SOME REMARKS ON THE LEXICAL NATURE OF RESTRUCTURING PREDICATES

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1. Introduction

Restructuring and Functional Heads constitutes one part of the project known as the cartography project, which attempts to map out an elaborated clausal architecture in the domain of functional categories. Cinque’s previous (1999) book has a significant role in promoting the cartography project, in which a universal hierarchy of functional projections in the domain of IP is laid out, based on a detailed study of the distribution and properties of adverbs. To support and refine the proposed functional hierarchy, the book under review explores a rather different area of syntax, the phenomena known since Rizzi (1982) as restructuring, through which the author attempts to make a further contribution to the development of the cartography project. Cinque presents a refreshing way of looking at the classical issues of restructuring under the theory of functional projections. He expands the scope of investigation by providing new findings on the nature of restructuring verbs in Romance beyond the well-known restructuring effects discussed extensively in the previous literature. In addition, his view of restructuring enables us to consider restructuring as a general phenomenon that should fall under the scope of principles of universal grammar, rather than an ex-

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ceptional or peripheral phenomenon as has often been assumed. There is no denying that his theory of restructuring will have a considerable influence not only on the study of restructuring but also on syntactic theory in general.

In addition to a brief (but substantive) introduction, this book consists of eight chapters. The first four chapters are concerned with restructuring, which is the central theme of the book. Chapter 1 presents a general theory of restructuring which claims that restructuring verbs are functional verbs in the sense that they manifest some of the functional heads assumed to exist in the universal hierarchy, with the consequence that restructuring constructions are always monoclausal.1 The following three chapters take up specific facets of restructuring phenomena. Chapter 2 tackles the rather puzzling problem of passivization of restructuring verbs in Romance—that is, only a limited class of restructuring verbs (mainly, aspectual ones) can undergo passivization. It is argued that only those restructuring verbs that are generated below the Voice head in the functional hierarchy can be passivized. Chapter 3 examines the ordering restrictions on modal and aspectual verbs in great detail, and elaborates the organization of functional heads proposed by Cinque (1999). Chapter 4 deals with four different phenomena considered as restructuring effects in French: quantifier and adverb climbing, the climbing of prepositional clitics (en and y), and long movement in tough-constructions. Cinque argues that only the latter two (i.e. the climbing of prepositional clitics and long movement in tough-constructions) can be taken as genuine restructuring phenomena. The last four chapters are not directly related to restructuring, but are concerned with more general issues in relation to the functional hierarchy. Chapter 5 deals with the syntax of adverbs. Here, the author responds to some of the objections that have been raised against his analysis of adverbs as specifiers of functional heads. Chapter 6 discusses the hierarchical ordering of complement and adverbial PPs. It is argued that these are canonically ordered according to a specific hierarchy above VP, and alternative orders are derived by movement to higher specifiers of prepositions followed by remnant VP movement—i.e. via processes assumed under Kayne’s (2004) theory of prepositions as probes. Chapter 7 and Chapter 8 deal with “mobile” affixes in Turkish and other languages, whose property of being freely ordered with

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1 Cinque defines functional categories as “categories that make up the extended projection of some other category.” (Cinque (2006: 5))
respect to other affixes raises a problem for the rigid functional projections proposed by Cinque (1999). It is argued in these chapters that closer scrutiny reveals that mobile affixes in fact have a designated position relative to other affixes in accordance with the functional hierarchy, but that their “mobile” nature comes from the fact that they can occupy more than one functional head position depending on the grammatical usage.

As the title of this book indicates, restructuring (or clause union in Aissen and Perlmutter’s (1976) terms) is the main topic of this book. Since the late 1970s, this phenomenon has attracted extensive attention in the literature due to a peculiar property known as “transparency” (or restructuring) effects, whereby a non-finite clause under a certain class of verb allows an otherwise local operation of movement to apply across its boundary. Since then, various approaches have been proposed to derive transparency effects. The two major approaches to restructuring are the monoclausal approach and the biclausal approach.

