Re-prefixation and complement selection in English \*

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#### 0. Introduction

The purpose of this paper is to deal with the question of why re-prefixation affects complement selection of a verb within the Government and Binding framework. In section 1. I will pose four questions about the relation between re-prefixation and complement selection of a verb. In section 2. I will propose theoretical assumptions about re-prefixation. In section 3. I will answer the four questions by invoking the theoretical assumptions. Section 4 is a conclusion.

## 1. Four Questions

It is well known that there are some cases where re-prefixation affects complement selection of verbs. For example, as shown in (la, b) below, the change in categorial selection from PP to NP takes place as a result of re-prefixation to the verb think, while no change arises in the case of re-prefixation to verbs taking either no complements or only NP complements, as in (2a, b) below:

- (1) a. John thought \*(about) the problem.
  - b. John rethought (\*about) the problem. 1
- (2) a. John (re)appeared.
  - b. John (re)read the book.

With these and other facts in mind. Carlson & Roeper (1980) (henceforth, C & R (1980)) propose the following descriptive generalization: re + V is a complex verb created in the lexicon which functions either as a verb taking no complement (an intransitive verb) or as a verb taking only an NP complement. Their generalization, however, is inadequate, since it has many counterexamples pointed out by Smith (1981) and Randall (1985).

a few of which are exemplified below:

(3) a. (re)allude to the scandal (Randall (1985, 54)) b. (re)decide on the solution (Ibid. p. 55)

Then one question arises: why is it that the change in categorial selection takes place in such cases as (1b), while it does not in cases like (3a. b)?

Second, why is it that re-prefixation applies neither to verb-particle combinations nor to resultatives and small clauses?

- (4) \*They rewrote the proposal up. (C & R (1980, 129))
- (5) \*We remade her beautiful. (Ibid. p. 141)
- (6) #Hector reconsidered Mary a fool. (Randall (1985, 35))

The third question is concerned with verbs with two obligatory arguments. Why is it that *re*-prefixation does not apply to these types of verbs?

- (7) #John reput the dog in the kennel. (C & R (1980, 142))
- (8) a. ? Re-read Bill a book. (Ibid. p. 149)
  - b. \*We regave him the money. 2

(Roeper & Keyser (1989, 3))

Fourth, why is it that re-prefixation does not allow the object of a verb to be missing and that it applies not to pure intransitive verbs but to ergative verbs?

- (9) a. She read (the article).
  - b. She reread \*(the article).
- (10) a. ergatives: reappear, re-enter, reawaken, etc.
  - b. pure intransitives: \*resneeze, \*redance, \*relaugh.
     etc.
- (a-b, cited in Matsuzawa (1988, 82-83) from Horn (1980, 136))

#### 2. Theoretical Assumptions

Before answering those questions, we make some theoretical assumptions. First, based on the fact that the noun reexamination is derived in the lexicon by suffixation of -tion to the prefixed verb reexamine, we assume, in line with C & R (1980), that re + V is a complex verb created in the lexicon.

Second, we turn to three special properties of the prefix re. namely, its function as a modifier, its scope marking function and its aspectual property of perfectiveness. With its modification function, the prefix re imposes the repetition of the action expressed by a verb. And to fulfill its scope-marking function. it requires that some kind of an object connected with the previous (first) action should be the same as that connected with the repeated (second) action. Thus, on the reading of the sentence John reread the book, the book which John read the second time must be the same one that he read the first time. From this observation, we can safely say that though it is attached to a verb in the lexicon, the prefix re takes scope not limited to the verb itself but extended to the complement of the verb. We will see later a mechanism to handle this scope-taking property; for the moment we restrict the scope of re in syntactic terms as follows:

(11) At LF the prefix re can take scope only over the obligatory NPs governed by a verb. 3

The configurational notion of government will be defined later in this section.

As pointed out by C & R (1980), the prefix re has another property, the aspectual property of perfectiveness: that is, re adds the perfective sense to the verb it modifies. Observe the following pair of examples which illustrates the point:

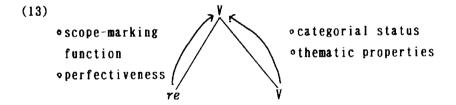
(12) a. They played the game until 6 o'clock.

b. They replayed the game until 6 o'clock.

