On the Italian repetitive prefix *ri-*:
Incorporation vs. cliticization*

Anna Cardinaletti
University of Venice

0. Introduction

In Keyser and Roeper (1992), the English repetitive prefix *re-* is analysed as a clitic element attached to the verb via a rule of compounding. This analysis cannot be extended to the Italian counterpart *ri-*. The Italian *ri-* construction does not undergo the same restrictions as the English *re-* construction, and *ri-* can modify any verb.

I claim that *ri-* is an incorporated adverb, attached to the verb in the syntax. In the case under discussion, English and Italian thus differ in the way the repetitive morpheme is lexically stored, from which all the superficial differences follow. This analysis supports the view that language variation is to be attributed to the lexical properties of single lexical items.

The distribution of Italian *ri-* also provides empirical evidence to distinguish between two very similar syntactic processes: incorporation and cliticization. This conclusion is based on the comparison of *ri-* with both clitic pronouns and clitic adverbs.

Finally, the distribution of *ri-* shows that excorporation cannot be a grammatical possibility.

1. Keyser and Roeper's analysis of English *re-*

Keyser and Roeper (1992) suggest that the English repetitive prefix *re-* originates in an abstract clitic position associated with any verb and then raises to the left of the verb by a rule of compounding. *Re-* cannot co-occur with particle verbs, idiomatic expressions, detransitivized, causative and locative verbs. If particles, idiomatic nouns, empty objects, etc. all occupy the "clitic" position, co-occurrence of any these constructions is predicted to be ungrammatical.

The Italian *ri-* construction does not undergo the same restrictions as the English *re-* construction. Italian *ri-* can modify any verb. Particle verbs, idiomatic expressions, detransitivized, causative and locative verbs give rise to grammatical sentences if combined with *ri-* (the English counterparts of (1)-(5) are all ungrammatical, cf. Keyser and Roeper 1992):[1]

(1)   a. Ha ributtato via il latte.
          [he] has re-thrown away the milk
      b. Ha rimesso su pancia.
          [he] has re-set up paunch
          "he has developed a paunch again"

(2)   Ha rigiocato sporco.
      [he] has re-played dirty

(3)   Mi piace ritradurre.
      [it] to-me pleases re-translate
      "I like to translate again (something)"

(4)   Questo mi ristupisce ogni volta.
      this me re-amazes each time
      "this amazes me again each time"

---

[1]   Other constructions are independently excluded in Italian and cannot therefore be checked with *ri-*. Among those discussed by Keyser and Roeper, there are double-object constructions, resultatives, and middles (without *si*).

(5)   Gianni ha rimesso la palla sullo scaffale.
       Gianni has re-put the ball on the shelf

Keyser and Roeper's analysis cannnot be extended to Italian. In what follows, the peculiar properties of *ri-* will be discussed, which distinguish it from any other prefix of the language. *Ri-* also differs from both members of a compound, which confirms that a rule of compounding is not an appropriate analysis for Italian *ri-*.

2. The peculiar properties of Italian *ri-*

Differently from other prefixes, repetitive *ri-* does not form a (morphological) word with what follows it. *Ri-* does not undergo word-internal processes such as s-sonorization and vowel deletion and can appear separated from the verb it modifies.

2.1.   S-sonorization

S-sonorization applies word-internally in intervocalic contexts. It can take place stem-internally, as in *asola* "button-hole" pronounced *a[z]ola,* or across a stem and an inflectional morpheme, as in *case* "houses" pronounced *ca[z]e.* Whereas other prefixes, including non-repetitive *ri-*, trigger the sonorization of [s] (cf. (6a)), repetitive *ri-* does not, (6b) vs. (6c):

(6)   a. ri[z]ultare / re[z]istere / de[z]istere / pre[z]umere
             to turn out / to resist / to desist / to suppose
       b. *ri[z]alire / ri[z]alutare
       c. ri[s]alire / ri[s]alutare
             to re-climb / to re-greet

2.2.   Vowel deletion
Deletion of the final vowel of a prefix can apply if the verb stem has an initial vowel. An example is provided by the verb *rinviare*, meaning "postpone".
This rule does not apply to repetitive *ri-*. *Rinviare* can be contrasted with *riinviare*, meaning "send again".

2.3. Ri-separation

Repetitive *ri-* can appear on a verb higher than the one it modifies. This can be a higher past participle in e.g. passive clauses, or a modal verb:

(7)   a. È ristato fatto ieri.   (= È stato rifatto ieri)

         [it] has re-been done yesterday   (= [it] has been re-done yesterday)

      b. Ripossiamo prendere il vaporino.   (= Possiamo riprendere il vaporino)

         [we] re-can take the boat   (= [we] can re-take the boat)

In (7a), the "again" meaning clearly modifies the lexical predicate *fatto* (*ieri*). In (7b), although the "again" meaning can modify the modal verb, it can also modify the embedded lexical predicate *prendere* (*il vaporino*). The sentence does not necessarily mean that we have again the possibility of taking the boat. It can mean that we have the possibility of taking the boat again.