The monoclausal approach (Picallo (1985, 1990), Rosen (1989), Strozer (1976), Zagona (1982), among many others) claims that restructuring constructions involve monoclausal structures, in which the restructuring verbs are similar to modal auxiliaries. The transparency effects are simply non-problematic on this view, as there is no clause boundary in them that would make the structure opaque to movement operations. One of the critical problems raised for such a “traditional” monoclausal analysis is its failure to provide a unified lexical entry for restructuring verbs, as it assumes that they not only behave like modal auxiliaries in the presence of transparency effects, but also function as main verbs taking a clausal complement in their absence. Cinque’s analysis is along the lines of the monoclausal approach, but it crucially differs from the traditional monoclausal analysis in this respect. He takes the strongest form of the monoclausal analysis in claiming that restructuring verbs are always functional heads in a monoclausal configuration, regardless of whether transparency effects are present or not, eliminating the problem originally posed for the traditional monoclausal analysis.²

On the other hand, the biclausal approach goes to the opposite extreme

² This view is presented in Ch. 1. His earlier work, reprinted in Ch. 2 to Ch. 4, adopts a weaker version of the monoclausal approach that assumes that monoclausal structures hold only when transparency effects obtain. The problems raised against the traditional monoclausal approach are not cleared up in the weaker version. The same ones remain in the recent study by Cardinaletti and Shlonsky (2004).
in assuming that restructuring constructions are always biclausal (involving either control or raising structures), in which the restructuring verbs—as main or lexical verbs—take a clausal complement. To deal with the transparency effects, most variants of the biclausal approach assume a special device by which the clause boundary is made ineffective for operations like clitic movement. The proposed devices include VP-raising (Burzio (1986)), verb incorporation (Baker (1988) and Zushi (1995, 2001)), INFL-raising (Kayne (1989)), T-raising (Roberts (1997)), and so on. This line of approach arouses a considerable challenge from Cinque in two important respects: (i) the nature of restructuring verbs (lexical vs. functional), and (ii) the structure they involve (biclausal vs. monoclausal).

In this review article, I will present some of the highlights of Cinque’s theory of restructuring, and discuss the major issues that arise in comparison of his approach to those that take restructuring verbs as lexical heads, i.e. yielding biclausal structures. Cinque’s idea that restructuring verbs are functional heads has three main features: (i) the ordering of restructuring verbs is determined according to the hierarchy of functional projections; (ii) restructuring verbs lack thematic properties; and (iii) restructuring is obligatory, but transparency effects are optional. I will discuss each of these issues below. Section 2 deals with the first feature regarding ordering restrictions imposed on restructuring verbs. Section 3 is concerned with the thematic properties of restructuring verbs. In these sections, data from Japanese will be carefully examined to show that restructuring predicates in Japanese are lexical, rather than functional. These observations go along with the biclausal approach, but pose a serious challenge for the theory put forth by Cinque, which is basically grounded on facts about restructuring in Romance. Section 4 tackles the third feature regarding the optionality of transparency effects, paying special attention to their co-occurrences. Theoretical problems with Cinque’s treatment of optional transparency effects will be pointed out. In section 5, I will briefly touch on the issue of restructuring variation across languages. It will be shown that cross-linguistic variation in the nature of restructuring predicates receives a better treatment in a theory of functional categories put forth by Fukui and Sakai (2003) than Cinque’s theory. Section 6 draws a conclusion.

3 The size of restructuring verb complements assumed under the biclausal approach varies. I will take as a biclausal approach one that assumes the size to be as large as vP, following Kuroda (2003).
2. Ordering and Co-occurrence Restrictions on Restructuring Verbs

One of the major empirical contributions of Cinque's approach to restructuring, which sharply distinguishes it from previously proposed ones, is his success in capturing the ordering and co-occurrence restrictions found among restructuring verbs in Romance. Under Cinque's theory, restructuring verbs are realizations of distinct functional heads, and thus their relative order reflects the relative positions of the functional heads in hierarchical structure. The hierarchy of functional projections independently proposed in Cinque (1999) and assumed in this book is as follows:

\[
\text{(1)} \quad \text{MoodP}_{\text{speech act}} > \text{MoodP}_{\text{evaluative}} > \text{MoodP}_{\text{evidential}} > \text{ModP}_{\text{epistemic}} > \\
\quad \text{TP(Past)} > \text{TP(Future)} > \text{MoodP}_{\text{irrealis}} > \text{ModP}_{\text{aethic}} > \text{AspP}_{\text{habitual}} > \\
\quad \text{AspP}_{\text{repetitive(I)}} > \text{AspP}_{\text{frequentative(I)}} > \text{ModP}_{\text{volitional}} > \text{AspP}_{\text{celerative(I)}} > \\
\quad \text{TP(Anterior)} > \text{AspP}_{\text{terminative}} > \text{AspP}_{\text{continuative}} > \text{AspP}_{\text{retrospective}} > \\
\quad \text{AspP}_{\text{proximative}} > \text{AspP}_{\text{durative}} > \text{AspP}_{\text{generic/progressive}} > \text{AspP}_{\text{prospective}} > \\
\quad \text{ModP}_{\text{obligation}} > \text{ModP}_{\text{permission/ability}} > \text{AspP}_{\text{completive}} > \text{VoiceP} > \\
\quad \text{AspP}_{\text{celerative(II)}} > \text{AspP}_{\text{repetitive(II)}} > \text{AspP}_{\text{frequentative(II)}}.
\]