(a-b from C & R (1980, 136))

As C & R observe, while the game was never completed until 6 o'clock in (12a), it was completed and replayed again and again until 6 o'clock in (12b). For a detailed discussion, see Wechsler (1989). See also Tenny (1987) for a similar argument about resultatives and secondary predicates.

Third, we assume that the properties of a complex verb re + V are determined by the Percolation Convention proposed by Selkirk (1982), which says that the features of a head and those of a nonhead unspecified in the head percolate up to its higher (mother) node. Thus the complex verb re + V inherits its categorial status V and thematic properties from the lower V (the head) (see Matsuzawa (1988) for a similar assumption). And it inherits the scope-marking function and the aspectual property of perfectiveness from the prefix re (the nonhead).



Fourth, a little mention should be made as to syntactically reanalyzed complex predicates. In the theoretical development of generative grammar, syntactically reanalyzed complex predicates have been studied by Rouveret & Vergnaud (1980), Baker (1988), among others. In order to account for the fact that complex predicates, even when morphologically separated as two (or more) distinct words, behave as single units syntactically at S-structure or at LF, Rouveret & Vergnaud (1980) introduce the mechanism of "Thematic Reindexing" and Baker (1988) proposes "Incorporation Theory". Kayne (1981), in the context of dealing with movements from within the structure V [pp P NP], proposes the device of

"co-superscription". Not discussing which is the theoretically best way of analyzing syntactically created complex predicates, we merely assume, adopting the common spirit of those analyses, that the elements constituting a syntactically reanalyzed complex predicate bear the same index, which is sufficient for our present purpose.

Fifth, we assume a configurational notion of government as follows:

## (14) government

 $\alpha$  governs  $\beta$  iff  $\alpha$  m-commands  $\beta$  and there is no  $\gamma$ .  $\gamma$  a barrier for  $\beta$ , such that  $\gamma$  excludes  $\alpha$ . (Chomsky (1986, 9))

And we also assume that the government relation of X is extended to the complement of Y if X and Y are syntactically reanalyzed to bear the same index; otherwise, the government relation is blocked by the minimality condition put forth by Chomsky (1986).

(15) In the structure  $\{\chi', X_i \mid \{\gamma p \dots Y_i \dots \}\}$ , the X governs everything governed by the Y.

Assumption (15) is essentially identical with Baker's (1988) The Government Transparency Corollary (GTC).

(16) The Government Transparency Corollary (GTC)

A lexical category which has an item incorporated into
it governs everything which the incorporated item
governed in its original structural position.

# 3. Explanation

# 3.1. The First Question

The first question, concerned with the contrast between the two types of PPs, is repeated here as follows: why does re-pre-fixation affect the subcategorizations of verbs like think, while

it does not affect those of verbs like allude and decide?

- (17) a. think \*(about) the problem
  - b. rethink (\*about) the problem
- (18) a. allude to the scandal
  - b. realiude to the scandal
  - c. decide on the solution
  - d. redecide on the solution

One might expect that there is some difference in syntactic connection between these two types of verb-preposition combinations, but both of them can undergo pseudo-passivization as exemplified below:

- (19) a. The problem is thought about.
  - b. The scandal is alluded to. (cf. Randall (1985, 78))

Thus the prepositions about and to are (abstractly) incorporated into the verbs think and allude respectively in the sense of Baker (1988). Within our system, the verbs and the prepositions are reanalyzed as complex predicates so that they bear the same index, as represented below in the abstract form:

(20) 
$$[v'V_{i} [PPP_{i} NP]]$$

There is no discernible difference between the two types of verbpreposition combinations in this respect; it can merely be
expected that examples (18b, d) are acceptable. For example, the
semantic interpretation of (18b) requires that the scandal that
was alluded to the first time is the same one that is alluded to
the second time. Given that the V and the P are reanalyzed to
bear the same index, the government relation of the V is extended
to the NP governed by the P (see assumption (15)). Therefore the
prefix re takes scope over the NP syntactically so that the
semantic requirement can be met properly. Note incidentally that

the  $\theta$ -role and the case can be assigned properly. In (18b), the  $\theta$ -role of the verb allude percolates up to the higher verb re-allude and is assigned to the PP complement to the scandal (or ultimately to the NP the scandal)  $rac{1}{2}$  and the structural case is assigned to the NP the scandal by the P to.