This is clearer with epistemic *dovere* "must" in (8). It seems semantically odd that the prefix meaning "again" combines with the epistemic meaning, to get the interpretations "it must again be true that he is sick", "it must again be true that he has left", respectively. Rather, the sentences in (8) mean: "it must be true that he is again sick", "it must be true that he has again left":

(8)   a. Ridoveva essere malato.   (= Doveva essere malato di nuovo)

         [he] re-must have been sick   (= [he] must have been sick again)

      b. Rideve essere partito.   (= Deve essere ripartito)

         [he] re-must have left   (= [he] must have left again)

I call this phenomenon *ri*-separation (the term *ri*-climbing is avoided for reasons that will become clear below). *Ri*-separation only applies to repetitive *ri-*. The separation from the stem of other instances of *ri-* and other prefixes produces ungrammatical sentences (even when the stem is a possible word: cf. *corso* in (9b) and *chiamare* and *correre* in (10b,c)):

(9)   a. È stato ripetuto.   vs.*È ristato petuto.

         [it] has been repeated

      b. È stato percorso più volte.   vs.*È perstato corso più volte.

         [it] has been run-along many times

(10) a. Possiamo ripetere la lezione.   vs.*Ripossiamo petere la lezione.
         [we] have to repeat the lecture

    b. Devo richiamare il ragazzo.   vs.*Ridevo chiamare il ragazzo.
         [I] have to rebuke the boy

    c. Deve percorrere quel viale.   vs.*Perdeve correre quel viale.
         [I] must run-along that avenue

In sum, *ri-* displays a morphological independence from what follows and a freedom in distribution unknown to morphological elements. The first conclusion is that *ri-* is not attached to the verb by a derivational word formation rule.

2.4. *Ri- is not the member of a compound either*

Does the compound analysis proposed by Keyser and Roeper (1992) for English *re-* account for the peculiarities of Italian *ri-*? The compound analysis accounts for the two first properties of *ri-*, which *ri-* shares with compounds, but remains silent on the third one, which is unknown to compounds. Let's consider the relevant data.

As with *ri-*, s-sonorization does not take place in compounds:

(11) a. *spargi[z]ale

    b. spargi[s]ale
         salt-sprinkler

Deletion of the last vowel of the first member of a compound takes place only in some types of compounds (cf. Scalise 1983). Deletion is possible in the lexicalized compound in (12a). In (12b), where no stress clash is produced, vowel deletion is optional. In (12c), on the other hand, vowel deletion is blocked because it would produce a stress clash, and in (12d,d') it never applies, independently of stress considerations:

(12) a. *galant**e**uomo vs. galantuomo   "gentleman"

    b. port**a**ombrelli vs. portombrelli   "umbrella-stand"

    c. spart**i**acque   vs. *spartacque   "watershed"

    d. turb**o**elica   vs. *turbelica   "turbo-propeller engine"

    d'. uom**o** uccello vs. *uomuccello   "bird-man"

If *ri-* forms a compound, this is clearly not of the lexicalized type. As we saw above in section 2.2, *ri-* never undergoes vowel deletion. Since no stress consideration is relevant for *ri-*, the compound must be of the type (12d,d').

However, differently from *ri-*, no constituent of a compound can ever be separated from the other constituent by any element: cf. *un grande portaombrelli* "a big umbrella-stand" vs. **un porta grande ombrelli*. This property, together with the observation that *ri-* is possible with any verb in Italian and does not undergo the restrictions pointed out by Keyser and Roeper (1992) for English (see section 1 above), leads us to the conclusion that compounding is not the correct analysis for Italian *ri-*.

3. The incorporation analysis

The above discussion shows that *ri-* has a very special status with respect to all other Italian prefixes and to the constituents of Italian compounds. It is phonologically and morphologically independent from what follows and shows a freedom in distribution which is unknown to morphological elements.

A radical way of accounting for the independence of *ri-* is to suggest that *ri-* is an incorporated adverb, attached to the verb in the syntax.

