

# Clitic Positions and Restructuring in Italian

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Verbs can be introduced (merged) in either a lexical VP or a functional head, the latter position giving rise to restructuring contexts. We argue that there are two clitic positions in Italian “restructured” clauses: one associated with the (restructured) lexical verb and the other a clausal clitic position located in the functional domain. While restructuring can be recursive, clitics appear either on the restructured infinitive (no clitic climbing) or in the functional domain of the highest verb (full clitic climbing). There is no clitic climbing to an intermediate restructuring verb. We argue that only the lowest restructured verb makes a position for clitics available and that this position is the same as that of infinitive-final [e]. Finally, we show that the functional ~ lexical dichotomy is too sharp and that a variety of verb classes must be admitted, whose properties correlate with the point in the structure in which they are merged.

*Keywords:* restructuring, clitic, lexical verb, functional verb, Italian, clitic climbing

The major goal of this article is to provide a descriptively adequate account of Italian restructuring. In particular, we are interested in the relationship between clitic climbing and the distribution of the word-final [e] of Italian infinitival verbs. We argue that restructuring takes place within a single CP and that “restructuring” verbs are functional verbs, namely, verbs that fill positions in the functional hierarchy of a clause. In this, we follow Cinque (2001, 2003, 2004) (see also Wurmbrand 2001, in press).

Verbs in a clause are hierarchically arrayed according to their “lexical” or “functional” status. Lexical verbs appear in the lowest part of the tree, while functional verbs pile up above the lexical verb. Despite being verbs morphologically, functional verbs should be taken to be the realization of functional heads, expressing such semantic features as modality and aspect. Our investigation of restructuring leads us to believe that the split between lexical and functional verbs

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is not binary. Between the lexical verb and the functional domain are found what we call *quasi-functional* verbs. These include causative, motion, and perception verbs.

We show that lexical verbs are associated with a position for clitic pronouns and a head realized by an infinitive-final [e] in Italian, as in *leggere* ‘read’. At the opposite end of the spectrum, functional verbs lack the infinitival [e] and cannot host clitics. Pronouns that appear as (pro)clitics on a modal verb—for example, *lo* in *Lo voglio leggere* ‘(I) it.want (to) read’—occupy a designated position for clitics in what might be called the “high” region of IP.

There are thus two types of position for clitics in the clause. The first is a high position, licensed independently of the choice of verb and forming part of the essential skeleton of IP. The second is lower in the structure, since it is contributed by a lexical or by a quasi-functional verb. The phenomenon known as *clitic climbing* boils down to the appearance of the clitic pronoun in the clausal clitic position (as opposed to the position associated with the lexical or quasi-functional verb).

The empirical generalization explained by our approach is that clitics can appear either on a lexical/quasi-functional verb or on the highest restructuring predicate and nowhere else. Whenever it seems that a clitic is manifested on an intermediate verb in a series, this is an illusion: the “intermediate” verb is in reality the highest functional verb in CP; the verb appearing on its left is in a higher clause.

In our view, the optionality of restructuring is to be understood as follows: one and the same verb can be used either as a lexical or as a functional verb. In the former case, restructuring—namely, a monoclausal structure—results; in the latter, a biclausal structure with no transparency effects.

It can be shown, we believe, that lexical verbs are endowed with more structure (enabling projection of arguments, association with a clitic position, and realization of the infinitive-final [e]) than verbs merged in functional heads. Finally, we show that the difference between lexical and functional verbs is reflected in the clausal architecture.

## 1 The Problem

The following sentences are representative of a typical restructuring pattern (Rizzi 1976, 1982). The pronoun *ci* ‘there’ can appear as a clitic either on the infinitival lexical verb *andare* ‘go’, by which it is selected, as in (1a), or on the inflected matrix verb *volere* ‘want’, as in (1b). The latter sentence illustrates the phenomenon of clitic climbing.<sup>1</sup>

<sup>1</sup> Clitic climbing is subject to significant dialectal and idiolectal variation. As a general rule, most of the dialects spoken in northern Italy either lack clitic climbing altogether and only allow (1a), or—and this is true particularly for the regional varieties of Standard Italian spoken in the North—strongly prefer (1a) to (1b). The opposite state of affairs holds, roughly speaking, in southern Italy, where most varieties prefer or even require the clitic-climbing option illustrated in (1b) (for further references, see Benincà 1986:130, Cinque 2003:sec. 5.1). We put aside in this article the important question of how to interpret this variation. We also ignore the finite versus nonfinite contrast found in both Northern Italian dialects and the regional varieties of Standard Italian spoken in the North. When the matrix verb is finite, the

- (1) a. Vorrei andarci con Maria.  
 (I) would-want (to) go.there with Maria  
 b. *Ci* vorrei andare con Maria.

Clitic climbing is possible only with restructuring verbs and is therefore impossible in (2b), which contains the nonrestructuring verb *detestare* 'detest'.

- (2) a. Detesterei andarci con Maria.  
 (I) would-detest (to) go.there with Maria  
 b. \**Ci* detesterei andare con Maria.

Another well-known property of restructuring is the auxiliary switch illustrated in (3a). Although a modal verb such as *volere* 'want' is associated with auxiliary *avere* 'have' and not with *essere* 'be' (as shown in (4) with nominal complements and gapping; Rizzi 1976:23), it can inherit the auxiliary of an embedded unaccusative verb if it restructures with it. ((3a) with *essere* is somewhat degraded as compared to the same example with *avere*. (3b) with *essere* is uniformly excluded.)<sup>2</sup>

- (3) a. Avrei/?Sarei voluto andarci con Maria.  
 (I) would-have/(I) would-be wanted (to) go.there with Maria  
 'I would have liked to go there with Maria.'  
 b. Avrei/\*Sarei detestato andarci con Maria.  
 (I) would-have/(I) would-be detested (to) go.there with Maria  
 'I would have hated to go there with Maria.'
- (4) a. Ho/\*Sono voluto questo.  
 (I) have/(I) am wanted this  
 'I wanted this.'  
 b. Non ho/\*sono voluto!  
 (I) not have/am wanted  
 'I didn't want to!'

The auxiliary *essere*'s ability to show up in (3a) is due to the restructuring that has taken place between the volitional verb and the motion verb, the latter transmitting upward, in some sense,

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clitic pronoun remains on the lexical verb, as in (ia). However, clitic climbing is required when the matrix verb is nonfinite, as in (ib) (Paola Benincà, personal communication; see also Longobardi 1978:179–180).

- (i) a. Vorrei leggerlo.  
 (I) would-want (to) read.it  
 b. [Volerlo leggere]/\*[Voler leggerlo] sarebbe una buona idea.  
 [(to) want.it to-read]/[(to) want to-read.it] would-be a nice idea

<sup>2</sup> Person inflection is an additional factor that affects speakers' judgments of examples such as (3a) with *essere*. For Guglielmo Cinque, cited in Rizzi 1976:48n18, auxiliary switch without clitic climbing is possible only with 3rd person singular.

its own auxiliary *essere*. This is not possible in (3b), which contains a nonrestructuring verb. Only the auxiliary *avere* is possible here, since it is required by the matrix verb *detestare*.

(3a) shows that auxiliary switch and clitic climbing are partially independent in that the former can take place without the latter, although there is a preference for clitic climbing when *essere* is selected (viz. the marginal status of (3a) with *sarei*). Compare (5) with (3a) with *sarei*.

- (5) *Ci sarei*                      voluto andare con Maria.  
 (I) there.would-be wanted (to) go with Maria  
 'I would have wanted to go there with Maria.'

As Rizzi (1976:48n18, 1982:44n26), Longobardi (1978:200n5), and Cinque (2004) point out, restructuring is a necessary condition for clitic climbing, but not a sufficient one. In other words, restructuring, as manifested by auxiliary switch, merely gives rise to the formal configuration permitting clitic climbing. Whether clitic climbing applies or not depends on other factors, which we do not treat here (see footnote 1). If clitic climbing has applied, however, we know that restructuring has taken place. In this case, auxiliary switch is obligatory. Compare (5) with \**Ci avrei voluto andare con Maria* '(I) there.would-have wanted (to) go with Maria'.

Examples such as (3a) lead one to expect Italian clitic climbing to be optional. This is indeed the case in relatively simple configurations containing two verbs, such as (1a–b). A more complex case is illustrated in (6). When there is more than one restructuring verb in the clause, the clitic pronoun can appear on any of them; in (6), for example, it can appear on the infinitival lexical verb *andare* 'go' (6a), on the infinitival modal verb *potere* 'can' (6b), or on the inflected modal verb *volere* 'want' (6c).<sup>3</sup>

- (6) a. (?) *Vorrei*                      poter                      andarci                      con Maria.  
 (I) would-want (to) be-able (to) go.there with Maria  
 b. *Vorrei poterci* andare con Maria.  
 c. *Ci vorrei poter* andare con Maria.

The pattern illustrated in (6) suggests not only that clitic climbing is optional, but also that modulo footnote 3, there are as many options for clitic climbing as there are restructuring predicates.

<sup>3</sup> For some speakers and for some lexical choices, sentences like (6a), with more than one restructuring verb, are judged to be marginal or nearly ungrammatical. For example, Longobardi cites the following examples:

- (i) ?\**Non dovrebbe poter muoverli senza il bastone.*  
 (he) not should be-able (to) move.them without the stick  
 (Longobardi 1978:180)  
 (ii) ?*Vorrei poter farlo.*  
 (I) would-want (to) be-able (to) do.it  
 (Longobardi 1979:213)  
 (iii) ?*Dovresti poter andarci.*  
 (you) should be-able (to) go.there  
 (Longobardi 1979:213)

For one of us (Cardinaletti), (6a) is only slightly degraded compared with the perfect (1a), where the clitic pronoun is less embedded. We put aside this and similar idiolectal differences in judgment (cf. footnote 1).

Suppose, now, that an auxiliary is added to (6) and that auxiliary switch applies. If climbing were possible to every restructuring verb in a chain of restructuring predicates, we would expect all three options in (6) to yield acceptable results when embedded under an auxiliary. This is not the case, however. What we find is that the nonclimbing and the “full” climbing options are substantially better than the partial climbing one (with full climbing perhaps better than nonclimbing). This contrast is illustrated in (7) and (8), where partial climbing to *potere* yields an ungrammatical result.

- (7) a. ?Sarei voluto poter andarci con Maria.  
 (I) would-be wanted (to) be-able (to) go.there with Maria  
 ‘I would have wanted to be able to go there with Maria.’  
 b. \*Sarei voluto poterci andare con Maria.  
 c. Ci sarei voluto poter andare con Maria.
- (8) a. ?Sarei dovuto poter uscirne prima.  
 (I) would-be had (to) be-able (to) exit.from-there sooner  
 ‘I should have been able to exit from there sooner.’  
 b. \*Sarei dovuto poterne uscire prima.  
 c. Ne sarei dovuto poter uscire prima.

One cannot argue that *potere* does not allow clitic climbing, since it clearly does attract the clitic in (6b). The paradox displayed by the combination of (6b) and (7b)/(8b) illustrates the following descriptive generalization:

- (9) Clitic pronouns can appear attached either to the lexical verb or to the highest verb that has restructured and nowhere else.

In (6b), restructuring does not go as high as *volere*, but stops with *potere*. Given the occurrence of *essere* in (7b), as opposed to *avere*, we know that auxiliary switch has applied. Hence, in (7b), restructuring goes up to *volere*. This difference is schematized in (10). (Here and henceforth, the square brackets indicate the restructured material.)

