{VP} V_{restructuring} [_{VP} t_{DPi} V_{inf} ]]]$ 

Under the assumption that PRO subject in the infinitival complement of a control predicate must have its null case checked by nonfinite T feature, the structure given in (19.a) poses a problem. With no Tense features in the complement, PRO cannot have its case checked. Thus, if 'restructuring' verbs take a bare VP complement as we hypothesize, the subject of the infinitive cannot be PRO.

Cinque (2004) proposes that 'restructuring' verbs are always functional and they appear in a monoclausal structure. In his analysis, due to their functional nature, 'restructuring' verbs do not have an argument of their own and always involve subject-raising. He bases his analysis on Kayne's (2000: 49) observation that object-control 'restructuring' verbs are generally nonexistent, and virtually all 'restructuring' verbs are either subject-control or raising verbs. Cinque provides evidence to show that the subject of the matrix 'restructuring' verb must always be derived in the complement, even in the structures that are generally taken to be subject-control.

One problem with the raising analysis concerns selectional requirements on the subject of certain 'restructuring' predicates. The analysis predicts that the surface subject of a 'restructuring' verb needs to conform to the selectional restriction imposed by the complement infinitive, but it is not selectionally restricted by the 'restructuring' verb. Although most of the 'restructuring' verbs do not impose selectional requirements on their subject, some 'restructuring' verbs, such as *volere*, *venire*, and *provare* do impose restrictions on their subject. Compare the following examples adopted from Cinque (2004).

(20) a. La casa gli doveva piacere. the house to-him had-to appeal

"The house had to appeal to him."

b. La casa non gli poteva piacere. the house not to-him could appeal

"The house could not appeal to him."

c. \*La casa gli voleva appartenere. the house to-him want-pst-3sg to belong

"The house wanted to belong to him."

### d. \*La casa gli provò a piacere. the house to-him tired to appeal

#### "The house tried to appeal to him."

As shown by (20.c) and (20.d), *volere* and *provare* impose selectional restrictions on their subject and rule out non-sentient subjects. Thus, these 'restructuring' verbs appear to take a subject of their own, and these cases appear to contradict the proposals that 'restructuring' verbs are all raising predicates. As a possible solution to this problem, Cinque suggests that 'restructuring' verbs that impose selectional restrictions on the surface subject like those in (20.c) and (20.d) are just like volitional adverbs such as *willingly* and *voluntarily*, which need to be predicated on a sentient being. Then, the ungrammaticality of (20.c) and (20.d) can be accounted for as a consequence of the lexical semantics of *volere* and *provare* without having to assume that they take an external argument of their own.

The contrasts observed in the following sentences involving English modal auxiliaries provide additional support for Cinque's analysis. When the English modal auxiliary verbs *can* and *may* are used in the sense of ability and permission, respectively, they only allow a sentient/agentive being as the subject.

- (21) a. The train arrives.
  - b. The train can arrive. (It is possible that the train arrives./
    \*The train has the ability to arrive.)
- (22) a. It rains.
  - b. It may rain. (It is possible to rain./\*It is allowed to rain.)

Notice that although the English modal auxiliary verbs are generally considered to be raising predicates, (21.b) and (22.b) show that there are certain selectional restrictions imposed on their surface subject.

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Thus, the apparent selectional restriction on the subject does not necessarily lead to the presence of an external argument.

In the proposed analysis, 'restructuring' constructions are structurally parallel to causatives in taking a VP complement. But, by assuming that 'restructuring' verbs are raising predicates while the causative verb is not, an important difference between the two types of construction follows in terms of matrix passivization. As shown in (23), while the matrix causative verb can be passivized with the embedded object moved into the matrix subject position, the corresponding matrix passivization is not generally possible with 'restructuring' verbs<sup>5</sup>.

 (23) a. Questo libro è stato fatto leggere a Francesco (da this book be-pres-3sg been made read to Francesco (by Antonella).

> 'Francesco has been made to read this book (by Antonella).'

b. \*Questo libro è stato voluto leggere (da Antonella). this book be-pres-3sg been wanted read (by Antonella)

'This book has been wanted to read (by Antonella).'

A possible explanation for this difference is that passive morphology cannot apply to 'restructuring' verbs since they do not have an external argument to be suppressed.