What is *ri-* the incorporated version of? It is tempting to suggest that *ri-* is the incorporated counterpart of the synonymous aspectual adverbs *ancora*, *nuovamente*, *di nuovo* (all meaning "again"):

(13) a. Ha vinto ancora / nuovamente / di nuovo.
       [he] has won again
     b. Ha rivinto.
       [he] has re-won

This proposal is supported by the following observations. First, *ri-* can be repeated, but only twice:[2]

---

[2]   Repetitive prefixes are claimed to be iterated in French and Argentina Spanish in Rainer (1986:202). Incidentally, iteration is another property that distinguishes *ri-* from other prefixes, which cannot be repeated. Examples: **disdisfare* "ununtdo", **dededurre* "dededuce". The restriction also holds true of the quasi-verbal form *ecco*, which allows *ri-* twice, but not more times:

(14) a. ririfare

      re-re-do

   b. *riririfare

It is evident that we cannot put any numeric constraint on the iteration of *ri-* of the type "two but not more", especially in view of the fact that three-times repetitions are possible in the language to convey a meaning of exaggeration or emphasis: cf. *Sei cattivo cattivo cattivo* "you are bad, bad, bad" = "you are extremely bad".[3] Nor does there seem to be any semantic reason to exclude (14b). If a process can be iterated twice, why not three or more times?

    The syntactic approach to repetitive *ri-* provides an answer to the restriction exemplified in (14). As noted in Cinque (1999:Section 4.13), repetitive adverbs can occur twice in one and the same sentence, as shown in (15):

(i) a. Eccolo ancora / nuovamente / di nuovo.

      "here he is again"

   b. Rieccolo.

   c. Ririeccolo.

   d. *Riririeccolo.

3. Rainer (1986:206f) observes that this kind of iteration, which is also possible with adverbs in English and with some prefixes in languages like German, always implies an intensification of the meaning of the adverb or the affix:

(i) a. very very very old = extremely old

   b. urururalt

     very very very old = extremely old

The interpretation of (i) is thus different from that of other prefixed words such as English *meta-meta-language* or German *vorvorgestern*, where the meaning is compositional: "a language used to talk about a language used to talk about a language", and "the day before the day before today". To get a compositional meaning, prefixes are usually iterated only twice.

(15) Gianni ha *di nuovo* battuto alla porta *di nuovo*.
      Gianni has again knocked on the door again

The leftmost *di nuovo* quantifies over the event of knocking on the door, while the rightmost quantifies over the act itself of knocking. Cinque concludes that repetitive adverbs occupy two different specifier positions in the clause structure, with different scope properties.

   If *ri-* is the incorporated version of repetitive adverbs, it follows that there can be only two occurrences of *ri-* in one and the same sentence, and not three or four.

   We also expect that *ri-* can cooccur with *di nuovo*, as in (16). In (16a), *ri-* modifies the lexical predicate, in (16b) it quantifies over the event:[4]

---

4.   The sentence in (16b) implies that the verb is higher than the starting point of *ri-*. This word order, not displayed in (15), is in fact possible, and is due to further movement of the past participle to the left:

(i)   Gianni ha battuto *di nuovo* alla porta.
      Gianni has knocked again on the door

The sentence in (i) is also compatible with an analysis in which *di nuovo* occurs in the lowest aspectual position and quantifies over the predicate. It can in fact co-occur with the highest, pre-participle *di nuovo* that quantifies over the event. (ii) is thus synonymous with (15):

(ii)   Gianni ha *di nuovo* battuto *di nuovo* alla porta.

Notice that more than two occurrences of items meaning "again" are sometimes possible:

(iii)   a.   Gianni ha di nuovo riribattuto alla porta.
        b.   Gianni ha riribattuto alla porta di nuovo.

These cases are problematic only apparently. In (iii), *ri-* seems to convey the meaning of intensification displayed by the examples discussed in note 3. This also seems to be the case in the following sentence containing *ri-* on a modal verb:

(iv)   Gianni rideve di nuovo parlare a Maria.
       Gianni re-must again speak to Maria

(16) a. Gianni ha di nuovo ribattuto alla porta.
     b. Gianni ha ribattuto alla porta di nuovo.

Notice that in the absence of an aspectual adverb, a verb modified by *ri-* is ambiguous between the two readings:

(17)   Gianni ha ribattuto alla porta.
     a. Gianni ha di nuovo battuto alla porta.
     b. Gianni ha battuto alla porta di nuovo.

Another argument for the incorporation analysis comes from the observation that *ri-* is always the outmost prefix in a series of prefixes. Cf. the contrast between *ridisfare* re-un-do "undo again" and *disrifare.