How, then, do we distinguish the two types of complex verbs? Consideration of the difference in categorial status between NP and PP will be helpful to answering this question. As is well known. NP complements receive the structural cases from verbs, while PP complements do not. And the NP immediately dominated by PP receives the case from P. This suggests that unlike the PP complements in (18b, d), the NP in (17b) must receive a structural The only candidate for assigning the structural case is the preceding (complex) verb. Then another question comes to our mind: does the verb think or the complex verb rethink have the structural case assigning capacity? Interestingly enough, the verb think has that capacity (though it does not assign the structural case when it selects the PP complement about NP). as can be seen from the following examples showing that it can appear in the verb-particle construction and the ECM (Exceptional Case Marking) construction:

- (21) a. think the matter over
  - b. I thought her rather clever.

Examples (21a, b) suggest that the verb *think*, when it combines with some element (in this case, the particle *over* or the adjective *clever*) to form a complex predicate, can assign the structural case to the following NP. Thus we have the following stipulation:

(22) The verb think (or the prefixed verb rethink) must assign the structural case to the following element on the condition that it combines with something to

constitute a complex predicate or a complex verb.

Assuming that the prefix re and the verb think combine together in the lexicon to constitute a complex verb. the structural case assigning capacity of the verb think is invoked and is transmitted to the higher verb rethink so that the complex verb assigns the structural case to the following element. the complement selection of the complex verb rethink is categorially NP, not PP (which does not receive the structural case). Then, another question is, why does the verb think select the PP complement though it has the structural case assigning capacity? In other words, why does the verb think assign the structural case only when it functions as a constituent of a complex verb or of a complex predicate? The reason for this is not completely clear. so we only speculate as follows: in the case of think about NP. the verb think and the preposition about are reanalyzed to form a complex predicate as in (20), but with regard to the case marking, the preposition, not the verb, is the closer governor for the NP so that the structural case is assigned to the NP by the preposition. On the other hand, the other cases of the complex verb and the complex predicates with the verb think show that V is the category which functions as the closer governor for the following Thus the structural case assigning capacity of the verb think is invoked and the structural case is assigned to the NP. Therefore we restate stipulation (22) as follows:

(23) The verb think (or the prefixed verb rethink) must assign the structural case to the following element on the condition that it combines with something to constitute a complex predicate or a complex verb and V is the category which functions as the closer governor for the element.

Other examples showing the same pattern are listed below:

(24) a. Mary reworked (\*on) the proof.

(Randall (1985, 88-89))

b. John retalked (\*about) the farm program.

(Matsuzawa (1988, 38))

c. The arrow re-pierced (\*through) the board.

(C & R (1980, 343))

Note that the verbs in examples (24a-c) also have the structural case assigning capacity. On the other hand, the verbs allude and decide do not have that capacity so that they cannot assign the structural case, selecting the PP complements even when reprefixation is applied to them. 8 These types of verbs are as follows:

(25) reconsent to the plan, resettle on the salary, etc. (Randall (1985, 55))

Summarizing the discussion so far, we have the following stipulations:

- (26) a. Verbs (like think) which have the capacity to assign a structural case (or prefixed verbs (like rethink) which inherit that capacity) must assign it to the following element on the condition that they combine with something to constitute complex verbs or complex predicates and V is the category which functions as the closer governor for the element.
  - b. Verbs (like allude) which do not have the capacity to assign a structural case (and prefixed verbs (like reallude)) cannot assign it to the following element even when they combine with something to constitute complex verbs or complex predicates.
- 3.2. The Second Question

  Let us next turn to the question of why re-prefixation

applies neither to verb-particle combinations nor to resultatives and small clauses?