While the present analysis shares with Cinque's in viewing 'restructuring' verbs as raising predicates without an external argument, the two analyses differ from each other in some significant ways. One major difference is that whereas Cinque proposes that 'restructuring' verbs are functional verbs directly inserted in the head of the corresponding functional projection, I propose in this paper that 'restructuring' verbs belong to the category V. The proposed structure of a 'restructuring' sentence can be represented as shown in (24).

### (24) $[_{IP} DP_i [_{VP} V_{restructuring} [_{VP} t_{DPi} V_{inf} ]]]$

Cinque observes that when motion verbs and the verb *sembrare* 'seem' appear in a 'restructuring' context, they are semantically different from their 'non-restructuring' usage. The examples in (25), adopted from (Cinque 2004: 156), are intended to show the relevant contrast.

(25) a. A: Come verrà da te a dipingere la porta?

'How will he come to your place to paint the door?'

B: In bicicletta.

'By bicycle.'

# b. A: Come ti verrà a dipingere la porta?'How will he come to paint your door?'

B: \*In bicicletta. 'By bicycle.'

In (25.a) *verrà* (< venire 'come') in A's question is followed by a locative argument and is interpreted genuinely as a verb of locomotion, part of whose meaning concerns the means of transportation. Therefore, B's response is possible in (25.a). On the other hand, in (25.b) A's question without a locative argument is a 'restructuring' sentence, and it asks the way (manner) he will (come to) paint the door. Therefore, it cannot be answered by giving the means of transportation. Cinque claims that this kind of contrast shows that 'restructuring' verbs are different from lexical verbs and they are functional. However, 'restructuring' verbs are not completely devoid of lexical semantic features as they allow adverbial modification as in the following example:

 (26) Lo voglio sicuramente leggere. it want-pre-1sg surely read
 'I surely want to read it.'

In the analysis proposed here, 'restructuring' verbs and their 'non-re-

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structuring' counterparts are both taken to be lexical verbs. The 'restructuring' verb *venire* in (25.b), for example, is different from its 'nonrestructuring' counterpart in (25.a) in terms of the argument structure, to which the observed semantic difference should be attributed.

#### 2.4 Dual Subcategorization of 'Restructuring' Verbs

2.4.1 The Distribution of the Perfect Auxiliaries

In the previous section, one of the motivations for arguing that 'restructuring' verbs take a bare VP complement was the distribution of a perfect auxiliary in 'restructuring' sentences. We have seen that when a perfect auxiliary associated with the matrix 'restructuring' verb is present, an aspectual auxiliary cannot be present in the infinitival complement. Thus, at most one aspectual auxiliary is allowed, either being associated with the matrix 'restructuring' verb or with the complement infinitive. The fact follows if Tense is not available in the 'restructuring' complement to independently license a perfect auxiliary. Hence a 'restructuring' complement is only a VP.

There are, however, cases in which both a 'restructuring' verb and the complement infinitive are independently associated with a perfect auxiliary. Compare example (27) with example (16) above repeated here as (28).

(27) Giovanni **avrebbe** voluto **averl**o già letto. Giovanni have-cond wanted have-it already read

'Giovanni would have wanted to have already read it.'

(28) \*Giovanni lo **avrebbe** voluto **aver** già letto. Giovanni it have-cond wanted have already read

The grammaticality of (27) seems to challenge our proposal that restructuring complements are not a full clausal projection with Tense. But this problem can be solved if 'restructuring' verbs have dual subcategorization possibilities, i.e., 'restructuring' verbs take either a VP or a clausal projection (IP) as their complement. It will be shown in the following discussion that this dual subcategorization account can better explain such differences as those observed in (27) and (28) than the accounts based on an optional 'restructuing' rule or incorporation/ head-movement.

Notice that (28) differs from (27) in the position of the clitic,  $l_0$ , which is construed as the object of the embedded verb. In ungrammatical (28) the clitic is placed before the matrix predicate, whereas in grammatical (27) the clitic attaches to the perfect auxiliary in the complement. In other words, in (27) the clitic attachment is realized within the complement infinitive, while in (28) and in many of the preceding examples, the clitic crosses the domain of the infinitive with which it is thematically associated. The fact that a perfect auxiliary can be present in the infinitival complement in (27) indicates that this infinitive includes the projection of Tense features. In Italian, infinitive verbs are assumed to move to I. Then, when a clitic remains within the infinitive of its origin, the clitic placement can be regarded as its attachment to the first available verbal host, V+I in its own infinitival clause, as illustrated in (29).