The incorporation analysis is supported by comparative observations. In some languages, the repetitive prefix has the same lexical form as the free adverb with the same meaning. This is the case in e.g. German (and Greek, as pointed out by Antonietta Bisetto, p.c.):

(18) a. **wieder**einstellen = to re-engage, to re-employ
     b. Er singt morgen schon **wieder**.
        he sings tomorrow already again
     c. Er ist schon **wieder** auf den Berg gestiegen.
        he is already again on the mountain climbed
        "he has already climbed the mountain again"

It is tempting to consider *wieder* in (18a) as the incorporated version of *wieder* in (18b) and (18c). Notice that in (18c), *wieder* is clearly an adverb and not a separated prefix, since it precedes the complement of the verb. Prefixes follow complements: *Er hat Maria **an**gerufen* "he has Maria pref-called" / **Er hat **an** Maria gerufen* "he has pref Maria called".

3.1. Ri- does not realize a functional head

In many languages, repetitive morphemes realize the functional aspectual head(s) in whose specifier(s) repetitive adverbs are found (cf. Cinque 1999). This analysis cannot be extended to Italian *ri-*. If *ri-* were to realize a functional head, we would expect *ri-* to

appear as a suffix on the verb, on a par with the other inflectional material in a language like Italian. Furthermore, given the Mirror Principle of Baker (1988) and the clause structure proposed in Cinque (1999), where repetitive functional heads are rather low, we would expect *ri-* to occur very close to the stem morpheme. This is in fact the position where, as Cinque (1999:Appendix 2) reports, the repetitive head appears in some Austronesian languages (e.g. Big Nambas and Kiribatese).

In Italian, *ri-* is not a suffix, nor is it close to the stem morpheme. I conclude that Italian *ri-* is not a functional head. As suggested above, Italian *ri-* is an incorporated adverb.

3.2. *Language variation*

Repetitive morphemes can be analysed differently in different languages. They can be analysed as members of compounds, as in English (see Keyser and Roeper 1992), as incorporated adverbs, as in Italian in the present analysis, or as functional heads, as in some Austronesian languages.

The proposed analysis supports the view that language variation is to be attributed to the lexical properties of single lexical items. In the case under discussion, English, Italian and the Austronesian languages differ in the way the repetitive morpheme is lexically stored, from which all the superficial differences follow.

Repetitive morphemes can also be absent from the lexicon of a language. Italian differs minimally from many Italian dialects, which do not display the repetitive prefix *ri-*, but use an aspectual adverb (e.g. Piedmontese *t'lu dik* **turna** "[I] say it to you again") or an aspectual verb instead (e.g. Venetian **torno a** *magnar* "[I] eat again") (see Rohlfs 1969:360).

4. The similarities with clitic pronouns

The properties of *ri-* mentioned in section 2 are shared by other elements that appear adjacent to a verb without forming a phonological word with it: clitic pronouns.

Clitic pronouns do not trigger s-sonorization, cf. *lo [s]o / *lo [z]o,* [I] it know "I know it".

Clitic pronouns do not generally undergo deletion of the final vowel in front of verbs with initial vowel, cf. *lo amo* [I] him love "I love him".[5]

Clitic pronouns can undergo climbing, i.e., they can appear on a modal verb, but their interpretation depends on the embedded lexical verb, as in (19):

(19) Lo posso fare domani.   (= Posso farlo domani)
      [I] it can do tomorrow
      "I can do it tomorrow"

Differently from *ri-*, we can only find one instance of a clitic pronoun in one and the same sentence. This difference is independently explained in theta-theoretic terms: clitic pronouns are verbal arguments, and the source for verbal arguments is unique.[6]

Both *ri-* and clitic pronouns are moved onto the verb in the syntax. Do the similarities with clitic pronouns mean that incorporation is the same as cliticization?

5. Incorporation vs cliticization: *ri-* vs clitic pronouns

A closer look at the distribution of *ri-* reveals that there are important differences between *ri-* and clitic pronouns. The distribution of Italian *ri-* supports the current hypothesis that incorporation and cliticization are different syntactic processes.

---

[5].   Deletion of the vowel of the clitic pronoun, as in *l'amo* [I] him love "I love him", is archaic.

[6].   Double occurrence of one and the same clitic is marginally found in clitic-climbing contexts, cf. ?*Lo posso farlo domani* [I] it can do-it tomorrow "I can do it tomorrow" (see Kayne 1989:256f, note 37), and can be explained in terms of the lexicalization of the trace left by the clitic pronoun on the embedded lexical verb. The same process is not possible with the prefix *ri-*. When it appears twice, on the modal verb and on the lexical verb, it necessarily conveys the "again" meaning twice:

(i)   Ridevo richiamare Maria.
       [I] re-must re-call Maria

In other words, the sentence necessarily means that "I have again to call Maria again". This can be seen as a further difference between incorporation and cliticization.