- (10) a. Vorrei [poterci andare con Maria]. (= (6b))  
 (I) would-want (to) be-able.there (to) go with Maria  
 ‘I would want to be able to go there with Maria.’  
 b. \*[Sarei voluto poterci andare con Maria].  
 (I) would-be wanted (to) be-able.there (to) go with Maria

In (6c) and trivially in (7c), restructuring has occurred “all the way up,” whence the high position of the clitic. Sentence (7a) reaffirms the optionality of clitic climbing, as does (6a), which is potentially ambiguous between the partial restructuring structure underlying (6b) (viz. footnote 3) and the full restructuring configuration underlying (6c).

To better explain and develop the generalization in (9), we need to present our view of restructuring and clitic placement, putting them in the context of previous work on the subject.

## 2 Restructuring

The process by which the scope of operations associated with a lower predicate (cliticization, auxiliary selection) is extended to the domain of a higher predicate—namely, restructuring—has received substantial attention in the literature. In what follows, we present the skeleton of two influential accounts of restructuring and show that they do not satisfactorily explain the generalization in (9). We then present our own view, which draws on Cinque 2001, 2003, 2004.

### 2.1 Previous Approaches

One approach to restructuring holds that this process creates a complex predicate and a monoclausal structure out of a biclausal sentence (see Rizzi 1976, 1982). Under the second approach to restructuring, there is no clausal conflation; rather, properties of the inflectional system render the CP boundary transparent to clitics, so that these can literally climb out of one clause into a superordinate one (see in particular Kayne 1989a, 1991, Roberts 1997, Rouveret 1997).

Neither of these approaches to restructuring provides an immediate explanation for the central observation made in the previous section, concerning the unacceptability of intermediate clitic positions or of *partial* climbing. In Rizzi's account, restructuring is a cyclic operation, so that the clitic pronoun appears on the second or intermediate verb when restructuring has taken place on the second cycle (Rizzi 1982:42n11). If restructuring then takes place on the third cycle, the clitic is placed on the highest verb. However, since clitic climbing is optional, third-cycle application of restructuring cannot force the clitic to climb from the intermediate position to the high position. Thus, the cyclic nature of restructuring combined with the optional character of clitic climbing incorrectly predicts that (7b) should be grammatical.

Kayne's and Roberts's analyses of clitic climbing in terms of long-distance movement are also incapable of accounting for (9). This is so because—as in Rizzi's approach—intermediate climbing is a derivational stage in long-distance climbing. In other words, (7b) is an intermediate step in the derivation of (7c).

Our account of clitic climbing, developed below, gets around the problem faced by previous ones by questioning the view that restructuring is a cyclic syntactic rule.

### 2.2 Restructuring: A Modified View

Assuming a rather uncontroversial clause structure like (11), where a VP is associated with functional heads projecting FPs,

$$(11) [_{FP_3} [_{FP_2} [_{FP_1} [_{VP} ]]]]$$

verbs can be inserted either in V or in one of the Fs. The verbs inserted in V are lexical, and those inserted in F are functional. To characterize a verb as a restructuring verb is to suppose that it is inserted in F. From this perspective, which we share with Cinque (2001, 2003, 2004), there is no restructuring “rule,” *pace* Rizzi (1976, 1982).

The often observed optionality of restructuring is expressed, in Rizzi's system, by a property of the restructuring rule itself. On our account, it is handled in terms of a choice of the position

in which a verb is merged. When a verb is inserted in F, a restructuring context results. The same verb can be inserted in V, in which case it takes a full clausal or CP complement and gives rise to a nonrestructuring configuration.

Assuming a monoclausal structure like (11), the generalization in (9) can be captured as follows. A single clause contains two clitic positions. In addition to the *clausal* clitic position situated in the high portion of the IP (adjoined to I, as in Kayne 1989b; or heading a unique clitic projection, as in Kayne 1994 and Sportiche 1996, among others), a *lexical* clitic position must be assumed. This clitic position is associated with the lexical verb as part of the lexical or VP domain. Being part of the lexical domain means being either a feature on V or an independent maximal projection above V but related to it in much the same way as vP is related to VP. Incorporating the latter option, (12) schematizes the two clitic positions.<sup>4</sup>

$$(12) \underbrace{[FP \dots [FP \text{ clitic } [FP \dots [FP \dots [FP \text{ clitic } [VP [VP ]]]]]]}_{\text{functional domain}} \dots \underbrace{[FP \dots [FP \text{ clitic } [VP [VP ]]]]}_{\text{lexical domain}}$$

The clausal clitic position differs from the lexical clitic position in that it interacts with functional elements, such as negation (see Zanuttini 1997, Poletto 2000).<sup>5</sup> Given (12), clitic climbing means that the clitic pronoun appears in the clausal clitic position. When the clitic pronoun appears in the lexical clitic position, the result is a restructuring context without clitic climbing. Partial climbing, as in (7b), is not an available option because there simply is no third clitic position in the clause.<sup>6</sup>

<sup>4</sup> The proposal in (12) is a partial reformulation of Kayne's (1989b:240) claim that "Romance clitics have two options: attachment to V or attachment to I" and implies that clitic pronouns always attach to functional heads.

<sup>5</sup> Wackernagel clitics have the same property. We do not try to establish here whether the Wackernagel position and the clausal clitic position are the same (see Shlonsky 2004 for a recent discussion).

<sup>6</sup> Clitic reduplication, of the sort attested in Piedmontese dialects, supports our claim that a clause can contain both a clausal and a lexical clitic position. Example (i) shows reduplication of the clitic cluster *m la*.

- (i) A' *m la* dev *levem la*.  
I to-me.it must take-away.to-me.it  
'I have to take it away.'

Examples such as (ii), where the clitic pronoun appears three times—on the lexical infinitival verb, on the modal past participle, and on the finite auxiliary verb—are rare but attested (Mair Parry, personal communication) and constitute a *prima facie* problem for our analysis.

- (ii) I *m'aveisi pusciume gitème*.  
you me.had could.me help.me  
'You could have helped me.'

However, if triple occurrence of the clitic is considered along with (iii), in which the lower clitic appears on the modal verb, then arguably this and similar dialects have the option of generalizing the lexical clitic position to all verbs (functional and lexical).

- (iii) I *l'avriu vursyla duverte*.  
we subject clitic.have wanted.it (to) open  
'We would have wanted to open it.'

The generalization of the lexical clitic position is, from a formal point of view, practically identical to a cyclic clitic-climbing (and copying) analysis of the type Rizzi proposes. See Parry 1995, 2001 for further discussion of these data.

The approach developed here entails that there is no clitic climbing in the sense of stepwise head-to-head movement of the clitic. We can, however, remain neutral about how clitic climbing should be derived: whether via actual movement of the clitic pronoun (A-movement of a maximal projection followed by local head-to-head movement, as proposed in Belletti 1999 or Sportiche 1996, for example) or via merging of the clitic pronoun in either the lexical or the clausal clitic position.

Our analysis eliminates the need for a restructuring rule and a clitic-climbing rule. It also permits us to construe auxiliary switch in a way that obviates the need for an *avere* → *essere* rule (of the sort proposed in Rizzi 1976, 1982). Notice that the *avere* → *essere* rule is at odds with the hypothesis that *essere* is the basic auxiliary and that *avere* is derived from *essere* (perhaps by incorporation of a preposition, as suggested in Kayne 1993). Rizzi's view of auxiliary switch requires a rule shifting *avere* back to *essere*. However, if there is no switch in auxiliaries, as we suggest, this problem simply does not arise. The clausal auxiliary is the auxiliary associated with the lexical verb, the choice between *avere* and *essere* being determined by properties of the lexical verb itself such as its argument structure and/or by properties of its related functional field (agreement and tense). The important point is that the choice of the auxiliary is independent of the presence of modal, volitional, or other functional verbs.

With these assumptions in mind, consider (6b) once again and take the square brackets in its associated structure (10a) to indicate that the embedded constituent is a CP selected by the main verb *volere*. Note that the bracketed CP complement in (10a) consists of a restructured clause. The possibility of auxiliary switch in (13) is evidence that *potere* is a functional verb combining with the lexical verb *andare*.<sup>7</sup>

- (13) Vorrei            [esserci    potuto    andare con Maria].  
 (I) would-want (to) be.there been-able (to) go with Maria  
 'I would want to have been able to go there with Maria.'

Another test for the presence of a full CP complement to a verb like *volere*, which we adapt from Rizzi 1976:12–13 and Kayne 1989b:243, 253, concerns the licit occurrence of clausal negation.

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A vital question in this context is whether the Romance varieties that have "clitic splitting" can associate a different clitic with a different verb, manifesting something like the Italian worded (ivb).

- (iv) a. *Gli ce ne*            sono potuti    andare solo tre.  
       to-him.there.of-them are    been-able (to) go only three  
       'Only three of them could go there for him.'  
       b. *Gli*    erano potuti-*ci*    andar-*ne*    solo tre.  
       to-him are    been-able.there (to) go.of-them only three

<sup>7</sup> The CP analysis and consequent CP-internal auxiliary change could be appropriate for (6a) as well, as shown in (i).

- (i) a. Vorrei            [poter    andarci    con Maria].  
 (I) would-want (to) be-able (to) go.there with Maria  
 b. Vorrei            [esser potuto    andarci    con Maria].  
 (I) would-want (to) be been-able (to) go.there with Maria  
 'I would like to have been able to go there with Maria.'



*Non* can appear in an embedded CP in (14), (15a–b), and (16a), but not in the restructuring contexts in (15c) and (16b).

- (14) Vorrei [non doverci andare con Maria].  
 (I) would-want not (to) have.there (to) go with Maria  
 ‘I would want not to have to go there with Maria.’
- (15) a. Vorrei [non dover mai farlo].  
 (I) would-want not (to) have ever (to) do.it  
 ‘I would want not to have to ever do it.’  
 b. Vorrei [non doverlo mai fare].  
 (I) would-want not (to) have.it ever (to) do  
 c. \*[Lo vorrei non dover mai fare].  
 (I) it.would-want not (to) have ever (to) do
- (16) a. Avrei voluto [non andare da nessuna parte].  
 (I) would-have wanted not (to) go to any where  
 ‘I would have wanted not to go anywhere.’  
 b. \*[Sarei voluta non andare da nessuna parte].  
 (I) would-be wanted not (to) go to any where

Kayne (1989b) attributes to negation a blocking effect on clitic climbing, which is why *lo* cannot climb in (15c). The blocking-effect analysis, however, does not explain why auxiliary switch is blocked in (16b). We reinterpret the incompatibility of clitic climbing and auxiliary switch with negation in structural terms (see Rizzi 1976:13). We propose that the presence of clausal negation implies the projection of a full CP, which is incompatible with the phenomenology of restructuring (but see Cinque 2004 for a different view and a different appraisal of the data).

The presence of the negative adverb *mai* ‘ever’ in (15) and the negative quantifier *nessuna* ‘any’ in (16) guarantees that *non* ‘not’ is the head of the (CP-dependent) clausal negation. This is so because negative adverbs and quantifiers must be licensed by association with a clausal NegP (Haegeman and Zanuttini 1991).

In the presence of negation, clitic climbing and auxiliary switch are acceptable without the negative quantifier, as shown in (17a–b). In these examples, however, *non* is an instance of lexical or lower negation with scope only over the lexical verb and is unable to license a negative quantifier.