#### (29) Francesco dovrebbe [IP PRO legger+I+lo [ $_{VP} t_v ec_{cl}$ ]]. Francesco must-cond-3sg to read+it-masc-acc

On the other hand, in constructions where clitic climbing is observed, the clitic moves up to I in the higher clause as shown in (30) since the embedded infinitive does not contain I to which the clitic can attach<sup>6</sup>.

(30)  $[_{IP} \operatorname{Francesco}_{i} [_{I} \operatorname{lo}+I+\operatorname{dovrebbe}] [_{VP} t_{i} [_{VP} \operatorname{leggere} \operatorname{ec}_{cl}]]].$ 

As already seen in Section 1, clitic climbing is also observed in causative constructions. But unlike the cases in (27) and (29) with a 'restructuring' verb, causatives lack the option of leaving a clitic in the embedded infinitive. This difference naturally follows if causative verbs are only allowed to take a VP complement while 'restructuring' verbs can take either a VP or IP complement.

In Rizzi (1982), the occurrence of clitic climbing is considered a reflex of the application of the restructuring rule. The different placement possibilities of clitics are attributed to the optionality in the application of the restructuring in Rizzi's analysis, whereas in the present proposal, the differences are due to the dual subcategorization possibilities of 'restructuring' verbs.

2.4.2 The Auxiliary Switch

Besides clitic climbing, another peculiarity that Rizzi associates with the restructuring rule is the occurrence of auxiliary switch. We will now show that the auxiliary switch in 'restructuring' constructions directly follows from the proposed dual subcategorization account.

As we have already seen, Italian has two perfect auxiliaries: *essere*, whose close equivalent in English is 'be,' occurs with the past participle of unaccusative verbs, and *avere* 'have' occurs with that of unergative and transitive verbs. The contrast is observed in the following examples.

- (31) a. Francesco è tornato a casa. be-pres-3sg returned to house
  - b. \*Francesco ha tornato a casa. have-pres-3sg
- (32) a. Francesco ha voluto questo libro. have-pres-sg wanted this book
  - b. \*Francesco è volute questo libro. be-pres-sg wanted this book

It has been known that the 'restructuring' contexts have a peculiar influence on the choice of auxiliary. When the verb embedded under a 'restructuring' verb belongs to *essere*-class, the 'restructuring' verb can take *essere* even if it only takes *avere* in other contexts. Compare examples in (33) and (34).

(33) Francesco ha voluto tornare a casa. have-pres-3sg wanted return to house

'Francesco has wanted to go home'

(34) a. Francesco è voluto tornare a casa. be-pres-3sg wanted return to house

'Francesco has wanted to go home.'

b. Antonella è voluta tornare a casa. be-pres-3sg wanted-fem return to house

'Antonella has wanted to go home.'

c. Francesco e Antonella sono voluti tornare a casa. be-pres-3pl wanted-pl return to house

'Francesco and Antonella have wanted to go home'

In (34.a-c), the matrix verb *volere*, which belongs to *avere*-class, takes *essere*. These sentences also show that when the auxiliary verb is *essere*, the associated past participle must agree with the subject in number and gender.

The auxiliary switch observed above is a property that distinguishes 'restructuring' verbs from other verbs taking an infinitival complement. The auxiliary switch is not possible with 'non-restructuring' verbs as shown by the following example:

 (35) Francesco ha/\*è sperato di tornare a casa. have-pre-3sg/\*be-pres-3sg hoped to return to house
 'Francesco has hoped to go home'

There is an interesting interaction between the auxiliary switch and clitic climbing. Notice that whenever clitic climbing is observed and the auxiliary switch is applicable in a 'restructuring' construction, the auxiliary switch is required. In (36.a) the clitic stays in situ, and the sentence is grammatical without the change of the auxiliary. On the other hand, if clitic climbing takes place as in (36.b), the resulting sentence is ungrammatical. The sentence, however, becomes grammatical if the auxiliary is switched to *essere* as in (36.c).