Although incorporation and cliticization are both instances of head-to-head movement, the way in which head movement takes place differs in the two cases. Incorporation takes place out of the base position of the incorporated element, whereas cliticization takes place from an already derived position. In other words, incorporation is a one-step derivation, whereas clitic movement is a two-step derivation, the first step being an instance of XP-movement which is shared by weak elements, the second being a true instance of head-movement (cf. Sportiche 1989, Kayne 1994, Belletti 1999, Cardinaletti and Starke 1999).

The proposal here is that *ri-* is incorporated, not cliticized. The incorporation analysis explains why *ri-* is always closer to the finite verb than clitic pronouns, i.e., the incorporated adverb intervenes between the verb and the clitic pronoun(s):[7]

(20) a. Lo rifa / *Ri lo fa.
      [he] it re-does
      "he does it again"
   b. Lo ripuò fare / *Ri lo può fare.
      [he] it re-can do
      "he can do it again"

With infinitival and imperative verbs, *ri-* is always proclitic whereas clitic pronouns appear in enclitic position:

---

[7]. This happens in other languages, such as Greek, which has both clitic pronouns and incorporated adverbs. See (i), from Rivero (1992):

(i) To sigo-évrasa.
    [I] it slowly-boiled
    "I boiled it slowly"

A different word order is however found with the locative clitic *ci* "there" occurring in existential constructions with the verb "be" in some central Italian dialects. The example is taken from the dialect spoken in Arcevia as reported in (Rohlfs 1969:360) (also see note 12):

(ii) Chi ar c'era?
     who again there was?
     "who was there again?"

(21) a. Può rifarlo.
           [he] can re-do-it
           "he can do it again"
      b. Rifallo!
           re-do it!
           "do it again"

If the verb-enclitic order derives from the movement of the verb across the clitic pronoun (cf. Kayne 1991), (21) shows that *ri-* is moved together with the verb across the clitic pronoun. Once again, this is only possible if *ri-* attaches to the verb before verb movement across the clitic pronoun takes place, whereas clitic movement is not dependent on the verb until the head-movement step takes place.

6. The analysis of *ri*-separation

The main consequence of the incorporation analysis, combined with the hypothesis that excorporation is not a possibility of UG, is that *ri*-separation (see section 2.3) is not *ri*-climbing. In other words, *ri-* stops on the first available host verb and does not climb from a derived position to another. *Ri-* and pronominal clitics thus differ in this respect in spite of the apparent similarity.

Remember that there are two potential sources for *ri-*, namely the two aspectual positions individuated by Cinque (1999) for the full counterparts of *ri-*. This suggests that separated *ri-*, as in (7), repeated here as (22),

(22) a. È ristato fatto ieri.   (= È stato rifatto ieri)
      b. Ripossiamo prendere il vaporino.   (= Possiamo riprendere il vaporino)

is incorporated from the highest of the two positions available to repetitive adverbs, and no climbing has taken place. The passive auxiliary *stato* and the modal verb *possiamo* can appear before the (highest) repetitive adverb, as in (23), which thus provides the configuration for incorporation:

(23) a. È stato di nuovo messo tutto bene sugli scaffali.
          [it] has been again put all well on-the shelves
          "everything has again been put well on the shelves"
      b. Possiamo di nuovo prendere il vaporino.
          [we] can again take the boat

Notice that, contrary to (17), the sentences in (7)/(22) are not ambiguous. The repetitive prefix cannot modify the embedded lexical verb. To get this reading, the prefix can only incorporate to the lexical verb itself (as in e.g. (16a)).

Another consequence of the incorporation analysis is the following contrast between lexical and modal verbs. Although *ri-* can appear on a modal verb in what we have called *ri*-separation, it cannot appear twice on a modal verb, contrary to what happens with lexical verbs (see (14a)):

(24) a. Lo ha ririfatto.
          [he] it has re-re-done
          "he has re-re-done it"
      b. *Lo riripuò fare.
          [he] it re-re-can do

In (24a), as proposed above, the two instances of *ri-* attached to the lexical verb are incorporated from the two aspectual positions for repetitive adverbs, the lower and the highest one. In (24b), one of the two instances of *ri-*, the lowest one, violates the locality conditions on movement. It should incorporate on the lexical verb (cf. *Lo ripuò rifare*). It however cannot move across the lexical verb, hence the ungrammaticality of the sentence.

The ungrammaticality of (24b) thus confirms that *ri*-separation cannot be *ri*-climbing. If it were, nothing would block the climbing of two instances of *ri-*. Cf. the climbing of more than one clitic pronoun in clitic clusters: *Maria può dartelo*, *Maria te lo può dare* "Maria can give it to you".

Ri- contrasts with clitic pronouns in other climbing contexts. In what follows, we discuss long-distance climbing and restructuring verbs.