- (17) a. [*Ci* vorrei non andare].  
 (I) there.would-want not (to) go  
 ‘I would want not to go there.’  
 b. [Sarei voluta non andare a Roma].  
 (I) would-be wanted not (to) go to Rome  
 ‘I would have wanted not to go to Rome.’

The distribution of negation in (18) shows that *potere* in (6a) can also take a CP complement.

- (18) Vorrei poter [non andarci con nessuno].  
 (I) would-want (to) be-able not (to) go.there with anybody  
 'I would want to be able to not go there with anybody.'

Clitic climbing to the domain of *potere* or *volere* is blocked in the sentences in (19), when the negation appearing on *andare* signals the presence of a CP. This is the expected result since clitic "climbing" takes place within a single CP.

- (19) a. \*Vorrei poterci [non andare con nessuno].  
 (I) would-want (to) be-able.there not (to) go with anybody  
 b. \*Ci vorrei poter [non andare con nessuno].  
 (I) there.would-want (to) be-able not (to) go with anybody

Note that the sentences in (20) are acceptable in the absence of a negative quantifier, which we interpret to imply the absence of clausal negation (see the discussion surrounding (17)).

- (20) a. Vorrei [poterci non andare].  
 (I) would-want (to) be-able.there not (to) go  
 'I would like to be able not to go there.'  
 b. [Ci vorrei poter non andare].  
 (I) there.would-want (to) be-able not (to) go  
 'I would like to be able not to go there.'

Lexical or lower negation on the modal verb *potere* yields a much less acceptable output. (20b) contrasts with (21).

- (21) \*[Ci vorrei non poter andare].

The question arises why *non* in (21) cannot be used as a lexical/lower negation and hence not interfere with clitic climbing. It appears that lexical/lower negation is systematically unavailable to modal verbs such as *potere*, so that *non* in (21) can only be analyzed as the high negative head despite the absence of a negative quantifier.<sup>8</sup>

In conclusion, our approach to restructuring eliminates the need for a restructuring rule, a clitic-climbing rule, and an *avere* → *essere* rule.<sup>9</sup>

### 3 The Infinitival [e] and the Two Clitic Positions

In this section, we study the distribution of the word-final [e] of Italian infinitives, arguing that its presence signals the availability of a lexical clitic position with which it is in complementary distribution.<sup>10</sup>

<sup>8</sup> The modal verb *dovere* allows the lower/lexical negation, as shown in (35c) below.

<sup>9</sup> We have proposed that the apparent optionality of restructuring phenomenology is due to a choice between inserting verbs in V or in F. Our proposal differs from that of Cinque (2004), who argues that restructuring verbs are invariably merged into functional heads and can never head a lexical VP.

<sup>10</sup> In addition to Standard Italian, the infinitival marker [e] is displayed in some Northern Italian dialects such as Paduan (Paola Benincà, personal communication). Our work is confined to Standard Italian but our analysis of [e] has obvious consequences for Paduan.

The first observation to make is that when a pronoun appears as an enclitic to an infinitive, [e] is obligatorily absent. This extremely robust fact is illustrated by the contrast in (22).

- (22) a. *Lo vorrei vedere.*  
 (I) it.would-want (to) see  
 ‘I would want to see it.’  
 b. *Vorrei veder(\*e)lo.*

The sentences in (23) illustrate another context where [e] is absent—namely, from modal and volitional predicates in their restructuring guise.<sup>11</sup> In (23a–f), restructuring is manifested by clitic climbing; in (23g), auxiliary switch is found.

- (23) a. *Lo vorrei poter(\*e) leggere.*  
 (I) it.would-want (to) be-able (to) read  
 ‘I would like to be able to read it.’  
 b. *Lo vorrei poter(\*e) far leggere a Maria.*  
 (I) it.would-want (to) be-able (to) make read to Maria  
 ‘I would like to be able to make Maria read it.’  
 c. *Ci vorrei poter(\*e) andare con Maria.*  
 (I) there.would-want (to) be-able (to) go with Maria  
 ‘I would like to be able to go there with Maria.’  
 d. *Li potrei saper(\*e) guidare.*  
 (I) them.could (to) be-able (to) drive  
 ‘I could be able to drive them.’  
 e. *Lo devo poter(\*e) fare in giornata.*  
 (I) it.must (to) be-able (to) do today  
 ‘I must be able to do it today.’  
 (adapted from Longobardi 1978:180)  
 f. *Ne potrei saper(\*e) guidare un paio di modelli fra qualche mese.*  
 (I) of-them.could (to) be-able (to) drive a couple of models in some month  
 ‘I could be able to drive a couple of models some months from now.’  
 (adapted from Longobardi 1978:180)

<sup>11</sup> Longobardi (1978:199n1) claims that with restructuring verbs, the form without [e] is stylistically preferred to the form with [e]. He provides the following examples:

- (i) a. *Non credo di voler/volere partire.*  
 (I) not think (to) want (to) leave  
 ‘I do not think that I want to leave.’  
 b. *È un argomento che vorrei far/fare studiare a Mario.*  
 [it] is a topic that (I) would-want (to) make study to Mario  
 ‘This is a topic that I would like to make Mario study.’

However, it is interesting that not a single infinitival modal verb in Longobardi’s examples appears with [e] (viz. pp. 178, 180) and that perception verbs appear both with [e] (p. 185) and without it (p. 182). The same is true in Rizzi 1982 and Burzio 1986. See section 4.3 below, where the difference between modal and perception verbs is given a structural interpretation.

- g. Sarei voluto poter(\*e) partire con Maria.  
 (I) would-be wanted (to) be-able (to) leave with Maria  
 ‘I would have liked to be able to leave with Maria.’

In conclusion, there are two contexts in which the infinitive-final [e] fails to appear:

1. when there is an enclitic pronoun on the verb, and
2. when the verb is functional.

Some further observations are prompted by (22) and (23):

1. The two contexts where [e] cannot occur seem to be totally unrelated.
2. No phonological constraint can account for the ungrammaticality of *vederelo* in (22b) and for the impossibility of [e] on the modal verbs in (23). After all, *vederelo* is a well-formed Italian word, and modal verbs can have [e] (e.g., in their citation form).
3. The obligatory absence of [e] on functional verbs such as modals cannot be attributed to Longobardi’s (1978) Double Inf Filter, which excludes sequences of two infinitivals such as *desiderare studiare* ‘(to) desire (to) study’ in (24a). Such sequences are excluded independently of the presence of [e], as the ungrammaticality of (24b) confirms (see Longobardi 1978:199n1), and thus contrast with the cases in (22) and (23).

- (24) a. ?\*Gianni dice di desiderare studiare.  
           Gianni says (to) desire (to) study  
 b. ?\*Gianni dice di desiderar studiare.

In the following sections, we show that the distribution of [e] cannot be accounted for phonologically and we provide a unified syntactic account for (22) and (23).

### 3.1 Against a Phonological Account

The absence of [e] with enclitic pronouns has been accounted for by the phonological rule of Troncamento (Truncation). This rule optionally deletes infinitival [e] in front of consonant-initial words, as in (25) (see Vogel et al. 1983, Nespor 1990, Peperkamp 1997).

- (25) a. Dice di partir(e) presto.  
           (he) says (to) leave early  
 b. Potrei partir(e) presto.  
           (I) could leave early

The absence of [e] with enclitic pronouns, however, is obligatory and never optional, as shown in (22). To account for the difference between (22) and (25), Nespor (1990) suggests that Troncamento behaves differently in the two cases because they involve different prosodic domains. In (22), the rule applies inside a clitic group; in (25), it applies inside an intonational phrase. Like other prosodic rules, Troncamento applies obligatorily in the smaller domain and optionally in the bigger domain. We consider this analysis unsatisfactory since it seems to merely restate the

facts, and we conclude that the absence of [e] with enclitic pronouns is not accounted for by the rule of Troncamento.

As for the absence of [e] on functional infinitives, to the best of our knowledge it has not been treated in the phonological literature. (This is perhaps not an accident since the distinction between lexical and functional verbs is not a phonological one.)<sup>12</sup> Like the [e]-drop in the presence of enclitic pronouns, the absence of [e] on functional verbs is not covered by the rule of Troncamento. This is so for two reasons. First, while Troncamento applies optionally, [e] is ungrammatical on restructuring modals. Compare (25) with (23). Second, Troncamento applies within the domain of an intonational phrase and cannot apply across a parenthetical, which constitutes an intonational phrase break, as shown in (26a) (from Nespor 1990:386). The sentence in (26b) shows that a modal verb lacks the [e] even before a parenthetical so that intonational or prosodic bracketing seems to be irrelevant to the absence of [e] on modal verbs.

- (26) a. \*Vorrebbe raccontar—come *ti* ho detto—solo stupidaggini.  
 (he) would-want (to) tell as (I) to-you.have told only nonsense  
 ‘He would like to tell—as I told you—only nonsense.’
- b. . . senza dover —nello stesso tempo— accusare anche gli altri.  
 . . . without having (to) —at-the same time— accuse also the others  
 ‘. . . without having to—at the same time—accuse the others, too.’

Clearly, then, Troncamento cannot account for either (23) or (26b). There is another context where the lack of [e] cannot be accounted for phonologically, namely, when functional verbs are raised in the Aux-to-C construction (the example in (27) is adapted from Rizzi 1982:112n10).<sup>13</sup>

- (27) Ritengo [dover(\*e) tuo fratello tornare a casa].  
 (I) believe (to) have your brother (to) come-back to home  
 ‘I believe that your brother has to come back home.’

### 3.2 The Syntactic Analysis of the Absence of [e]

We contend that the two contexts in which [e] fails to appear are one and the same. In a sense that we make precise below, the infinitive-final [e] occupies the lexical clitic position we have

<sup>12</sup> Monachesi (1995:54) treats the case of a modal verb plus a lexical verb together with the cases of optional Troncamento, as shown in her schema reported in (i).

(i) potere + leggere = poter leggere/potere leggere  
 ‘can’ + ‘read’

Since Monachesi does not provide any example sentences, we do not know whether she treats *potere* in (i) as a functional verb or as a lexical modal verb.

<sup>13</sup> An anonymous reviewer points out that the possibility of sequences such as *poter studiare* ‘be able (to) study’ is another argument against a phonological rule approach to modals since initial [s]C may block truncation (as in \**nessun/nessuno studente* ‘no student’ vs. *nessun ragazzo* ‘no boy’). The rule of Troncamento that applies to lexical verbs, however, can apply also in front of [s]C, as shown by *scrivere storie* ‘(to) write stories’ and *han strappato* ‘(they) have torn’ (Nespor 1990:395). The phonotactic restriction can therefore not be used as an argument against a phonological treatment of (22) and (23).

posited in our discussion of (9). Thus, [e] is an independent morpheme and not part of the nonfinite inflection, which is [r].

The syntactic generalization we wish to explain is that [e]'s distribution is a subset of the distribution of clitic pronouns. Just like enclitic pronouns, [e] is possible on all lexical verbs; see *vedere* in (22). Conversely, [e], just like enclitic pronouns, is impossible on modal/volitional verbs, when these are merged as intermediate functional verbs; see (7b) and (23). In these two contexts, [e] and enclitics are either in complementary distribution or excluded, a fact we can express by saying that they compete for the same position, when such a position is available.