An illustration of ordering and co-occurrence restrictions of restructuring verbs in Italian is given in (2): when volere 'want' and smettere 'stop' co-occur, the only possible order is one in which volere precedes smettere.

(2) a. Non vi vuole smettere di importunare
   not you want stop di bother
   'He doesn’t want to stop bothering you'

b. *Non vi smette di voler importunare
   not you stop di want bother
   'He doesn’t stop wanting to bother you' (Cinque (2006: 18))

The relative order of volere with respect to smettere follows the order of functional heads—\text{ModP}_{\text{volitional}} > \text{AspP}_{\text{terminative}} in the hierarchy given in (1). Cinque also observes that the ordering restrictions in Romance hold...
regardless of whether transparency effects obtain or not.

(3) a. Suole {provare a farle / provarle a fare} da solo
use to-try to-do-them to-try-them to-do by himself
‘Lit. He uses to try to do them by himself’
b. *Prova a {soler farle / solerle fare} da solo
try to-use to-do-them to-use-them to-do by himself
‘He tries to use to do them by himself’ (Cinque (2006: 34))

As the contrast in (3) shows, solere ‘use’ must precede provare ‘try,’ regardless of the presence or absence of clitic climbing.

This sort of ordering restriction can also be found in a subset of restructuring verbs in German, as observed by Wurmbrand (2001, 2004). There, however, another class of restructuring verbs—lexical restructuring verbs in her terms—freely co-occurs with no ordering restrictions being imposed. This fact may weaken Cinque’s proposal whereby restructuring verbs are considered as uniformly functional heads across languages (see Cinque (2006: Postscript of Ch. 1) for a different treatment). While some sort of ordering/co-occurrence restrictions are at work in at least this subclass of verbs in German, no such restrictions can be observed with restructuring predicates in Japanese.

The restructuring predicates in Japanese that trigger transparency effects include a desiderative predicate tai ‘want’; aspectual verbs such as oer ‘finish,’ tuzuker ‘continue,’ and hazimer ‘begin’; the potential suffix (rar)er ‘be able,’ and motion verbs such as kur ‘come.’ (See Kuroda (1965), Inoue (1976), Matsumoto (1996), Miyagawa (1987), Nishigauchi (1993), Shibatani (1978), Zushi (1995, 2001, 2005), among others.) There seem to be no restrictions on the position where these predicates are placed. For example, the potential suffix (rar)er ‘be able’ can either precede or follow the inceptive aspectual verb, hazimer ‘begin,’ as shown in (4).

(4) a. Taroo-ga youyaku piza-o tabe-hazimer-are-ta
Taro-Nom at last pizza-Acc eat-begin-can-Past
‘At last Taro could begin eating pizza’
b. Taroo-ga youyaku piza-o tabe-rare-hazime-ta
Taro-Nom at last pizza-Acc eat-can-begin-Past
‘At last Taro began being able to eat pizza’

The possible order (rar)er < hazimer in (4b) is not expected under Cinque’s theory, since it does not correspond to the relative order AspP_{inceptive} < ModP_{ability} in the hierarchy (1) (see note 5). Note that the object of the most deeply embedded verb can be marked as nominative, as illustrated in (5). This has been considered as a restructuring effect, in that nominative
Case on the object is determined across a clause boundary by the higher stative potential suffix.

(5) a. Taroo-ga youyaku pizza-ga tabe-hazimer-are-ta
   Taro-Nom at last pizza-Nom eat-begin-can-Past
   ‘At last Taro could begin eating pizza’

   b. Taroo-ga youyaku pizza-ga tabe-rare-hazime-ta
   Taro-Nom at last pizza-Nom eat-can-begin-Past
   ‘At last Taro began being able to eat pizza’

The acceptability of these examples shows that Case marking on the object is not related to the ordering of predicates.