6.1. Long-distance climbing

Whereas there are some marginal instances of long-distance clitic climbing, as in (25a) (cf. Kayne 1991), *ri-* cannot be separated long-distance, (25b):[8]

(25) a. Non ti so cosa dire.
          [I] not to-you know what [to] say
          "I don"t know what to say to you"
      b. *Non riso cosa dire a Maria   (cf. Non so cosa ridire a Maria)
          [I] not re-know what [to] say to Maria

The clitic pronoun moves across the *wh-* word as a maximal category. This is confirmed by the fact that it triggers past-participle agreement on the highest verb: *Li ha saputi leggere* (cf. Roberts 1997).[9] On the other hand, the adverb *ri-* has no other choice than

---

[8]. In the presence of *ri-*, long-distance climbing of a clitic pronoun is ungrammatical both when *ri-* is moved to the matrix verb and when *ri-* is incorporated on the embedded verb:

(i)   *Non ti riso cosa dire.
       [I] not to-you re-know what [to] say

(ii)   ?*Non ti so cosa ridire.
       [I] not to-you know what [to] re-say, again

[9]. This is not a sufficient condition on clitic climbing. Clitic climbing is impossible out of embedded clauses, e.g. tensed clauses as in (i):

(i)   *Lo spera che farò.   (cf. Spera che lo farò)
       [he] it hopes that [I] will-do   [he] hopes that [I] it will-do
       "he hopes that I will do it"

This is also true of *ri-* separation:

(ii)   *Rispera che farò lo stesso.   (cf. Spera che rifarò lo stesso)
       [he] re-hopes that [I] will-do the same   [he] hopes that [I] re-will-do the same
       "he hopes that I will again do the same"

head movement, which is blocked in (25b) by the complementizer head of the embedded sentence.

6.2. *Ri- with restructuring verbs*

Ri- and clitic pronouns also behave differently with restructuring predicates such as perception, causative and motion verbs. When *ri-* appears on these verbs, the preferred reading is the one where *ri-* modifies them rather than the lexical verb: see the a. interpretations in (26), (27), (28) and (29), which are much better than the b. interpretations. This ambiguity, and the consequent preference for the matrix reading, never arises in the case of cliticization, since the clitic pronoun is an argument of the embedded lexical verb, as shown in (30):

(26)   L'ho rivisto leggere quel libro.
        [I] him have re-seen cross the street
   a. = L'ho di nuovo visto leggere quel libro.
   b. ??= L'ho visto leggere di nuovo quel libro.
        (cf. L'ho visto rileggere quel libro)

(27)   Gliel'ho rifatto leggere.
        [I] to him it have re-made see
        "I have again made him see it"
   a. = Gliel'ho di nuovo fatto leggere.
   b. ??= Gliel'ho fatto leggere di nuovo.
        (cf. Gliel'ho fatto rileggere)

(28)   È riandato a prendere il pane.
        [he] is re-gone to get the bread
   a. = È di nuovo andato a prendere il pane.
   b. ??= È andato a prendere di nuovo il pane.
        (cf. È andato a riprendere il pane)

(29)   Ho ricominciato a leggere quel libro.
        [I] have re-started to read hat book
   a. = Ho di nuovo cominciato a leggere quel libro.

    b. ??= Ho cominciato a leggere di nuovo quel libro.
       (cf. Ho cominciato a rileggere quel libro)

(30) a. L'ho visto leggere quel libro.
      b. Gliel'ho fatto leggere.
      c. Lo è andato a prendere.
      d. Lo ha cominciato a leggere.

This follows if restructuring verbs build a complex event together with the lexical verb, which *di nuovo* quantifies over.[10] In (26), (27), (28) and (29), *ri-* incorporates from the highest of the two repetitive aspectual positions.[11] Incorporation from the lowest one is blocked by the lexical verb itself.

7. Incorporation vs cliticization: *ri-* vs clitic adverbs

    Further support for the distinction between incorporation and cliticization comes from the comparison between *ri-* and clitic adverbs, such as the reduced forms of manner adverbs (*ben* "well" and *mal* "badly").

    In Italian, the reduced forms of these adverbs can appear in the word order in (31), where they precede the past participle. In this order, they are adjoined to the verb. Evidence for this comes from the observation, attributed in Cinque (1999:211, note 70) to Richard Kayne, that the adverb precedes the verb in participial clauses, as in (31c). In this type of clauses, the past participle is known to move to C (cf. Belletti 1990:Ch.2). The order "adverb past-participle" thus shows that the verb has moved to C together with the adverb:

---

[10]   For the different types of restructuring verbs, see Cinque 2001, in press, and Cardinaletti and Shlonsky 2002; for motion verbs, see Cardinaletti and Giusti 2001.