- (27) (=(4)) \*They rewrote the proposal up.
- (28)(=(5)) \*We remade her beautiful.
- (29)(=(6)) #Hector reconsidered Mary a fool.

The unacceptability of example (27) can be accounted for in the following way. The structure of example (27) is represented as in (30) below. if we accept a part of Kayne's (1985) idea, which says that in the sequence V NP Particle (Prt), the NP and the Prt constitute a projection of Prt:

(30) They 
$$[v']$$
 wrote  $[Prt''(orPrt')]$  the proposal up ]

In structure (30), the verb wrote selects the projection of the particle up. Another selectional property of this construction should also be somehow represented: the verb wrote and the particle up compositionally select the NP the proposal. Within our system, since the verb and the particle are syntactically reanalyzed to form a complex predicate, that property is represented by co-indexation:

Then a question arises: is the NP properly selected by the complex predicate wrote up when re-prefixation is applied? Consider the following structure:

(32) They 
$$[_{V_i}$$
 re wrote  $]$   $[_{NT}$   $(_{or} Rri')$  NP  $Prt_i$   $]$ 

In structure (32), the verb wrote and the Prt cannot form a complex predicate because the intervening prefix re, functioning as the word-internal modifier and combining with the verb wrote, does

not allow them to do so. Thus the verb and the particle cannot compositionally select the NP and example (27) (with structure (32)) is ruled out as unacceptable.

The same explanation holds true of resultatives and small clauses. Observe the following examples:

(33) a. #He redrove the man crazy.

(Roeper & Keyser (1989, 12))

b. (=(5)) \*We remade her beautiful.

(34)(=(6)) #Hector reconsidered Mary a fool.

The structure of resultatives and that of small clauses are analyzed either as (35a) or as (35b) below:

(35) a. NP 
$$\begin{bmatrix} \mathbf{v}' & \mathbf{V} & \mathbf{NP} & \mathbf{XP} \end{bmatrix}$$
  
b. NP  $\begin{bmatrix} \mathbf{v}' & \mathbf{V} & \mathbf{E}_{\mathbf{c}} & \mathbf{NP} & \mathbf{XP} \end{bmatrix}$ 

Putting aside the question of which structure they take. let us turn to their common property: the V and the X. compositionally selecting the NP. are reanalyzed to function as a complex predicate. Again, the V and the X cannot form a complex predicate in (33a, b) and (34) because of the prefix re intervening between them. 13 Therefore examples (33a, b) and (34) are unacceptable, as expected.

If, on the other hand, the XP in (35) is not an obligatory element, the V and the X are not reanalyzed and the sentence is correctly predicted to be grammatical, with the prefix re taking scope only over the object NP:

(36) John repainted the house red. (cf. C & R (1980, 151), Roeper & Keyser (1989, 13))

One of the interpretations of (36) is said to be as follows: John painted the house green the first time and repainted it red the second time.

#### 3.3. The Third Question

Now let us answer the third question of why re-prefixation does not apply to verbs with two obligatory arguments. Consider the following example:

(37)(=(7)) \*John reput the dog in the kennel.

Again, the same explanation can be made as to the unacceptability of example (37), if Kayne (1981) is correct in suggesting on the basis of the possibility of wh-movement that the verb put and the preposition in are syntactically reanalyzed (co-superscripted in Kayne's terms) to form a complex predicate (e.g. what did John put the dog in?). <sup>14</sup> Consider (38) below, which represents the structure of (37):

(38) John [
$$_{\mathbf{V}'}$$
[ $_{\mathbf{V}_{i}}$  re put ] NP [ $_{\mathbf{PP}}$  P; NP ] ]

In structure (38), the verb put and the preposition in cannot constitute a complex predicate because of the intervening prefix re. Hence the unacceptability of example (37). The verb locate. on the other hand, takes one obligatory argument NP and one optional PP.

(39) John located the dog (in the kennel).