In addition, the desiderative predicate tai ‘want’ can either precede or follow the continuative aspectual verb tuzuker ‘continue.’

(6) a. Taroo-ga pizza-{o/ga} tabe-tuzuke-tai (koto)
   Taro-Nom pizza-Acc/Nom eat-continue-want fact
   ‘(the fact that) Taro wants to continue eating pizza’

   b. Taroo-ga pizza-{o/*ga} tabe-ta-gari-tuzuke-ta (koto)
   Taro-Nom pizza-Acc/Nom eat-want-continue-Past fact
   ‘(the fact that) Taro continued wanting to eat pizza’

The order tuzuker ‘begin’ < tai ‘want’ in (6a) is in accordance with the order AspP continual < ModP volitional in the hierarchy (1), while the reverse tuzuker > tai in (6b) is not.

To sum up, restructuring predicates in Japanese—unlike those in Romance—do not exhibit ordering/co-occurrence restrictions, which constitute one of the most significant characteristics of the functional nature of restructuring verbs in Cinque’s theory.

3. Thematic Properties of Restructuring Verbs

3.1. The Presence of External Arguments

Another issue that attracts special attention in Cinque’s theory relates to the thematic properties of restructuring verbs—that is, the idea that they

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6 The impossibility of nominative Case on the object in (6b) has nothing to do with the ordering of restructuring predicates. Rather, it is due to the fact that when the desiderative tai ‘want’ is verbalized, its object cannot be marked with nominative Case. Note also that the difference between (6a) and (6b) in terms of a form of the desiderative predicate (tai in (6a) vs. its verbalized tagar in (6b)) is not relevant to the discussion here. The verbalized form not only precedes the continuative aspect verb, as shown in (6b), but also follows the one in the example as (6a).
take no external argument. On this view, restructuring verbs can never be control verbs. Rather, they can only be raising verbs which do not assign an external theta-role. An immediate problem that confronts this view (as Cinque himself points out) is that at least one subclass of restructuring verbs imposes selectional restrictions on the subject. Thus, verbs like Italian volere ‘want’ do not allow non-thematic elements to occur in subject position (see Burzio (1986) for discussion). This may cast some doubt on the idea that restructuring verbs do not assign an external theta-role, given the standard assumption that selectional restrictions are included in the scope of theta-role assignment. Still, the nature of selectional restrictions has also been a matter of debate. Given that selectional restrictions imposed by a verb on its arguments are closely related to the verb’s meaning, selection might be more appropriately treated in semantic terms, rather than syntactic terms such as theta-role assignment. Thus, an argument based on selectional restrictions may not be a decisive argument for the presence of external arguments in the thematic make-up of restructuring verbs.

As it turns out, there are two pieces of syntactic evidence from Japanese that support the view, contra Cinque, that certain classes of restructuring verbs take an external argument. The first piece of evidence is related to subject honorification with the form o-V ni naru in Japanese. This form is used to express a speaker’s respect toward the referent of the subject NP. To illustrate how it works, an example is given in (7). Here, only sensei ‘teacher’—but not Taro—can be the person for whom the speaker expresses his/her respect, i.e. being a person socially superior to the speaker (see Harada (1976)).

(7) Sensei-ga/*Taro-ga atarashii ronbun-o
    teacher-Nom/Taro-Nom new article-Acc
    o-kaki-ni nat-ta
    Hp-write-Cop become-Past
    ‘The teacher/*Taro wrote a new article’

An interesting difference between control and raising structures in Japanese surfaces with regard to subject honorification with the form o-V ni naru. As observed by Kuno (1983), when one attempts to attach the honorific marker to a complex predicate headed by an aspectual verb, only a

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7 See Wurmbrand (2001, 2004) for evidence from German, and Baker (1997) from polysynthetic languages, in favor of the view that there are classes of restructuring verbs that take an external argument.
limited class of aspectual verbs will allow it to be placed on the complex predicate as a whole. Thus, this form is allowed with the verb oer ‘finish,’ but not with the verb owar ‘finish,’ as shown in (8).\(^8\)

(8) a. *Sensei-wa tegami-o o-kaki-owari ni nari-masi-ta
  teacher-Top letter-Acc Hp-write-finish Cop become-Pol-Past
  ‘The teacher finished writing a letter’
  
b. Sensei-wa tegami-o o-kaki-oe ni nari-masi-ta
  teacher-Top letter-Acc Hp-write-finish Cop become-Pol-Past
  ‘The teacher finished writing a letter’

(Matsumoto (1996: 179))

The contrast in (8) can be nicely handled under the hypothesis that owar in (8a) is a raising verb, while oer in (8b) is a control verb (see Matsumoto (1996)). As a raising verb, owar lacks a subject of its own as the target of respect in terms of subject honorification, hence the ungrammaticality of (8a). On the other hand, oer does have a subject that can serve as a target of respect (sensei ‘teacher’ in (8b)), allowing for subject honorific marking. The presence of a subject with the highest verb of a complex predicate is therefore crucial for the observed differences in subject honorification.