There is one context, however, in which enclitics are found but from which [e] is barred: namely, when the modal verb is the highest in a series of functional verbs. In this configuration, the verb can host a clitic pronoun, but it cannot display the infinitival [e]. In (28a), for example, a clitic is possible on *dovere* because it is the highest functional verb in the CP complement to *volere*. (28b) shows that [e] is not possible in the same context (recall that [e] cannot cooccur with the clitic).

- (28) a. Vorrei [non doverlo mai fare].  
 (I) would-want (to) not have.it (to) ever do  
 'I would like to not have to ever do it.'  
 b. Vorrei [non dover(\*e) mai farlo].

Put succinctly, (28) shows that clitics and [e] are not in complementary distribution when the clausal clitic position is utilized. In this position, [e] is simply impossible. The infinitival [e] is a phonetic realization of the lexical clitic position and not of the independently available clausal clitic position.

### 3.3 [e] and the Phonology of Italian Clitics

Consider the hypothesis that the phonemic form of the infinitive-final vowel is /i/ and that [e] is derived by a phonological rule lowering /i/ to [e] when preceded by a coronal sonorant. In infinitives, the nonfinite morpheme [-r] is responsible for the lowering of /i/ to [e].

A similar lowering process is attested in the pronominal system. The final vowels of the clitics *mi* 'me', *ti* 'you-sg', *si* 'self', *ci* 'us; there', *vi* 'you-pl; there', *gli* 'to-him', *le* 'to-her', and *ne* 'of-it/them, from-there' are realized as [e] when preceded by the coronal sonorants /l/ and /n/ (e.g., *le* and *ne*) and as [i] otherwise (e.g., *mi*, *ti*, etc.). Assume then that /i/ is the phonemic vowel and [e] an allophonic realization of /i/ when preceded by a coronal sonorant.<sup>14</sup>

It is tempting to consider the [e] of infinitives and the final vowels of the clitics *mi*, *ti*, and so forth, as the same morpheme. This is tantamount to saying that this vowel is not part of the clitic form itself, just as it is not part of the infinitival morpheme. From this perspective, it is no

<sup>14</sup> Many thanks to Lori Repetti and Tobias Scheer for discussion of the phonological aspects of clitic pronouns and infinitivals.

The /i/-to-[e] lowering following a coronal sonorant applies also in the case of the fusion of prepositions and articles (the so-called *preposizioni articolate*), as in *nel* 'in the' derived from /n/ + /i/ + /l/ (see footnote 17).

accident that the clitics subject to the [i] ~ [e] alternation are precisely those whose feature content is exhaustively expressed by the consonant. Let us call this series (*mi, ti, si, ci, vi, gli, le, and ne*) the *consonantal* series. This series is to be distinguished from accusative *lo* ‘him, it’, *la* ‘her, it’, *li* ‘them-masc’, and *le* ‘them-fem’, whose final vowels bear morphosyntactic features such as gender and number.

The idea, then, is to treat a clitic such as *ne* ‘of-it/them’ as composed of two morphemes, /n/ and /i/, and an infinitival verb like *parlare* ‘speak’ as composed of /parl + a + r/ + /i/. In both cases, /i/ realizes the same functional head associated with the lexical verb.

In the case of *parlare*, the infinitival stem *parlar* adjoins to the functional head /i/, which is lowered to [e] in the phonology. In the presence of clitic pronouns, the clitic first adjoins to /i/, following which the infinitival verb is adjoined either to the clitic itself or to a higher head as in Kayne 1994, giving rise for example to *parlarne* (whose phonemic form is thus /parl + a + r/ + /n/ + /i/).

It transpires from the above discussion that the complementary distribution of enclitics and [e] is only apparent: the vowel is always present and follows either the verb or the enclitic pronoun (in the strictest sense, low enclisis is an instance of mesoclisism—that is, of word-internal, as opposed to word-marginal, cliticization).<sup>15</sup>

When the clitic is not a member of the consonantal series and hence comes equipped with its own vowel, adjunction to /i/ produces a vowel cluster that is an impossible mora in unstressed syllables (*\*vederloi* ‘to see.him’). In this context, /i/ is either unrealized or dropped (see Cardinaletti and Repetti’s (2002) discussion of a similar restriction in some Northern Italian dialects).

While /i/ is the realization of the lexical head hosting clitics, the clausal clitic–hosting head has no phonological content. Thus, functional infinitivals appearing in the high domain of the clause systematically lack [e], as we have shown. The high head can, however, host clitics, as in (28a).

In restructuring contexts such as (28a) and (29), clitic pronouns make use of the clausal clitic head, freeing the lower, /i/-filled head for adjunction by the lower infinitival. In both (29a)

<sup>15</sup> The analysis presented here straightforwardly explains the contrast between (i) and (ii), which remains unexplained in other analyses. The optional deletion of verb-final vowels due to the application of Troncamento (see section 3.1) is also manifested on inflected verbs, as shown in (ia) and (ib) (see Peperkamp 1997:201–202 and the references cited there).

- (i) a. Partiam(o) subito.  
(we) leave/let-us leave soon  
b. Son(o) partiti.  
(they) are left

However, the final vowel of inflected verbs is never dropped with enclitic pronouns, as shown in the imperative form in (ii).

- (ii) Mangiam\*(o)li.  
let-us-eat.them

In this respect, the status of the pre-enclitic vowel in (ii) is different from that of the infinitive-final [e]. The former is part of the agreement morpheme, while the latter is the realization of a different functional head.

and (29b), the clitic is adjoined to the clausal clitic–hosting head and the lexical infinitive to the lexical one, realized by [e].<sup>16</sup>

- (29) a. Credo [di doverlo fare].  
 (I) think (to) have.it (to) do  
 ‘I think that I have to do it.’  
 b. *Lo devo fare.*  
 (I) it.have (to) do  
 ‘I have to do it.’

Notice that the consonantal clitics manifest a vowel even when they occur in the clausal clitic position.

- (30) a. Dice di [volermi vedere].  
 (he) says (to) want.me (to) see  
 ‘He says that he wants to see me.’  
 b. *Mi vuole vedere.*  
 (he) me.wants (to) see  
 ‘He wants to see me.’

At first sight, this is unexpected, since we have claimed that the clausal head hosting the clitic is not realized by the vowel [e]. Suppose that the appearance of consonantal clitic pronouns in the clausal clitic position triggers epenthesis to facilitate syllabification.<sup>17</sup> In other words, the [i] of *mi* in (30a) as well as in (30b) is an epenthetic vowel (also see Kayne 2000:135). Epenthesis is not needed, however, when a consonantal clitic pronoun such as [m] ‘1st sg’ is adjoined to the lexical clitic position in, say, *vuole vedermi* because here the vowel is provided by the lexical clitic position itself.<sup>18</sup>

Epenthetic vowels are also required in clitic clusters, as shown in (31). In (31a), the vowel on the first clitic *se* is epenthetic, while the vowel on *ne* is provided by the lexical clitic position. In (31b), both vowels are epenthetic.

- (31) a. È voluto andarsene  
 (he) is wanted (to) go.himself.from-there  
 ‘He wanted to leave.’  
 b. *Se ne è voluto andare.*

<sup>16</sup> As (29) shows, the use of the clausal clitic position is independent of the mode of attachment of the clitic, that is, enclisis or proclisis.

<sup>17</sup> Other documented cases of epenthesis in Italian involve the definite masculine singular article // > [il] ‘the’ and words like *psicologo* > *p[il]sicologo* ‘psychologist’ (in popular spoken varieties) (see Repetti 2003, Vanelli 1992).

<sup>18</sup> In absolute constructions such as *vedendomi* ‘seeing.me’ and *vistomi* ‘seen.me’, the final vowel of the clitic is not contributed by the lexical clitic head, but is an epenthetic vowel attached to the consonantal clitic. This is a consequence of the fact that gerundive and participial verbs make use of the clausal clitic position, as argued by Belletti (1990).



The phonemic form of the epenthetic vowel is /i/: *Vuole mettermici* ‘(he) wants (to) put.me.there’. In (31), /i/ is lowered to [e] because it is followed by a coronal sonorant. Lowering also takes place in (32) (see Peperkamp 1997:194n27 and the references cited there).<sup>19</sup>

- (32) a. *Me lo vuole dare.*  
 (he) to-me.it.wants (to) give  
 ‘He wants to give it to me.’  
 b. *Vuole darmelo.*

One might wonder at this point why the lexical clitic position has the same phonological form as the epenthetic vowel—namely, /i/, lowered to [e] in the appropriate phonological context. Cardinaletti and Repetti (2002) propose that functional heads can have a default realization. Nothing prevents the default realization of a functional head from being phonologically identical to the epenthetic vowel used in the language. In the Northern Italian dialect Cardinaletti and Repetti have studied (spoken in the province of Piacenza), a functional head of the Subject field and a functional head of the C(omp) field can be realized as [ə], which is the epenthetic vowel in that dialect. It stands to reason that the infinitive-final /i/ in Italian is the default realization of the lexical clitic position. This is why it is phonologically nondistinct from the epenthetic vowel.

### 3.4 [e] and the Dual Analysis of Modal and Volitional Verbs

On the basis of clitic placement, auxiliary switch, and the distribution of negation, we concluded section 2.2 by saying that modal and volitional verbs can be merged either in V or in a higher functional head. The distribution of [e] supports this dual analysis. [e] can appear on modal/volitional verbs when they are used as lexical verbs. (33) shows the case in which a volitional verb takes a DP complement; (34) shows the case in which a volitional verb takes a CP complement.

- (33) [Volere questo] è irrazionale.  
 (to) want this is irrational
- (34) a. *Vorrei potere [non farlo leggere a nessuno].*  
 (I) would-want (to) be-able (to) not make.it read to anybody  
 ‘I would like to be able to not make anybody read it.’  
 b. *Vorrei potere [non leggere niente in inglese].*  
 (I) would-want (to) be-able (to) not read anything in English  
 ‘I would like to be able to not read anything in English.’

<sup>19</sup> In order to explain the two vowel-lowering cases, the one applying with singleton clitics and the one applying in clitic clusters, by means of a single phonological rule, /i/ can be said to lower to [e] when it is *adjacent* to a coronal sonorant (see Cardinaletti 2000 for further discussion).

- c. [Volere [non dover mai partire]] sarebbe strano.  
 (to) want (to) not have ever (to) leave would-be strange  
 ‘To desire not to have to ever leave would be strange.’

No [e] is present on the modal verb when it is merged as a functional verb.<sup>20</sup>

- (35) a. Vorrei [poter farlo leggere a Maria].  
 (I) would-want (to) be-able (to) make.it read to Maria  
 ‘I would like to be able to make Maria read it.’  
 b. Vorrei [poter leggere questo in inglese].  
 (I) would-want (to) be-able (to) read this in English  
 ‘I would like to be able to read this in English.’  
 c. [Voler non dover partire subito] sarebbe strano.  
 (to) want (to) not have (to) leave soon would-be strange  
 ‘To want not to have to leave soon would be strange.’