[11]   Notice also that in the case of aspectual and motion verbs, the incorporation of *ri-* from the specifier position modifying the embedded lexical verb is blocked by the prepositional head *a*. The XP-movement of clitic pronouns is never blocked by the presence of these prepositional heads.

(31) a. L'hai ben sistemata?

it-have [you] well placed?

"do you have placed it well?"

b. La valigia è stata ben sistemata.

the suitcase has been well placed

c. Una volta ben sistemato anche te, tuo padre si rilasserà.

once well placed you too, your father will relax

There are a number of distributional asymmetries between *ben* / *mal* on the one hand and *ri-* on the other.

First, *ben*, like *ri-*, can also appear before the passive past-participle auxiliary, but differently from *ri-* cannot climb to the modal verb:

(32) a. ?La valigia è ben stata sistemata.

the suit-case has well been placed

b. *Ben devi sistemare la valigia.

[you] well must place the suit-case

Assuming, as we did above, that excorporation is not a possibility provided by UG, the location of *ben* in (32a) cannot be due to direct incorporation from the base position because this would lead to a violation of locality conditions. *Ben* must move to the verb *stata* from a position closer to it and therefore higher than *sistemata*. Such a position could be identified with the specifier occupied by the weak version of the adverb *bene* (cf. Cardinaletti and Starke 1999:Section 9.1.4). This implies that *ben* in (32a) is a clitic adverb, which moves onto the verb *stata* from the derived position of the weak counterpart *bene*, a specifier which can be higher than the head reached by the passive past-participle of the lexical verb (cf. Cinque 1999:Section 4.24, from which (33) is taken):

(33) Questo genere di spettacoli è sempre stato bene accolto da tutti.

this kind of shows has always been well received by everybody

The ungrammaticality of (32b) follows from the fact that in Italian, infinitival verbs move to a position which always precedes the position of the weak adverbs *bene* and *male*: cf. the contrast in (34):

(34) a. Devi sistemare bene la valigia.
          [you] must place well the suit-case
      b. *Devi bene sistemare la valigia.

The infinitival verb represents the only host for the cliticized adverb: cf. *Devi ben sistemare la valigia*. The adverb cannot cliticize to higher verbs such as modals, hence the ungrammaticality of (32b).

Furthermore, contrary to French (35), Italian does not display long movement of weak adverbs, as shown in (36) (see Cinque 2002 for a recent discussion). This explains why (36c) cannot be the source of (32b):

(35) a. Il a bien dû se comporter.   (Kayne 1975)
          he has well must himself behave
          "He must have behaved well"
      b. J'ai mal dû raccrocher.   (Kayne 1991:655,fn.23)
          I have badly must hang-up
          "I must have hung (the phone) up badly / wrongly"

(36) a. *Ha ben dovuto comportarsi.
          [he] has well must behave-himself
      b. *Ho mal dovuto riattaccare.
          [I] have badly must hang-up
      c. *Ha ben dovuto sistemare la valigia.
          [he] has well must place the suit-case

To summarize: *ben / mal* are cliticized adverbs, the cliticized counterpart of the weak adverbs *bene* and *male*, whereas *ri-* is an incorporated adverb, moved directly from the base position.

8. A restriction

Ri- cannot appear on "have" and "be":[12]

_____

[12].   In the Italian dialects in which the lexical verb *have* requires the clitic *ci* (*C'ha l'influenza*, "he has a

(37) a. ?*Riho chiamato la proprietaria.   (cf. Ho richiamato la proprietaria)
         [I] re-have called the owner
     b. ?*Riè dovuto partire.   (cf. È ridovuto partire)
         [he] re-have had to leave

(38) a. ?*Riha l'influenza.   (cf. Ha di nuovo l'influenza)
         [he] re-has a flu
     b. ?*Riera malato.   (cf. Era di nuovo malato)
         [he] re-is sick
     c. ?*Riè l'avvocato di Gianni.   (cf. È di nuovo l'avvocato di Gianni)
         [he] re-is the lawyer of Gianni

The tentative proposal to explain these facts is that *ri*- cannot incorporate to auxiliaries.

---

flu"), the respective order of *ci* and *ri*- is fixed, as in (i). The opposite order in (ii) is ungrammatical:

(i)   Ric'ha l'influenza / Ri c'ha l'influenza.

(ii)   *Ci riha l'influenza.

This is explained if *ci* is a predicate (cf. Moro 1997). *Ci* is incorporated to the verb before the aspectual adverb *ri*. Difficulties however arise as to how (i) should be spelled. Neither of the possibilities in (i) is satisfactory.