The asymmetry observed in (8) is even maintained when a transparency effect shows up, as illustrated in (9). In the examples in (9), the honorific forms in (8) are embedded under the desiderative tai ‘want,’ which triggers nominative Case marking on the object of the most deeply embedded verb.

(9) a. *Sensei-ga tegami-ga o-kaki-owari ni nari-tai
  teacher-Nom letter-Nom Hp-write-finish Cop become-want
  (koto)
  fact

\(^8\) Kuno (1983) observes that oer, in contrast to owar, does not allow the honorific marker to be placed on the embedded verb of the complex predicates in (8):

(i) a. Sensei-wa tegami-o o-kaki ni nari-owari-masi-ta
  teacher-Top letter-Acc Hp-write Cop become-finish-Pol-Past
  ‘The teacher finished writing a letter’
  
b. *Sensei-wa tegami-o o-kaki ni nari-oe-masi-ta
  teacher-Top letter-Acc Hp-write Cop become-finish-Pol-Past
  ‘The teacher finished writing a letter’

(Matsumoto (1996: 180))

Kuno’s judgment of (ib) must be treated with some caution. As Matsumoto (1996) points out, many speakers find (ib) to be not so unacceptable. Kageyama (1993) also finds (ib) acceptable. This is expected, as the embedded verb kaku ‘write’—as a regular transitive verb—takes an external argument.
'\(\text{(the fact that) the teacher wants to finish writing a letter}\)'

b. Sensei-ga tegami-ga o-kaki-o ni nari-tai
\[
\begin{align*}
\text{teacher-Top letter-Nom Hp-write-finish Cop become-want} \\
\text{(koto)}
\end{align*}
\]
\[
\text{fact}
\]

'\(\text{(the fact that) the teacher wants to finish writing a letter}\)'

The analysis offered above for the contrast in (8) carries over to the one in (9). The grammaticality of (9b) indicates that oer takes the subject to be the target of respect in terms of honorification in the presence of a restructuring effect. These facts lead us to conclude that regardless of the presence of transparency effects, aspectual verbs like oer 'finish' take an external argument.

Another piece of evidence that argues for the presence of an external argument with restructuring verbs comes from passivization. In Japanese, Nishigauchi (1993) observes a difference between the two types of aspectual verb with respect to passivization:

(10) a. Sono ronbun-ga (John-niyotte) kaki-o rare-ta
\[
\text{that paper-Nom John-by write-finish-Pass-Past}
\]
\[
\text{\'\textbf{*That paper was by John finished to write}}\]
\[
\text{(Nishigauchi (1993: 79))}
\]

b. *John-ga (Mary-ni) naguri-kake-rare-ta
\[
\text{John-Nom Mary-by hit-about-to-Pass-Past}
\]
\[
\text{\'\textbf{*John was by Mary about to hit}}\]
\[
\text{(Nishigauchi (1993: 96))}
\]

Nishigauchi claims that oer 'finish' is a control verb, while kaker 'about to' involves raising. This hypothesis accounts straightforwardly for the contrast in (10) on the standard assumption that the presence of an external argument is necessary for the passive. The lack of an external argument with kaker does not meet the prerequisite for passivization, hence the ungrammaticality of (10b).

Nishigauchi observes another difference between control verbs and raising verbs in terms of embedded passives. Control verbs tend to disallow an embedded passive, whereas raising verbs do not:

(11) a. *Sono ronbun-ga kak-are-o rare-ta
\[
\text{that paper-Nom write-Pass-finish-Past}
\]
\[
\text{\'Lit. That paper finished to be written}}\]
\[
\text{(Nishigauchi (1993: 93))}
\]

b. Sono ziken-ga (kisya-niyotte) houkokus-are-kake-ta
\[
\text{that incident-Nom reporter-by report-Pass-about to-Past}
\]
\[
\text{\'The incident was about to be reported (by the reporter)}}\]
According to Nishigauchi, the unacceptability of (11a) is partly due to the fact that the derived subject sono ronbun ‘that paper’ does not qualify as agent, which at the same time is required by the control verb oer ‘finish’ (see Nishigauchi (1993) for discussion). If the subject is replaced by a qualifying agent, acceptability improves, as shown in (12). The raising verb kaker ‘about to’ does not select the subject, hence the grammaticality of (11b).