#### 4 Restructuring with Other Functional Verbs

Our discussion in the preceding sections was based on the behavior of modal and volitional restructuring verbs. Other restructuring verbs, such as motion verbs (*andare* ‘go’, *venire* ‘come’, *passare* ‘pass’), causative verbs (*fare* ‘make’), and perception verbs (*vedere* ‘see’, *sentire* ‘hear’), behave somewhat differently. In particular, they do not display auxiliary switch even when they permit clitic climbing. The relevant properties of these *quasi-functional* verbs are discussed in the following sections.<sup>21</sup>

##### 4.1 Auxiliary Switch

Auxiliary switch is the hallmark of modals used as functional verbs and a necessary condition for clitic climbing. Whereas in a nonrestructuring context such as (36a), the auxiliary associated with the main modal verb *volere* ‘want’ is *avere, essere*—the auxiliary of the lexical unaccusative verb *andare* ‘go’—replaces *avere* in the restructured (36b).

- (36) a. Avrei voluto [andare a Roma].  
 (I) would-have wanted (to) go to Rome

<sup>20</sup> In the absence of negation, speakers generally disprefer the [e] on the modal infinitive. Compare the following examples with (34):

- (i) a. ?Vorrei potere [farlo leggere a Maria].  
 b. ?Vorrei potere [leggere questo in inglese].  
 c. ?[Volere [non dover partire subito]] sarebbe strano.

This suggests that when the conditions for restructuring are met, it is the preferred option; see (35).

<sup>21</sup> The question arises of how to classify “lexical restructuring” verbs such as ‘try’ or ‘forget’ in German, discussed in Wurmbrand, in press. Clearly, German has options unavailable in Italian. In any case, “lexical restructuring” verbs should be kept apart from what we call “quasi-functional” verbs.

- b. [Sarei voluto andare a Roma].  
(I) would-be wanted (to) go to Rome

In other words, modals impose their associated auxiliary when they are used as lexical verbs taking a propositional (CP) complement, but they are ‘transparent’ to, or project upward, the auxiliary of the lexical verb when they are merged in functional heads.

The transparency of modals to auxiliary selection does not extend to other functional verbs. Motion verbs, for example, are not transparent. Even though the lexical verb embedded under the motion verb is a transitive verb requiring *avere*, *essere* is necessary in the sentences in (37), with and without clitic climbing (see Rizzi 1982:19, Burzio 1986:333). When clitic climbing has taken place, as in (37a), *andare* ‘go’ is used as a functional verb and imposes its own auxiliary, namely, *essere*. When the clitic appears attached to the lexical verb *trovare* ‘visit’, the result is either a restructured clause with no clitic climbing, as in (37b), or a nonrestructured context, as in (37c). In both cases, *essere* is the only possibility.

- (37) a. [*Lo* \*ho/sono andato a trovare].  
(I) him.have/am gone (to) visit  
‘I went to visit him.’  
b. [\*Ho/Sono andato a trovarlo].  
c. \*Ho/Sono andato [a trovarlo].

The presence of a modal verb in the clause does not alter the choice of *essere*, since the modal verb is transparent to the auxiliary selected by the functional motion verb.

- (38) a. [Sarebbe voluto andare a trovarlo].  
(he) would-be wanted (to) go (to) visit.him  
‘He would have wanted to go and visit him.’  
b. [Sarebbe voluto andarlo a trovare].  
c. [*Lo* sarebbe voluto andare a trovare].

As (39) shows, in all the cases in (38), clausal negation is impossible, a fact that confirms the monoclausal status of the examples.

- (39) a. \*[Sarebbe voluto non andare mai a trovarlo].  
(he) would-be wanted (to) not go ever (to) visit.him  
‘He would have wanted to never go and visit him.’  
b. \*[Sarebbe voluto non andarlo mai a trovare].  
c. \*[*Lo* sarebbe voluto non andare mai a trovare].

Sentences (38a) and (38b) can also manifest the auxiliary *avere*. We take this to mean that the modal *volere* embeds a CP. In this case, clausal negation also becomes available, as in (40).

- (40) a. Avrebbe voluto [non andare mai a trovarlo].  
(he) would-have wanted (to) not go ever (to) visit.him  
‘He would have wanted to never go and visit him.’  
b. Avrebbe voluto [non andarlo mai a trovare].

However, *avere* is not possible when full clitic climbing has taken place, as in (38c), repeated here as (41b).

- (41) a. \*[*Lo avrebbe voluto andare a trovare*].  
 b. [*Lo sarebbe voluto andare a trovare*].

This is also true in more complex sentences such as those in (42).

- (42) a. \*[*Lo avrebbe voluto poter andare a trovare*].  
 (he) him.would-have wanted (to) be-able (to) go (to) visit  
 ‘He would have wanted to be able to go and visit him.’  
 b. [*Lo sarebbe voluto poter andare a trovare*].

Our judgment of (38c) differs from Rizzi’s (1982:22) judgment of similar sentences, where he rejects *essere* and only allows *avere*.

- (43) a. \**Maria li sarebbe voluti andare a prendere lei stessa*.  
 Maria them.would-be wanted (to) go (to) fetch herself  
 (Rizzi 1982:22)  
 b. *Maria li avrebbe voluti andare a prendere lei stessa*.  
 ‘Maria would have wanted to go and fetch them herself.’  
 (Rizzi 1982:22)

On the basis of the contrast he discerns between (43a) and (43b), Rizzi suggests that it is the most embedded verb that governs the distribution of auxiliaries (and triggers auxiliary switch if it requires *essere*). As for the presence of *essere* in sentences like (38a) (his example is *Maria sarebbe voluta andare a prenderli lei stessa* ‘Maria would-be wanted (to) go (to) fetch.them herself’), his proposal is that restructuring has taken place only between *volere* and *andare*.<sup>22</sup>

Rizzi does not consider examples like (38b), however, where clitic climbing to *andare* has taken place, indicating that the lowest infinitive, *trovare*, is also restructured. This being the case, it cannot be maintained that it is the lowest verb that determines the auxiliary.

Although the conflicting judgments of (38c) and (43a) (and of (41a) and (43b)) remain puzzling, they are independent of the acceptability of (38b), which shows that *essere* is not selected by the most embedded verb *trovare*. The only available source for *essere* is the unaccusative motion verb *andare*. If this is true, then *andare* is also the source of *essere* in (38a), under a restructuring (without clitic climbing) analysis.

Two conclusions follow from this discussion. The first, broader conclusion is that there exist three types of verbs, not two: lexical verbs, functional verbs, and quasi-functional verbs. The quasi-functional verbs, unlike the functional ones, are associated with their own auxiliary. Hence, even when they are restructured, they impose their own auxiliary and are opaque to auxiliary transmission by a lower predicate. The second, narrow conclusion is that in restructuring contexts,

<sup>22</sup> For further discussion of these cases, see Burzio 1986:367–369.

it is the highest verb with its own auxiliary, and not the lowest one, that determines the clausal auxiliary.

Causative and perception verbs pattern with motion verbs in terms of auxiliary selection. The causative verb *fare* invariably controls auxiliary selection by imposing its *avere* (the auxiliary that it also selects in its lexical usage: *Gianni ha/\*è fatto questo* ‘Gianni has/\*is done this’). In (44), *fare* embeds *andare* ‘go’, which is an *essere*-taking lexical unaccusative verb; in (45), *fare* combines with *andare* in its functional guise.

- (44) a. *Ce l’ho fatto andare.*  
 (I) there.him.have made go  
 ‘I made him go there.’  
 b. \**Ce lo fatto andare.*  
 (I) there.him.am made go
- (45) a. *L’ho fatto andare a prendere a Maria.*  
 (I) it.have made go (to) fetch to Maria  
 ‘I made Maria go and fetch it.’  
 b. \**Lo sono fatto andare a prendere a Maria.*  
 (I) it.am made go (to) fetch to Maria

When *fare* cooccurs with a modal verb, it imposes its own auxiliary—*avere*—on the whole restructured clause. As seen above, modal verbs are transparent to auxiliary selection.

- (46) a. *Ce lo avrei potuto far andare.*  
 (I) there.him.would-have been-able (to) make go  
 ‘I could have made him go there.’  
 b. \**Ce lo sarei potuto far andare.*  
 (I) there.him.would-be been-able (to) make go
- (47) a. *Lo avrei potuto far andare a prendere a Maria.*  
 (I) it.would-have been-able (to) make go (to) fetch to Maria  
 ‘I could have made Maria go and fetch it.’  
 b. \**Lo sarei potuto far andare a prendere a Maria.*  
 (I) it.would-be been-able (to) make go (to) fetch to Maria

Perception verbs behave in a similar fashion. They are opaque to auxiliary transmission and also take *avere* (as they do in their lexical usage: *Gianni ha/\*è visto Maria* ‘Gianni has/\*is seen Maria’). They cannot be construed with *essere* if the lexical verb is unaccusative (like *partire* in (48)) or if the functional motion verb *andare* is embedded under them, as in (49).

- (48) a. *L’ho visto partire.*  
 (I) him.have seen leave  
 ‘I saw him leave.’  
 b. \**Lo sono visto partire.*  
 (I) him.am seen leave

- (49) a. *Glief*'ho visto andare a consegnare a Maria.  
 (I) to-him.it.have seen go (to) deliver to Maria  
 'I saw him go and deliver it to Maria.'
- b. \**Glief*o sono visto andare a consegnare a Maria.  
 (I) to-him.it.am seen go (to) deliver to Maria

*Avere* is also the auxiliary of the whole restructured clause when *vedere* combines with a modal verb.

- (50) a. *Lo* avrei potuto veder partire.  
 (I) him.would-have been-able (to) see leave  
 'I could have seen him leave.'
- b. \**Lo* sarei potuto veder partire.  
 (I) him.would-be been-able (to) see leave

In conclusion, causative and perception verbs never undergo auxiliary switch in restructuring contexts. Rizzi (1982:28) concludes that *fare* 'make', *lasciare* 'let', and *vedere* 'see' are not subject to the *avere* → *essere* rule because they do not undergo restructuring. We think that causative and perception verbs should be analyzed as restructuring verbs on a par with motion verbs, as Burzio (1986) and Cinque (2004) suggest. The reason why causative and perception verbs do not undergo auxiliary switch is that, like lexical verbs, they have their own auxiliary, namely, *avere*. Their quasi-functional behavior is confirmed by clitic placement, as we will show in section 4.2, and by other properties discussed in sections 4.3 and 4.4.

We end this section by reiterating the central observations. If more than one quasi-functional verb is present in a sentence, the auxiliary that appears is the one associated with or selected by the highest verb (i.e., *essere* for the motion verbs *andare* and *venire*, *avere* for causative and perception verbs). Modal verbs do not have their own auxiliary when occurring as functional verbs (in restructuring contexts), but inherit the auxiliary of the lexical verb (if no other functional verb is present) or of the (highest) quasi-functional verb.

#### 4.2 Clitic Placement

The sentences in (51) show that auxiliary switch is independent of clitic placement. *Essere* surfaces even though the clitic remains on the lexical verb or only raises to the lowest restructuring verb. In (52), however, in which a third restructuring verb is added, clitic climbing on *potere*, the intermediate restructuring verb, is incompatible with auxiliary switch.

- (51) a. Sarei voluto andare a trovarlo.  
 (I) would-be wanted (to) go (to) visit.him  
 'I would have wanted to go and visit him.'
- b. Sarei voluto andarlo a trovare.
- c. *Lo* sarei voluto andare a trovare.

- (52) a. Sarei voluto poter andare a trovarlo.  
 (I) would-be wanted (to) be-able (to) go (to) visit.him  
 'I would have wanted to be able to go and visit him.'
- b. Sarei voluto poter andarlo a trovare.
- c. \*Sarei voluto poterlo andare a trovare.
- c'. Avrei voluto [poterlo andare a trovare].
- d. Lo sarei voluto poter andare a trovare.