(36) a. Maria ha dovuto venirci molte volte. Maria have-pres-3sg had-to come-there many times

'Maria has had to come there many times.'

- b. \*?Maria ci ha dovuto venire molte volte. Maria there have-pres-3sg had-to come many times
- c. Maria c'è dovuta venire molte volte. Maria there-be-pres-3sg had-to come many times

In the analysis proposed above, when clitic climbing is observed, it is a consequence of a 'restructuring' verb's taking a VP complement, but when the clitic stays in situ, the 'restructuring' complement is assumed to be IP. On the basis of this analysis, the structures of the sentences in (36) will be as shown in (37).

- (37) a. Maria<sub>i</sub> ha dovuto [IP PRO<sub>i</sub> venirci [VP  $t_v t_i$  ec<sub>d</sub> molte volte]]
  - b. \*Maria<sub>i</sub> ci ha dovuto [VP venire  $t_i$  ec<sub>cl</sub> molte volte]]
  - c. Maria<sub>i</sub> c'è dovuto [VP venire  $t_i$  ec<sub>cl</sub> molte volte]]

In (37.a), where the clitic stays in situ, the matrix verb *dovere* takes an IP complement, while in (37.b) and (37.c) the matrix verb takes a VP complement out of which the clitic climbs. According to Bruzio (1986), the choice between the auxiliaries, *avere* and *essere*, is dependent on the structural relations within the clause; *essere* is required where the surface subject binds its trace in the direct object position, and otherwise *avere* is selected. Since the embedded infinitive verb *venire* in the above examples is an unaccusative verb, and in the proposed analysis the

matrix verb *dovere* in these examples is a raising verb, a binding relation holds between the surface matrix subject position and the object position of the embedded VP. Therefore, *essere* is required when a 'restructuring' verb takes a VP complement headed by an unaccusative verb as in (37.c) In (37.a), on the other hand, since *dovere* in this sentence is not a raising predicate, the matrix subject does not directly bind the trace in the embedded object position. The latter is bound by the embedded PRO subject, which is co-indexed with the matrix subject. Hence, the auxiliary switch does not take place in this case.

Besides the difference in clitic climbing, 'restructuring' constructions differ from causatives with respect to the auxiliary switch as well. The causative verb *fare* always requires *avere* as the perfect auxiliary even when the clitic associated with the complement infinitive appears before the causative verb.

(38) a. Francesco l'ha fatto venire. Francesco him have-pre-3sg made come 'Francesco has made him come.'

b. \*Francesco l'è fatto venire.

Even though the causative verb takes a VP complement as 'restructuring' verbs do, the causative verb is not a raising predicate and a binding relation does not hold between its surface subject and the object position in the complement VP. Therefore, the condition for the auxiliary switch is never met in causatives.

When two or more 'restructuring' verbs concatenate, the proposed analysis can also account for the available data correctly. Consider the examples in (39) from Rizzi (1982: 22).

 (39) a. Maria li avrebbe voluti andare a prendere lei stessa. Maria them have-cond-3sg wanted go to get her self
 'Maria would have wanted to go to fetch them herself.'

- b. \*Maria li sarebbe volute andare a prendere lei stessa. Maria them be-cond-3sg wanted go to get her self
- c. Maria sarebbe/avrebbe voluta/o andare a prenderli lei stessa.

In these examples, the most deeply embedded verb, *prendere* with which the clitic *li* is associated, is a transitive verb, not an unaccusative verb. In (39.a) and (39.b), the position of the clitic suggests that both *volere* and *andare* are raising verbs taking a VP complement. But, since the surface subject, *Maria*, does not bind the object position of the VP from which the clitic originates, the auxiliary selection is solely due to the property of the matrix verb *volere*. Therefore, *avere* is required as in (39.a), not *essere* as in (39.b). In contrast, the position of the clitic in (39. c) suggests that the complement of *andare* is IP. But as to the complement of *volere*, the VP/IP possibilities are both open as illustrated in (40).