Since the PP in the kennel in example (39) is optional, the verb locate and the preposition in are not syntactically reanalyzed to form a complex predicate. Thus, re-prefixation is applied without violation, and the scope of the prefix re is limited only to the obligatory argument NP the dog governed by the verb locate, as correctly expected from the semantic interpretation of example (40) below.

(40) John relocated the dog in the kennel. (C & R (1980, 356))

Let us next turn to re-prefixation in double object constructions.

(41)(=(8)) a. ?Re-read Bill a book. b. #We regave him the money.

Before explaining the (slight) oddity of (41), we introduce Baker's (1988) analysis of a double object construction.

(42) a. We gave Bill the money. b. NP  $\begin{bmatrix} v' & V & [pp] & p \end{bmatrix}$  NP  $\begin{bmatrix} V & V & [pp] & P \end{bmatrix}$ 

Baker assumes that the D-structure of (42a) is something like (42b) and that the two rules he terms "P-Incorporation" and "N-V Reanalysis" are applied to (42b) to produce the following S-structure:

(43) We 
$$[v'[v v_j + \emptyset_i][p_P t_i NP][p_P N_j]$$

In (43), t is the trace of the null preposition pleft by "P-Incorporation" and the same index j is assigned to the V and the N by "N-V Reanalysis". As to the question of why the direct object undergoes "N-V Reanalysis", he answers as follows: the verb give has the capacity of assigning one structural case, which is assigned to the indirect object NP as a result of "P-Incorporation", and thus, the direct object cannot receive the structural case. Then it undergoes another process of "N-V Reanalysis" to be "directly theta connected" to the verb and to be interpreted ("identified" in Baker's terms) at PF even if it lacks the structural case.

Now we are in a position to explain the (slight) oddity of (41a, b). If Baker is correct in assuming that "N-V Reanalysis"

is applied in the double object construction, the same explanation can be given: when 're-prefixation is applied in the lexicon to the verb give to produce the complex verb regive, further application of "N-V Reanalysis" in the syntax does not make possible the "direct theta connection" between the V and the N because of the intervening prefix re. Again examples (41a, b) are unacceptable, as expected.

#### 3.4. The Fourth Question

Finally let us answer the fourth question of why re-prefixation does not allow the missing object and it applies not to pure intransitives but to ergatives:

- (44)(=(9)) a. She read (the article).
  - b. She reread \*(the article).
- (45)(=(10)) a. ergatives: reappear. re-enter, reawaken, etc.
  - b. pure intransitives: \*resneeze, \*redance.\*relaugh, etc.

The contrast found in (44a) and (44b) can be explained by the aspectual property of perfectiveness inherent in the prefix re, which percolates up to the higher complex verb re + V by the convention. Thus the complex verb meets the following condition imposed by the prefix re: some kind of an element internally thematically related with the verb (in other words, some kind of an element receiving the internal  $\theta$ -role of the verb) must be syntactically specified in the complement position in order for the action expressed by the verb to be completed. For example, as C & R (1980) point out, while to write does not, to write a letter carries the actual completion of the action expressed by to write because the complement a letter is syntactically specified to show the termination of the action. Then (44a) is contrasted in acceptability with (44b) due to the presence or absence of the complement. Other examples are illustrated below:

- (46) a. Mary reargued \*(the case) with John.
  - b. The man redrove \*(the car) into the garage.

(a-b from Fraser (1974, 31))

The contrast as in (45a, b) between ergatives and pure intransitives can be explained by the same property of perfectiveness (which requires some kind of an element receiving the internal  $\theta$ -role to be syntactically specified in the complement position) and by the claim that while ergatives have internal  $\theta$ -roles to assign, pure intransitives have only external  $\theta$ -roles to assign (cf. Perlmutter (1978). Burzio (1986)). While ergatives have internal  $\theta$ -roles to assign, which are transmitted to higher complex verbs by the Percolation Convention, pure intransitives do not, and thus, the requirement by the perfective property of the complex verb re + V can be met properly in the case of ergatives, not in the case of pure intransitives. Therefore the examples in (45a) are acceptable and those in (45b) unacceptable. Another pair of examples containing the verbs mass and amass illustrates the same point:

- (47) a. \*The crowd remassed quickly.
  - b. The crowd reamassed quickly.