We would like to interpret the contrast between (51b) and (52b), on the one hand, and (52c), on the other, in the following terms. Whereas intermediate placement of the clitic on the modal verb in (52c) is not possible (see the generalization in (9)), long restructuring (as evidenced by auxiliary switch) with "intermediate" placement of the clitic in (51b) and (52b) is made possible by the motion verb itself. In other words, motion verbs make an additional clitic position available—additional, that is, to the lexical clitic position in the domain of the lexical verb *trovare* and to the clausal clitic position in the functional domain.

Indeed, the contrast between (51b)/(52b) and (52c) confirms that there is no clitic position associated with modal/volitional verbs and conversely, that there is a clitic position associated with motion verbs. The presence of an extra clitic position associated with motion verbs is what explains why (9) can be violated when restructuring takes place with motion verbs.

Motion verbs thus differ from modal and volitional verbs and are similar to lexical verbs not only in determining their own auxiliary, but also in being associated with a position for clitics. The correlation of these two properties singles out and defines the class of quasi-functional verbs. They are like the functional modals in that they can be restructuring predicates realizing a functional head associated with a lexical VP (alongside being fully lexical, thematic verbs). However, they are also similar to lexical verbs in selecting an auxiliary and being able to host clitics.

Causative and perception verbs pattern with motion verbs with respect to clitic climbing: as shown in in (53)–(57), they can host a clitic pronoun.<sup>23</sup>

- (53) *Modal + causative*
- a. [Vorrei farlo leggere a Maria].  
 (I) would-want (to) make.it read to Maria  
 'I would like to make Maria read it.'
- b. [Lo vorrei far leggere a Maria].

<sup>23</sup> Rizzi (1976:42n4) and Burzio (1986:260ff.) point out that clitic pronouns cannot remain under causative *fare*. This is shown in (i).

- (i) \*Piero farà leggerlo a Mario.  
 Piero will-make read.it to Mario  
 'Piero will make Mario read it.'  
 (Rizzi 1976:42n4)

- (54) *Modal + modal + causative*
- ?Vorrei poter farlo leggere a Maria.  
(I) would-want (to) be-able (to) make.it read to Maria  
'I would like to be able to make Maria read it.'
  - Vorrei [poterlo fare leggere a Maria].
  - [Lo vorrei poter fare leggere a Maria].
- (55) *Causative + motion verb*
- [Lo faccio andare a prendere a Maria].  
(I) it.make go (to) fetch to Maria  
'I make Maria go and fetch it.'
- (56) *Modal + causative + motion verb*
- [Posso farlo andare a prendere a Maria].  
(I) can make.it go (to) fetch to Maria  
'I can make Maria go and fetch it.'
  - [Lo posso fare andare a prendere a Maria].
- (57) *Modal + modal + causative + motion verb*
- [Vorrei poter farlo andare a prendere a Maria].  
(I) would-want (to) be-able (to) make.it go (to) fetch to Maria  
'I would like to be able to make Maria go and fetch it.'
  - Vorrei [poterlo fare andare a prendere a Maria].
  - [Lo vorrei poter fare andare a prendere a Maria].

Since causative and perception verbs determine the auxiliary *avere*, it is not possible to observe the interaction of clitic placement and auxiliary switch with these verb classes. As a matter of fact, the sentences in which the clitic pronoun appears on the causative verb might be analyzed as not involving restructuring above these verbs. In other words, a sentence like (53a) could be analyzed as containing the lexical verb *vorrei* followed by a CP, as in *Vorrei [farlo leggere a Maria]*. Under such a structural analysis, the fact that the clitic pronoun is adjoined to the causative verb *fare* would not count as evidence that this verb provides a lexical clitic position. Nevertheless, the restructuring analysis assumed in (53)–(57) is not impossible, given the essentially optional character of clitic climbing. We therefore continue to adopt this analysis despite the lack of the evidence provided by auxiliary switch. Our approach is confirmed by the fact that causative and perception verbs are endowed with other properties that argue for classifying them as quasi-functional verbs, alongside motion verbs. We discuss these properties in the following sections.

### 4.3 *The Infinitival [e]*

Functional verbs such as modals differ from lexical verbs in lacking the position that is realized by the infinitive-final [e] and to which clitics adjoin. When clitics climb to or over modals, they



are associated with the clausal clitic position, a position independent of the functional verb and not realized by [e].

We have shown that quasi-functional verbs differ from modals in having their own clitic position in addition to the clausal clitic position and the clitic position supplied by the lexical predicate. Quasi-functional verbs introduce a third clitic position and thus allow intermediate clitic climbing.

We have argued that the lexical clitic position is realized by [e]. Since quasi-functional verbs have an associated clitic position, we expect them to also manifest the infinitive-final [e], as a mark of the presence of the “extra” position to which clitics can attach.

Consider, in this context, the paradigm in (58). When the clitic pronoun remains on the lexical verb, as in (58a), [e] can appear on the quasi-functional verb *andare*. When the clitic pronoun climbs onto the quasi-functional verb, as in (58b), [e] trivially appears on the lexical verb. In (58c), where long restructuring has taken place, [e] can appear twice, on both the lexical verb and the quasi-functional verb.

- (58) a. Vorrei andare a trovarlo.  
 (I) would-want (to) go (to) visit.him  
 b. Vorrei andarlo a trovare.  
 c. *Lo* vorrei andare a trovare.

Modulo the ungrammaticality of the clitic pronoun on the verb embedded under *fare* (see footnote 23), causative verbs show the same distribution of infinitive-final [e].

- (59) a. Vorrei farli leggere a Maria.  
 (I) would-want (to) make.them read to Maria  
 ‘I would like to make Maria read them.’  
 b. *Li* vorrei fare leggere a Maria.  
 (60) a. Vorrei poter farli leggere a Maria.  
 (I) would-want (to) be-able (to) make.them read to Maria  
 ‘I would like to be able to make Maria read them.’  
 b. Vorrei poterli fare leggere a Maria.  
 c. *Li* vorrei poter fare leggere a Maria.

In a series of quasi-functional verbs, [e] can also appear three times, as in (61).

- (61) *Li* ho voluti fare andare a prendere a Maria.  
 (I) them.have wanted (to) make go (to) fetch to Maria  
 ‘I wanted to make Maria go and fetch them.’

Quasi-functional verbs manifest an optionality in the realization of [e] that is not found with lexical verbs (unless, of course, Troncamento applies; see section 3.1). The former may display [e], as shown in (61) or even more clearly in (62), while the latter must display it, as shown in (63).

- (62) a. *Li ho voluti far(e) leggere a Maria.*  
 (I) them.have wanted (to) make read to Maria  
 'I wanted to make Maria read them.'
- b. *Li ho fatti andar(e) a prendere a Maria.*  
 (I) them.have made go (to) fetch to Maria  
 'I made Maria go and fetch them.'
- (63) *Li ho voluti legger\*(e) a Maria.*  
 (I) them.have wanted (to) read to Maria  
 'I wanted to read them to Maria.'

The optional realization of [e] on quasi-functional verbs can be interpreted to mean that the head realized by [e] is optionally available to the verbs belonging to this class (motion, causative, and perception verbs), while it is obligatory with lexical verbs.

Interestingly, the infinitival [e] is obligatorily present on the lower of two quasi-functional verbs combined in a single clause if it is present on the higher one. Of the four possibilities in (64), only three are acceptable; (64b) is ungrammatical.<sup>24</sup>

- (64) a. *Li ho voluti fare andare a prendere a Maria.*  
 (I) them.have wanted (to) make go (to) fetch to Maria  
 'I wanted to make Maria go and fetch them.'
- b. \**Li ho voluti fare andar a prendere a Maria.*
- c. *Li ho voluti far andare a prendere a Maria.*
- d. *Li ho voluti far andar a prendere a Maria.*

The same pattern is displayed with other combinations of quasi-functional verbs, as in (65), with perception and motion verbs.

- (65) a. *Glielo vorrei vedere andare a consegnare a Maria.*  
 (I) to-him.it.would-want (to) see go (to) deliver to Maria  
 'I would like to see him go and deliver it to Maria.'
- b. \**Glielo vorrei vedere andar a consegnare a Maria.*
- c. *Glielo vorrei veder andare a consegnare a Maria.*
- d. *Glielo vorrei veder andar a consegnare a Maria.*

<sup>24</sup> To control for phonological factors, in (i) we use the motion verb *andare* 'go' with the repetitive prefix *ri* 'again', which starts with a consonant. The results are the same as in (64).

- (i) a. *Li ho voluti fare riandare a prendere a Maria.*  
 (I) them.have wanted (to) make again-go (to) fetch to Maria  
 'I wanted to make Maria go and fetch them again.'
- b. \**Li ho voluti fare riandar a prendere a Maria.*
- c. *Li ho voluti far riandare a prendere a Maria.*
- d. *Li ho voluti far riandar a prendere a Maria.*

The generalization that emerges from this discussion is that once a functional or quasi-functional verb lacking the final [e] is merged, subsequent merger of a verb with [e] is impossible. Thus, a quasi-functional verb with [e] must be merged before and hence appear lower than a quasi-functional verb without [e].

#### 4.4 *Aux-to-C Movement*

There is one other empirical domain that classes the quasi-functional verbs with the lexical ones and distinguishes them from the functional ones. Rizzi (1982:112n10) observes that only auxiliary and modal verbs can be raised to C; aspectual and lexical verbs cannot.

- (66) a. Ritengo [<sub>CP</sub> dover [<sub>IP</sub> tuo fratello/lui tornare a casa]].  
 (I) believe (to) have your brother/he (to) come-back to home  
 ‘I believe that your brother/he has to come back home.’
- b. \*Ritengo [<sub>CP</sub> cominciare [<sub>IP</sub> tuo fratello/lui a dire sciocchezze]].  
 (I) believe (to) begin your brother/he to tell nonsense  
 ‘I believe that your brother/he is beginning to speak nonsense.’
- c. \*Ritengo [<sub>CP</sub> raccontare [<sub>IP</sub> tuo fratello/lui questa storia]].  
 (I) believe (to) tell your brother/he this story  
 ‘I believe that your brother/he is telling this story.’

This contrast cannot be captured by the binary partition of verbs into functional and lexical and by the proposal that only functional verbs can be raised to C. Aspectual verbs like *cominciare* ‘begin’ are functional (see Cinque 1999, 2001), but they are barred from moving to C. We come back to aspectual verbs in section 6. Here, we note that other verbs that are excluded from the Aux-to-C construction are motion, causative, and perception verbs, as illustrated in (67). These are precisely the verbs that we have characterized as quasi-functional.<sup>25</sup>

- (67) a. \*Ritengo [<sub>CP</sub> andar [<sub>IP</sub> Gianni a trovare Maria]].  
 (I) believe (to) go Gianni (to) visit Maria  
 ‘I believe that Gianni is going to visit Maria.’
- b. \*Ritengo [<sub>CP</sub> far [<sub>IP</sub> Gianni leggere questo a Maria]].  
 (I) believe (to) make Gianni read this to Maria  
 ‘I believe that Gianni is making Maria read this.’
- c. \*Ritengo [<sub>CP</sub> veder [<sub>IP</sub> Gianni riparare la macchina]].  
 (I) believe (to) see Gianni fix the car  
 ‘I believe that Gianni is seeing someone fix the car.’