    The same paradigm is found with the idiomatic form *c'entra* "to have to do with", and the same problem in the graphic transcription arises (see (iiib)) (see Renzi 2000). Only (iii) is possible, while (iv) is ungrammatical, or better, loses the idiomatic meaning and equals "This enters there again", or "This falls within it":

(iii) a.   Questo c'entra eccome.
             "that's got indeed to do with it"
       b.   Questo ric'entra eccome. / Questo ri c'entra eccome. / Questo ricentra eccome.
             "that's got indeed to do with it again"

(iv)   *Questo ci rientra.

9. Conclusions

In this paper, the Italian repetitive prefix *ri-* has been analysed as an incorporated adverb. Purely morphological analyses in terms of word-formation rules have been shown to be inadequate. *Ri-* also displays a number of distributional properties which distinguish it from cliticized elements, both nominal (clitic pronouns) and adverbial (clitic adverbs). The different distribution follows from the different derivational history of incorporation and cliticization.

References

Baker, M. (1988). *Incorporation*, University of Chicago Press, Chicago.

Belletti, A. (1990). *Generalized Verb Movement*, Rosenberg and Sellier, Turin.

Belletti, A. (1999). "Italian/Romance clitics: Structure and derivation", in H. van Riemsdijk (ed.) *Clitics in the Languages of Europe*, vol. 8 of *Language Typology*, Mouton de Gruyter, Berlin, pp. 543-579.

Cardinaletti, A. and G. Giusti (2001). "'Semi-Lexical' Motion Verbs in Romance and Germanic", in N. Corver and H. van Riemsdijk (eds.), *Semi-lexical categories. On the function of content words and the content of function words*, Mouton de Gruyter, Berlin, pp. 371-414.

Cardinaletti, A. and U. Shlonsky (2002). "Clitic positions and restructuring in Italian", ms., University of Venice and University of Geneva.

Cardinaletti, A. and M. Starke (1999). "The Typology of Structural Deficiency: A Case Study of the Three Classes of Pronouns", in H. van Riemsdijk (ed.) *Clitics in the Languages of Europe*, vol. 8 of *Language Typology*, Mouton de Gruyter, Berlin, pp. 145-233.

Cinque, G. (1999). *Adverbs and the Universal Hierarchy of Functional Projections*, Oxford University Press, Oxford.

Cinque, G. (2001). "'Restructuring' and the Order of Aspectual and Root Modal Heads", in G. Cinque and G. Salvi (eds.), *Current Studies in Italian Syntax*. Essays Offered to Lorenzo Renzi. Elsevier, Amsterdam, pp. 137-155.

Cinque, G. (2002). "A Note on "Restructuring" and Quantifier Climbing in French", *Linguistic Inquiry* 33.4, pp. 617-636.

Cinque, G. (in press). "'Restructuring' and Functional Structure", in L. Rizzi (ed.), *The Structure of CP and IP*, Oxford University Press, New York.

Kayne, R. (1975). *French Syntax*, MIT Press, Cambridge, Mass.

Kayne, R. (1989) "Null Subjects and Clitic Climbing", in O. Jaeggli and K.J. Safir (eds.) *The Null Subject Parameter*, Kluwer, Dordrecht, pp. 239-261.

Kayne, R. (1991). "Romance clitics, verb movement, and PRO", *Linguistic Inquiry* 22, 647-686.

Kayne, R. (1994). *The Antisymmetry of Syntax*, MIT Press, Cambridge, Mass.

Keyser, J.S. and T. Roeper (1992) "Re: The Abstract Clitic Hypothesis", *Linguistic Inquiry* 23.1, pp. 89-125.

Moro, A. (1997). *The Raising of Predicates*, Cambridge University Press, Cambridge.

Rainer, F. (1986). "Recursiveness in word-formation, with special regard to Spanish", *Acta Linguistica Academiae Scientiarum Hungaricae*, Tomus 36 (1-4), pp. 197-209.

Renzi, L. (2000). "Le tendenze dell'italiano contemporaneo. Note sul cambiamento linguistico nel breve periodo", *Studi di lessicografia italiana* XVII, pp. 279-319.

Rivero, M.L. (1992). "Adverb incorporation and the syntax of adverbs in Modern Greek", *Linguistics and Philosophy* 15, pp. 289-331.

Roberts, I. (1997). "Restructuring, Head Movement and Locality", *Linguistic Inquiry* 28.3, pp. 423-460.

Rohlfs, G. (1969). *Grammatica storica della lingua italiana e dei suoi dialetti, III: Sintassi e formazione delle parole*, Einaudi, Torino.

Scalise, S. (1983). *Morfologia lessicale*, Cafoscarina, Venezia.

Sportiche, D. (1989). "Movement, agreement and case", ms., UCLA.