(a-b from Keyser & Roeper (1984, 397-98))

If, as Keyser & Roeper argue, mass is a pure intransitive verb and amass is an ergative verb, the contrast found in (47a, b) can also be correctly predicted within our system. See Keyser & Roeper for similar examples.

#### 4. Conclusion

In this paper, I have assumed that re + V is a lexically created complex verb which inherits the categorial status and the thematic properties from the lower V and inherits the scopemarking function and the aspectual property of perfectiveness from

the prefix re. By invoking these assumptions, the stipulations about the structural case marking and the general principle of government, I have answered the four questions about the relation between re-prefixation and complement selection of a verb within the Government and Binding framework.

#### Notes

- \* This is a revised version of a paper read at the Eighth National Conference of the English Linguistic Society of Japan held at Rikkyo University on November 17, 1990. I am very grateful to Takayasu Namiki. Tsuyoshi Ohishi, and other conference participants for their valuable comments and suggestions. I am also indebted to Shinji Saito for his helpful comments on an earlier version of this paper. Special thanks go to Masaharu Shimada, Shin-ichi Tanaka and Mikinari Matsuoka for their comments and advice. Needless to say, all remaining errors and inadequacies are strictly my own.
- <sup>1</sup> Throughout this paper, the italics in the examples are mine.
- <sup>2</sup> Judgments differ as to re-prefixation in double object constructions. Smith (1981) judges that while to-datives allow re-prefixation as in (i). for-datives do not as in (ii):
  - (i) a. I reforwarded them the package.
    - b. Mary reread John the story.
  - (ii) a. \*Mary reheated John the soup.
    - b. \*Susan replayed Paul the sonata.

Wechsler (1989) judges that re-prefixation is possible in the case of to-datives:

(iii) John re-sent Mary the letter.

<sup>3</sup> Here the NPs include those governed by a verb which, together with another element, constitutes and functions as a complex predicate. Thus *re* takes scope over the NP in a structure like (i) below (with the V and the P reanalyzed to form a complex predicate):

(i) 
$$[v'[v] re + V_i][pp P_i NP]$$

'It might be possible to assume that re is moved to the Spec of VP, to the V' adjoined position, or to the head of Aspectual Phrase (if it exists) at LF in order to fulfill the scope-marking function. This assumption, however, is problematic, because it runs counter to the Generalized Lexical Hypothesis (GLH) explicitly stated by Lapointe (1980) which says that syntactic rules are not allowed to refer to the internal morphological structures of words. By contrast, Anderson (1982) claims that this hypothesis is too strong and that inflectional morphology, as distinct from derivational morphology, is relevant to the (morpho-)synfax. Without positive evidence showing that re with the perfective aspect is treated in the same way as inflectional morphology, we adopt the Percolation Convention to deal with the scope-marking function of re.

<sup>5</sup> The definitions of the terms "m-command", "barrier" and "exclude" are as follows:

#### (i) a. m-command

 $\alpha$  m-commands  $\beta$  iff  $\alpha$  does not dominate  $\beta$  and every  $\gamma$ ,  $\gamma$  a maximal projection, that dominates  $\alpha$  dominates  $\beta$ . (Chomsky (1986, 8))

#### b. barrier

 $\gamma$  is a barrier for  $\beta$  iff (a) or (b):

- (a)  $\gamma$  immediately dominates  $\delta$ ,  $\delta$  a BC for  $\beta$ ;
- (b)  $\gamma$  is a BC for  $\beta$ ,  $\gamma \neq IP$ .
- cf. BC ("blocking category")

 $\gamma$  is a BC for  $\beta$  iff  $\gamma$  is not L-marked and

#### $\gamma$ dominates $\beta$ .

([bid. p. 14)

c. exclude

 $m{lpha}$  excludes  $m{eta}$  if no segment of  $m{lpha}$  dominates  $m{eta}$ . (Ibid. p.9)