- (40) a. Maria<sub>i</sub> aux voluta [<sub>VP</sub>  $t_i$  and are  $t_i$ [<sub>IP</sub> PRO<sub>i</sub> a prenderli [<sub>VP</sub>  $t_v$  ec<sub>cl</sub> lei stessa]
  - b. Maria<sub>i</sub> aux voluta [IP PRO<sub>i</sub> andare  $t_i$  [IP PRO<sub>i</sub> a prenderli [VP  $t_v$  ec<sub>cl</sub> lei stessa]

If the complement of *volere* is a VP as in (40.a), this will create the context for the auxiliary switch to *essere* due to *andare*. If, on the other hand, *volere* takes an IP complement, the auxiliary selection is not affected by the embedded verb and *avere* is selected. Thus, the fact that in (39.c) either *avere* or *essere* is possible as the matrix auxiliary can be attributed to the two possible structural analyses of the sentence.

The analysis provided for the sentences in (39) can be confirmed by the auxiliary selection in the following example.

## (41) Maria avrebbe voluto andarli a prendere lei stessa. Maria have-cond-3sg wanted go-them to get her self 'Maria would have wanted to go to fetch them herself.'

In (41), the attachment of the clitic li to *andare* suggests that the complement of *andare* is a VP and the complement of *volere* is an IP as shown in (42).

(42) Maria<sub>i</sub> avrebbe voluto  $[_{IP} PRO_i$  andarli  $t_i [_{VP} t_i$  a prendere  $ec_{cl}$  lei stessa]]

If the complement of *volere* were a VP, the clitic *li* could not be attached to *andare* since within this complement no I is present to host the verb and the clitic. Since a binding relation does not hold between the surface subject of *volere* and the trace in the object position of *andare*, the proposed analysis correctly predicts that the auxiliary switch does not apply in this sentence.

An interesting point that needs to be explained about the auxiliary switch is that the switch is always in one direction, i.e., from *avere* to *essere*. A 'restructuring' verb normally requiring *avere* as the perfect auxiliary takes *essere* if the embedded verb belongs to the *essere*-class and a certain structural condition is met as discussed above. However, the reverse situation never holds. When the matrix auxiliary verb is *essere*, it is never switched to *avere* even if the embedded verb belongs to the *avere*-class.

- (43) a. Francesco lo è andato a prendere.
   Francesco it be-pres-3sg gone to get
   'Francesco has gone to get it.'
  - b. \*Francesco lo ha andato a prendere. Francesco it have-pres-3sg to get

If the matrix verb belongs to the *essere*-class, there is always a binding

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relation between the matrix subject and the direct object position, and this relation still holds even if the matrix subject binds the subject of the embedded infinitive as shown in (44).

(44) Francesco<sub>i</sub> lo è andato  $t_i$  [VP  $t_i$  a prendere ec<sub>cl</sub>]

Therefore, when the matrix 'restructuring' verb is an *essere*-class verb, it always takes *essere* as the perfect auxiliary verb.

We have seen above that if clitic climbing is observed, the auxiliary switch is required where it is applicable. However, the inverse relation does not necessarily hold. Consider the following example adopted from Bruzio (1986: 327).

 (45) Mario sarebbe proprio voluto andarci. Mario be-cond-3sg really wanted go-there
 'Mario would have really wanted to go there.'

The matrix verb volere in (45) is an avere-class verb. But, the auxiliary is switched to essere, suggesting that there is a binding relation between the matrix subject and the object position in the embedded infinitive. However, the position of the clitic *ci* in this sentence indicates that the complement is IP as shown in (46).

(46) Mario<sub>i</sub> sarebbe proprio voluto  $[IP PRO_i andarci [VP <math>t_v t_i ec_{cl}]]$ 

As long as sentence (45) has the structure shown in (46), the auxiliary switch observed here remains problematic. One possible solution might be to postulate that *volere* in this sentence takes an IP complement, but unlike the control verb in (46), it is a raising verb, giving hybrid properties of 'restructuring' and 'non-restructuring' constructions to this sentence as illustrated in (47).

#### (47) Mario<sub>i</sub> sarebbe proprio voluto $[IP t_i and arci [VP t_v t_i ec_{cl}]]$

With this structure, the position of the clitic and the auxiliary switch to *essere* can both be accounted for. Needless to say, more empirical data and theoretical analyses are needed in order to determine the validity of this last analysis. I will have to leave this to future research.