<sup>25</sup> An anonymous reviewer points out that the English counterparts of the ungrammatical sentences in (66) and (67) are also degraded (as shown by the following example that he or she provides: *?I believe him to go see Maria*) and suggests that there might be some semantic incompatibility with ‘believe’ rather than a constraint on Aux-to-C movement. English, however, lacks the contrast between (66a) and (66b–c) since the English counterpart to (66a) is also degraded: *??I believe him to have to go back home*. The contrast between (66a) on the one hand and (66b–c) and (67) on the other can only be due to the type of verb raised to C, as argued in the text.

**Table 1**  
Preliminary typology of restructuring verbs

	Functional verbs		Lexical verbs
	Modal verbs	Quasi-functional verbs	
Biclausal structure (*clitic climbing)	–	–	+
Selects auxiliary	–	+	+
Lexical clitic position	–	+	+
Infinitive-final [e]	–	+	+
Aux-to-C movement	+	–	–

## 5 Restructuring and Clausal Architecture

Our study of Italian restructuring has yielded a number of correlations. Motion, causative, and perception verbs, the so-called quasi-functional verbs, behave like lexical verbs in that they control auxiliary selection, can be associated with a lexical clitic position, can display the infinitival marker [e], and cannot raise to C. Modal verbs or ‘‘high’’ functional verbs do not control auxiliary selection, lack the lexical clitic position, cannot display the infinitival marker [e], and can raise to C. This is summarized in table 1. The properties tabulated there reflect the extent to which the different classes of verbs project ancillary functional structure (such as vP).

A lexical verb projects a shell that houses its arguments and the associated rudimentary functional structure. The position realized by [e] in Italian can be construed as a component of the VP shell (a vP of some sort). Verbs with arguments can determine or select an auxiliary. The choice of course depends on the way the arguments are aligned in the VP shell.

Functional verbs differ from lexical ones in that they lack a shell. This is manifested by the absence of an argument structure,<sup>26</sup> of an [e] position, and of any propensity to determine an auxiliary. To put it concisely, functional verbs are associated with a more impoverished structure than lexical verbs.

Causative and perception verbs do not contribute internal arguments and are thus not lexical (unergative predicates must therefore be taken to project a null internal argument). However, they do add an (external) argument to the structure (a causer and a perceiver, respectively, italicized

<sup>26</sup> The selection of an external argument by the functional verb *volere* in sentences like (i) is only apparent, as Cinque (2004:sec. 4.3) demonstrates.

(i) \*La casa gli voleva appartenere.  
the house to-him wanted (to) belong

According to Cinque, (i) is ungrammatical not because *volere* selects the external argument, thereby imposing selectional restrictions on it, but because it is semantically compatible only with a subject referring to a sentient being, much like volitional adverbs such as *willingly* and *voluntarily*: compare \**The house willingly belonged to Bill*. The same reason accounts for the ungrammaticality of \**Vorrebbe esser ovvio che . . .* ‘(it) would-want (to) be obvious that . . .’, with a quasi-argumental subject.

in (68)) and may add an adjunct complement (italicized in (69)). They thus cannot be taken to be purely functional verbs either.

- (68) a. [*Maria l'ha fatto partire*].  
 Maria him.has made leave  
 'Maria made him leave.'
- b. [*Maria l'ha visto aiutare sua sorella*].  
 Maria him.has seen (to) help his/her sister  
 'Maria saw him help his/her sister.'
- (69) a. [*Maria l'ha fatto mangiare con le botte*].  
 Maria him.has made eat with the blows  
 'Maria made him eat by beating him.'
- b. [*Maria l'ha visto correre dalla finestra*].  
 Maria him.has seen (to) run from-the window  
 'Maria saw from the window that he was running.'

Motion verbs are yet another subclass of quasi-functional predicates. They have an [e] position but project no arguments (except adjunct complements). This is shown in (70) to (72) (also see Cinque 2004).<sup>27</sup>

- (70) a. [Lo vado a prendere *in macchina*].  
 (I) him.go (to) take by car  
 'I go and take him by car.'
- b. [Lo verranno a operare *da Torino*].  
 (they) him.will-come (to) operate from Turin  
 'They will come from Turin to operate on him.'  
 (Cinque 2004)
- (71) \*Te ne sono venuti *molti* a portare un regalo.  
 to-you.of-them.are come many (to) bring a present  
 'Many of them came to bring you a present.'  
 (Cinque 2004)
- (72) a. \*Lo vado *alverso casa* a prendere.  
 (I) him.go to/toward home (to) take  
 'I go home to fetch him.'
- b. \*Lo vado a prendere *alverso casa*.  
 (I) him.go (to) take to/toward home

The different verb classes defined on the basis of the properties discussed above, which we have expressed in terms of an ancillary functional structure, have an interesting correlate with

<sup>27</sup> (72b) is grammatical in the irrelevant reading in which the PP *alverso casa* is a locative adjunct to the lexical verb *prendere*, meaning 'at home/close to home'. For discussion, see Cardinaletti and Giusti 2003:39.

Cinque's (1999, 2001, 2004) functional hierarchy. Cinque argues that restructuring predicates are arrayed in a hierarchy, as shown in (73). Modal and volitional verbs appear highest in the hierarchy. The class of verbs that we have named quasi-functional (italicized in (73)) occur in the lower part of this hierarchy, below Voice and above the domain of "VP-adverbs."

(73) > Mod volition > ... > Mod obligation > ... > Mod permission > ... > Voice  
> *Perception* > *Causative* > ... > *Andative* > Completeive > ... > VP

The different verb classes seem to be arrayed on a scale of impoverished ancillary functional structure in the clausal skeleton: the more impoverished a verb's structure is, the higher the verb merges in the tree.

## 6 Aspectual Verbs

The behavior of aspectual verbs confirms the essence of our proposal and leads to some refinements. In section 4.4, we noted that aspectual verbs like *cominciare* 'begin' behave like quasi-functional and lexical verbs in resisting Aux-to-C movement. In this respect, they differ from modal verbs.

The distinction between modal and lexical verbs could be captured by saying that only high verbs can be moved to C. Aspectual verbs like *cominciare*, however, can be higher than (for example) obligational *dovere* in Cinque's (2001) hierarchy, as shown by the order of verbs in the following example (from Cinque 2001:151), and are therefore expected to raise to C in the Aux-to-C construction.

(74) *Ci comincia a dover andare anche di notte.*  
(he) there.begins (to) have (to) go also by night  
'He begins to have to go there also by night.'

Still, *cominciare* cannot move to C, while *dovere* can. Although *cominciare* shares the non-Aux-to-C property with lexical verbs, it allows clitics to raise over it to a higher verb and is thus a restructuring verb.<sup>28</sup>

<sup>28</sup> Like modal verbs, aspectual verbs can also be fully lexical verbs, as confirmed by their selecting a DP complement, as in (i), and a clause containing clausal negation, as in (ii).

- (i) a. Ho cominciato quel lavoro.  
(I) have started that work  
b. Quel lavoro è stato finalmente cominciato.  
that work is been finally started  
'That work has finally been started.'  
c. Il film è finito alle due.  
the film is finished at two  
'The film ended at two.'
- (ii) Comincio [a non sopportare più nessuno].  
(I) begin not (to) stand any-longer anybody  
'I'm beginning not to stand anybody any longer.'

Unlike quasi-functional verbs, *cominciare* and *continuare* do not select any argument. The lack of auxiliary selection and hence the possibility of auxiliary switch are therefore expected.<sup>29</sup>

- (75) a. *Ci è dovuto cominciare ad andare anche di notte.*  
 (he) there.is had (to) begin (to) go also by night  
 'He had to begin to go there also by night.'  
 b. *Maria ci sarebbe dovuta cominciare ad andare.*  
 Maria there.would-be had (to) begin (to) go  
 'Maria would have had to begin to go there.'  
 (Rizzi 1982:23)

- (76) *La pioggia è continuata ad aumentare.*  
 the rain is continued (to) increase  
 'The rain continued to intensify.'  
 (Rizzi 1982:19)

A further property differentiating aspectual verbs from motion, causative, and perception verbs is their lack of association with a clitic position in full restructuring contexts such as (77a). In (77b), restructuring is partial, and hence the clitic pronoun on the aspectual verb makes use of the clausal clitic position. Thus, the distribution of clitic pronouns classes aspectual verbs along with the fully functional ones and not with motion, causative, and perception verbs.

- (77) a. \*[È dovuto cominciare*ci* ad andare anche di notte].  
 b. Ha dovuto [cominciare*ci* ad andare anche di notte].

To summarize, the aspectual verbs *cominciare* and *continuare* share with functional verbs the impossibility of imposing their own auxiliary and the absence of an associated clitic position, and they share with quasi-functional and lexical verbs the impossibility of undergoing Aux-to-C movement. They thus seem to constitute a class of their own.

With respect to the occurrence of the infinitive-final vowel [e], aspectual verbs behave like full-fledged quasi-functional verbs (see section 4.3): [e] is optionally present on *cominciare* and *finire* in (78), as it is on (for example) *fare* in (64).

<sup>29</sup> Burzio (1986:381) observes that auxiliary switch with *finire* 'finish' is surprisingly impossible.

- (i) Coll'inizio della scuola avremo finito/\*saremo finiti di andare in spiaggia.  
 with-the beginning of-the school (we) will-have/will-be finished (to) go to beach  
 'With the beginning of school, we will have finished going to the beach.'

*Essere* is ungrammatical simply because (i) is not a case of restructuring. Completive aspect realized by *finire* is not compatible with activity verbs such as *andare in spiaggia* 'go to the beach' (see Cinque 1999:83). In this case, clitic climbing is also deviant.

- (ii) \*Coll'inizio della scuola *ci* avremo finito/saremo finiti di andare.  
 with-the beginning of-the school (we) there.will-have/will-be finished (to) go  
 'With the beginning of school, we will have finished going there.'

- (78) a. *Lo vorrei cominciare(e) a fare.*  
 (I) it.would-want (to) begin (to) do  
 ‘I would like to begin doing it.’  
 b. *Lo vorrei finire(e) di leggere per domani.*  
 (I) it.would-want (to) finish (to) read by tomorrow  
 ‘I would like to finish reading it by tomorrow.’

Thus, the parallelism that we have observed between the possibility of hosting clitics and the occurrence of [e] breaks down with this class of verbs. Since these verbs do not host clitics (see (77a)), the manifestation of [e] is surprising. We believe that this property is related to another distinctive trait of aspectual verbs, namely, the fact that they obligatorily select a preposition—as in the list in (79)—and in this sense differ from the other classes of verbs.

- (79) a. cominciare a ‘begin’, continuare a ‘continue’, riuscire a ‘manage’, provare a ‘try’  
 b. finire di ‘finish’, smettere di ‘stop’  
 c. stare per ‘be going to’, finire per ‘end up’

Comparison of two aspectual verbs that differ only in the presence versus absence of a preposition confirms the relevance of the preposition to the manifestation of [e]. While progressive *stare* cannot occur with [e], prospective *stare per* can.

- (80) a. *Lo potrebbe star/\*stare mangiando.*  
 (he) it.could be eating  
 ‘He could be eating it.’  
 b. *Lo potrebbe star/stare per mangiare.*  
 (he) it.could be going (to) eat  
 ‘He could be going to eat it.’