6 Roughly speaking, the minimality condition requires that the X cannot govern the complement of the Y in (i) below:

# (i) $\begin{bmatrix} \mathbf{x'} & \mathbf{X} & \begin{bmatrix} \mathbf{y_P} & \dots & \mathbf{Y} & \dots \end{bmatrix} \end{bmatrix}$

- There are two possibilities as to the way of  $\theta$ -role assignment in this case. One is that it is first assigned to the PP complement, and then, transmitted to the immediately dominated NP complement, with the index i being ignored in  $\theta$ -marking. The other is that it is assigned directly to the NP complement by the compositional re + V + P reallude to. We will return to these possibilities in note (12).
- \* Decide in Decide the question has the structural case assigning capacity, but it has the meaning "to arrive at an answer", which is different from the meaning "to make a choice or judgment" of decide in decide on NP.
- 9 Hint in rehint at the solution (Randall (1985, 54)) is a counterexample to our explanation.
- <sup>10</sup> Here we do not define a strict formulation of the compositional selection, but merely suggest a possibility that the compositional selection might be somehow dealt with by the  $\theta$ -Theory.
- this case, the base verb and the particle) must be syntactically (or morphologically) adjacent to each other in order to constitute a complex predicate. We cannot make a principled explanation for it, so we merely point out a phenomenon which can be dealt with in a similar way.

- (i) a. ??Gli; ritenevo [sc tua sorella affezionata e;]
  - (1) to-him believed your sister affectionate
  - b. Gli; ritenevo [scej affezionata e; anche tua sorella;]
    - (I) to-him believe affectionate also your sister
      (Rizzi (1986, 82))

Rizzi (1986) claims that while the clitic trace is not bound within the small clause counting as the governing category for it in (ia). It is bound by gli within the main clause counting as the governing category in (ib) (because the main verb ritenevo and the embedded predicate affezionata are reanalyzed with no phonetic element intervening between them and the governing category for the clitic trace is extended to the main clause.

12 One might ask why the complex verb reallude to is acceptable in spite of the possibility of having an index relation similar to that in verb-particle constructions. As to this problem we have two possible solutions. One is as follows: the preposition to is lexically uniquely selected by the verb allude and there is so close a lexical connection between them that selection of the other prepositions cannot be permitted. Thus the verb and the preposition first form a (lexically created) complex verb behaving as if it were a transitive verb, which then combines with re to form another complex verb. In this case, the internal role of allude (or. in fact. allude to) is transmitted to the higher complex verb reallude to and is assigned to the NP complement (the second possibility of heta -marking in note (7)). The other is based on an assumption that the preposition to selected by the verb allude, being semantically of little significance, does not contribute anything to heta -marking but functions only as a case-marker of the following NP. Therefore re and allude form a complex verb to assign the internal heta-role to the following PP and essentially to the immediately dominated NP because the P to lacks semantic content and the PP is essentially identical with the NP with respect to heta-marking (the first

possibility of  $\theta$ -marking in note (7)). This is entirely different from the case in the verb-particle construction (27), where up has semantic content and can be replaced by other particles compatible with write. The same is true of the resultatives and small clause in (33)-(34), where crazy, beautiful and (a) fool have semantic content and can be replaced by other words or phrases compatible with drive, make and consider respectively.

13 Stowell (1987) assumes that consider and honest in (i) below undergo Restructuring (Incorporation) at LF:

## (i) John considered Mary honest.

- pseudo-passivization (\*The kennel was put the dog in) that the verb and the preposition are not reanalyzed as a complex predicate, then the government relation of the verb is not extended to the NP immediately dominated by the PP and the prefix re cannot take scope over it. However, the interpretation of example (36), if we are forced to interpret it, must be as follows: John put the same dog in the same kennel twice. Hence a syntactico-semantic conflict.
  - 15 See Baker for further detail.
- 15 If Baker's analysis of double object constructions is correct, however, the acceptability of to-datives (the judgment by Smith and Wechsler) cannot be explained within our system.

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