#### 3. Conclusion

This paper presented arguments for dual subcategorization possibilities for 'restructuring' verbs. On the basis of the distribution of the perfect auxiliary verbs and clitic placement, it was argued that 'restructuring' verbs can take either a VP or IP complement. With the monoclausal structure analysis of 'restructuring' constructions, long DPmovement and clitic climbing, which are observed in 'restructuring' and causative constructions both, can be given a uniform account. In the proposed analysis, 'restructuring' verbs are raising predicates when they take a VP complement, and this analysis provided a better account for the auxiliary switch phenomena and other differences between 'restructuring' and causative constructions. The present paper also accounted for the presence and absence of the 'transparency' effects in 'restructuring' constructions not in terms of an optional restructuring rule, but in terms of dual subcategorization possibilities of the predicates. The proposed analysis was also successful in explaining another notable property of 'restructuring' constructions, i.e., the auxiliary switch phenomena, which have not always been given a satisfactory account in other approaches such as those involving incorporation.

#### Notes

1 The subject of an intransitive verb in a causative complement can be expressed by an accusative clitic, and this clitic must be placed before the causative verb.

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(i) Francesco la fa lavorare.

Francesco it-3sg-fem-acc make-pres-3sg work

\*Francesco fa lavorarla.

The subject of a transitive verb in a causative complement can be expressed by a dative clitic placed before the causative verb.

(ii) Francesco gli fa reparare la macchina.

Francesco them-dat make-pres-3sg repair the car

2 Guasti (1997) proposes that Romance causatives are derived by the process of incorporation and the subsequent excorporation. In Guasti's analysis, a well-formed word  $(V_{inf})$  incorporates into the causative V root, which is less than a word. While incorporation allows the object of the infinitive to behave as that of the causative V, by the excorporation of the causative V, the causative V and the infinitive V behave as morphologically independent words. An example to illustrate the latter point is given in (i), in which the causative V and the complement infinitive V can be separated by an adverbial element.

(i) I professori non fanno più commentare quell libro a Ugo. the professors NEG make-pres-3pl anymore comment that book to Ugo.

3 Alternatively, above the infinitive VP, an extended functional feature corresponding to the nominal feature of the infinitive may project. A prepositional complementizer selects this VP with the nominal feature.

4 As another indication that 'restructuring' complements have more structure than VP, Bok-Bennema notes that in its restructuring use the Italian verb *sapere* 'know' takes an infinitival complement containing a fronted *wh*-word.

(i) Su questo punto, non ti saprei che dire. on this point, not you know-cond-1sg what tell

'On this point, I wouldn't know what to say.'

Rizzi (1982) observes that the productivity of a restructuring verb+interrogative complement is severely restricted. Among the predicates that take embedded interrogatives, *sapere* seems to be the only verb that allows this construction, and there is also a restriction on the type of interrogatives.

(ii) \*Di questo problema, non ne saprei quando parlare.

of this problem, not of-it know-cond-1sg when speak 'Of this problem, I wouldn't know when to speak' (iii) \*Su questo problema, non lo saprei se consigliare o no. on this problem, not him know-cond-1sg whether advise or not

'On this problem, I wouldn't know whether to advise him or not." I suspect that a highly lexicalized process underlies the grammaticality of sentence (i), and thus this cannot be a strong argument against the present proposal.

- 5 There are some exceptions to the failure of matrix passivization of 'restructuring' verbs as given in (i).
  - (i) Il palazzo<sub>i</sub> fu cominciato [a costruire  $t_i$ ] sotto Carlo V.
    - the palace be-past-3sg begun to build under Carlo V.

'The palace began to be built under Carlo V.'

Such exceptions seem to be restricted to 'aspectual' predicates such as *cominciare* and *continuare*, but I do not attempt to provide an explanation for these exceptions in this paper.

- 6 When a 'restructuring' infinitive contains multiple object clitics, they must either stay together in the clause of their origin, or climb together up to the matrix clause. The fact shown by the data in (i) is also predictable from the proposed analysis.
  - (i) a. Francesco voleva darmelo. Francesco want-past-3sg give+me-dat+it-acc
    - Francesco me lo voleva dare.
    - b. \*Francesco lo voleva darenmi.
    - c. \*Francesco mi volova darlo.

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