Suppose that the preposition indicates a structural layer creating a position for [e]. This can be technically executed by adopting the core idea of Kayne’s (1999) proposal that prepositional ‘‘complementizers’’ are merged outside of the XP projected by a head and its selected complement. Under this view, *finisco di parlare* ‘(I) finish to talk’ is derived from a structure such as [<sub>PP</sub> di [<sub>XP</sub> finisco parlare]].

The above discussion leads to a view of verbs as being associated with more or fewer structural layers. Lexical verbs are those that project all layers; quasi-functional verbs project the clitic layer, the [e] layer, and the prepositional layer (e.g., *andare*); aspectual verbs project the [e] layer and the prepositional layer; and modal verbs do not project any additional structure.

A final speculation about the restriction of Aux-to-C movement to modals and volitionals is in order. Suppose that Aux-to-C movement is a bona fide instance of head movement (of I to C). If Kayne (1994), Koopman and Szabolcsi (2000), and others are right in arguing that much of what has been described as head movement is a (sometimes concealed) form of phrasal movement, then the verb class restriction on Aux-to-C movement is due to the fact that only modal/volitional verbs can undergo head movement. This is so because these verbs are stripped of any related functional structure. This speculation is supported by the behavior of *avere da* ‘have to’,



which has a modal meaning but differs from modal verbs in being associated with a preposition (hence with functional structure). *Avere da* cannot be raised to C.

- (81) a. Gianni ha da presentarsi al più presto.  
Gianni has (to) present.himself as soon as possible  
'Gianni has to present himself as soon as possible.'
- b. \*Ritengo [aver Gianni da presentarsi al più presto].  
(I) believe (to) have Gianni (to) present.himself as soon as possible  
'I think that Gianni has to present himself as soon as possible.'

## 7 Conclusion

Let us summarize the major contributions of this article. First, we argued that verbs can be merged either in VP or in a functional head, the latter giving rise to restructuring. Second, we developed the hypothesis that there are two distinct clitic positions in a clause: a lexical clitic position associated with the lexical verb and structurally determined by it, and a clausal clitic position located in the functional domain but crucially unassociated with any particular functional verb. We then discussed the distribution of the infinitive-final [e] and argued that its position should be identified with the lexical clitic position. Finally, we presented empirical evidence to show that the functional ~ lexical dichotomy is too sharp and that a variety of verb classes must be admitted, including quasi-functional and aspectual verbs.

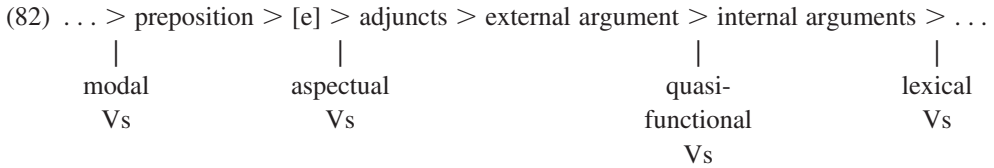
Table 2 summarizes the relevant morphosyntactic properties that we have attempted to relate in this article. The number of properties that functional verbs share with lexical verbs seems to

**Table 2**  
Properties of restructuring verbs

	Functional verbs			Lexical verbs
	Modal verbs	Aspectual verbs	Quasi-functional verbs	
Biclausal structure (*clitic climbing)	–	–	–	+
Internal arguments	–	–	–	+
External argument	–	–	±	±
Adjuncts	–	–	+	+
Selects auxiliary	–	–	+	+
Clitic position	–	–	+	+
Infinitive-final [e]	–	+	+	+
Selects particle	–	±	±	±
Aux-to-C movement	+	–	–	–

The symbol ± signals that single lexical items may behave differently with respect to the relevant property. For instance, not all lexical and quasi-functional verbs select an external argument.

correlate with the point in the structure at which they are merged. The closer to the VP a verb is merged, the more ancillary structure it is endowed with. This is summarized in (82).<sup>30</sup>



Lexical verbs are merged at the bottom of the clause structure; they can combine with all types of arguments and adjuncts, and with the lexical clitic position. Quasi-functional verbs are merged higher than lexical verbs, a level that correlates with the lack of internal arguments. Aspectual verbs, in addition, lack a clitic position. Finally, modal verbs are bare functional heads.

### Appendix: On *avere* and *essere*

Italian *avere* ‘have’ and *essere* ‘be’ behave somewhat differently from both functional and lexical verbs. In this appendix, we discuss their idiosyncratic behavior, although we do not try to give a full account of it.

Like lexical verbs, but unlike functional ones, aspectual auxiliaries can display the infinitival [e], with a slight difference in acceptability between the two.

- (83) a. Dice di aver(?e) parlato con Maria.  
 (he) says (to) have spoken with Maria  
 ‘He says that he spoke to Maria.’  
 b. Dice di esser(e) partito alle cinque.  
 (he) says (to) be left at five  
 ‘He says that he left at five.’

The optional presence of [e] in (83) cannot be handled by any phonological rule. No relevant difference exists between *avere* and *essere*. Here, too, the distribution of [e] must be syntactically governed.<sup>31</sup> The contrast detected between (83a) and (83b) can be reproduced in Aux-to-C move-

<sup>30</sup> Our conclusions are consistent with those reached by Cardinaletti and Giusti (2001) on the basis of a crosslinguistic study of quasi-functional motion verbs, which display different properties in different languages. Cardinaletti and Giusti suggest correlating these properties with the point in the structure at which motion verbs are merged in the different languages. Their results are summarized schematically in (i).

- (i) clausal adverbs > adjuncts > external arguments > internal argument
- |           |                   |               |         |
|-----------|-------------------|---------------|---------|
|           |                   |               |         |
| Marsalese | English           | English       | Swedish |
|           | <i>go and buy</i> | <i>go buy</i> |         |

<sup>31</sup> Note that there is no phonological constituent difference between the data discussed here and in section 3.1, yet the distribution of [e] is different. This reaffirms that the distribution of [e] cannot be accounted for in phonological terms.

ment contexts. Note that the occurrence of [e] on auxiliary *avere* and *essere* is slightly more acceptable than its occurrence on functional verbs. Although the Aux-to-C movement examples in Rizzi 1982:chap. 3 systematically lack [e], adding it results in a less flagrant degradation than that attributed to the examples discussed in section 3.1.<sup>32</sup>

- (84) a. Questa commissione ritiene [aver(??e) loro sempre ottemperato agli  
this commission believes (to) have them always fulfilled the  
obblighi previsti dalla legge].  
obligations demanded by-the law  
'This commission believes them to have always fulfilled their legal duties.'
- b. L'[aver(??e) lui affermato che ti vuole aiutare] non implica che  
the (to) have he asserted that (he) you.wants (to) help not implies that  
sei fuori dai guai.  
(you) are out of-the troubles  
'The fact that he claimed that he wants to help you does not imply that you are out of trouble.'
- c. Il giudice è stato sospeso per [aver(??e) suo figlio commesso una grave  
the judge is been suspended for (to) have his son made a serious  
imprudenza].  
imprudence  
'The judge has been suspended because his son committed a grave imprudence.'
- (85) a. Suppongo [non esser(?e) Gianni partito in tempo].  
(I) believe not (to) be Gianni left on time  
'I believe Gianni not to have left on time.'
- b. L' avvocato è stato sospeso per [esser(?e) il suo assistito partito senza  
the lawyer is been suspended for (to) be his client left without  
avvertire nessuno].  
(to) notify anybody  
'The lawyer has been suspended because his client left without notifying anybody.'

The main verbs *avere* and *essere* behave in the same way as the auxiliary ones: they can display [e] (86), they can be moved to C (87), and they can host a clitic pronoun (88).

- 
- (i) a. Dice di esser(e) partito alle cinque.  
(he) says (to) be left at five  
'He says that he left at five.'
- b. Potrebbe esser(e) partito alle cinque.  
(he) might be left at five  
'He might have left at five.'

<sup>32</sup> One might try to correlate the contrast between *avere* and *essere* in the Aux-to-C configuration with a difference in hierarchical position and claim that *avere* is merged or moved higher than *essere*.

- (86) a. Potrebbe avere il documento.  
(he) could have the document  
b. Vorrebbe essere fedele a sua moglie.  
(he) would-want (to) be faithful to his wife
- (87) a. Suppongo [non aver(?e) Gianni niente da mangiare].  
(I) believe not (to) have Gianni nothing to eat  
'I believe that Gianni has nothing to eat.'  
b. Mario afferma [non esser(?e) lui in grado di affrontare la situazione].  
Mario claims not (to) be he able to face the situation  
'Mario claims that he is not able to face the situation.'
- (88) a. Potrebbe averlo.  
(he) could have.it  
b. Vorrebbe esserle fedele.  
(he) would-want (to) be.to-her faithful  
'He would like to be faithful to her.'

Main verbs *avere* and *essere* can be analyzed as quasi-functional/lexical verbs (whence their cooccurrence with [e] and with clitic pronouns) that are raised to a functional position and may consequently move to C. In this respect, they pattern like the English main verbs *be* and (in some varieties) *have*, which can be moved to C like auxiliaries *be* and *have*, as in (89).

- (89) a. Is G.W.B. really the president?  
b. Have you any wool?

The copula is peculiar also with respect to auxiliary switch. According to Burzio (1986:365), it gives marginal results with both *essere* and *avere*.

- (90) Giovanni *le* ?sarebbe/?avrebbe dovuto essere fedele.  
Giovanni to-her would-be/would-have had (to) be faithful  
'Giovanni would have had to be faithful to her.'

Finally, consider the behavior of *essere* when used as a passive auxiliary. Rizzi (1982:45n27) and Burzio (1986:364–365) point out that it does not trigger auxiliary switch, as shown in (91a). This is also true of the passive auxiliary *venire* 'come' in (91b).

- (91) a. Giovanni gli ha/\*è voluto essere presentato.  
Giovanni to-him.has/is wanted (to) be introduced  
'Giovanni wanted to be introduced to him.'  
b. Giovanni gli ha/\*è voluto venir presentato.  
Giovanni to-him.has/is wanted (to) come introduced  
'Giovanni wanted to be introduced to him.'

This state of affairs is expected if passive auxiliaries, like modal verbs, are functional verbs and therefore do not select their own auxiliary. *Avere* in (91) is the auxiliary associated with the

lexical transitive verb *presentare*: compare *Gli ho presentato Giovanni* '(I) to-him.have introduced Giovanni.'

In compound passive forms, the aspectual auxiliary 'have' is also found in languages like English and French, where the passive auxiliary is functional 'be'. In these languages, however, 'have' is also the auxiliary of the verb 'be'. Therefore, it cannot be established directly whether 'have' in (92) is associated with the lexical verb *introducelprésenter* or with the passive auxiliary *belêtre*. If the evidence provided by Italian (91a) is correct, comparative considerations favor the former conclusion.

- (92) a. John has been introduced to him.  
b. Jean a été présenté à lui.

One might wonder at this point why the auxiliary *essere* shows up in compound passive forms in Italian, as in (93).

- (93) Giovanni gli \*ha/è stato presentato.  
Giovanni to-him.\*has/is been introduced  
'Giovanni has been introduced to him.'

We take *essere* in (93) to be the auxiliary of the verb *stare*, which is used as a suppletive form of the past participle of the passive auxiliary. In this respect, passive *stare* behaves like a quasi-functional verb in imposing its own auxiliary, namely, *essere* (cf. *stare* in its lexical usage: *Giovanni è stato a casa* 'Giovanni is been/remained at home').

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