(12) Gakusei-ga zen’in nagur-are-oe-ta
  students-Nom all hit-Pass-finish-Past
  ‘Students, all of them, finished being hit’

(Nishigauchi (1993: 93))

Under Nishigauchi’s analysis, the difference between the two types of aspectual verbs with respect to passives can in part be attributed to the different thematic properties of the two verbs themselves, i.e., control vs. raising. This supports the idea that control verbs having an external theta-role that trigger restructuring exist in Japanese.

Cinque (2006: Ch. 2) proposes an alternative account for a similar range of facts in Romance, viz. the interaction of passive and restructuring. His basic observation is that those restructuring verbs which can be passivized do not allow a passive to be embedded, while those for which passive is not an option will allow a passive to be embedded. The key to this distinction is in the positions that the verbs occur in the hierarchy of functional projections. Cinque claims that the restructuring verbs which can be passivized appear lower than a Voice head in the hierarchy, and can move up to combine with it to derive well-formed passives. These verbs cannot, however, embed a passive, since Voice is located higher. On the other hand, verbs which cannot undergo passivization appear higher than Voice. Therefore, they cannot be combined with this category to form passives, although they can embed one.

The same analysis can be extended to capture Nishigauchi’s observations presented above. Suppose that Japanese oer ‘finish’ corresponds to the Completive aspect head, and kaker ‘about to’ to the head known as Prospective aspect. Cinque’s theory correctly predicts that oer can be passivized, but cannot embed a passive, since it is placed lower than Voice in the hierarchy, while kaker cannot be passivised, but can embed a passive, being lo-
cated higher than Voice.\textsuperscript{9} Cinque's alternative is thus equally as appropriate as Nishigauchi's as far as the data are concerned. However, there is some evidence indicating that Nishigauchi's analysis is preferable. In Japanese, the verbalized desiderative predicate \textit{ta-gar} 'to show signs of wanting' can undergo passivization (see Kageyama (1993), Matsumoto (1996), and Sugio (1984)), as shown in (13a). Yet it also allows a passive to be embedded, as illustrated in (13b).

\begin{align*}
(13) & \text{a. Sono hon-wa minna-ni \{yomi/kai/mi\}-ta-gar-are-teiru} \\
& \text{that book-Top all-by read/buy/look-want-Vbl-Pass-Asp} \\
& \text{`Lit. That book is in such a case that everyone wants to \{read/buy/look at\} it'}
\end{align*}

\begin{align*}
& \text{(Matsumoto (1996: 107))} \\
(13) & \text{b. Taroo-ga \{tasuke/nagusame/home\}-rare-ta-ga-tte-iru (koto)} \\
& \text{Taro-Nom help/console/praise-Pass-want-Vbl-Asp fact} \\
& \text{`(the fact that) Taro wants to be \{helped/consoled/praised\}'}
\end{align*}

These facts can be accommodated by Nishigauchi's analysis on the assumption that the desiderative \textit{tai} is a control verb. The grammaticality of (13a) is therefore analogous to that of (10a), as is (13b) to (12). On the other hand, these same facts raise a problem for Cinque's theory, which wrongly predicts that the desiderative predicate cannot be passivized, but can still embed a passive—assuming the predicate corresponds to a \textit{Mod}\textsubscript{volitional} head which is higher than Voice in the hierarchy.

In addition, the following fact about motion verbs raises a further problem: The motion verb \textit{kur} 'come' can be passivized, as shown in (14a), and embed a passive, as shown in (14b) (see Matsumoto (1996) and Miyagawa (1987) for discussion).

\begin{align*}
(14) & \text{a. Sono hon-ga mada dare-ni-mo} \\
& \text{that book-Nom yet anybody-by-too} \\
& \text{torini-ko-rare-tei-nai (koto)} \\
& \text{take-come-Pass-Asp-Neg fact} \\
& \text{`(the fact that) this book has not been claimed (i.e. no one has come to take it)'} \\
& \text{(Matsumoto (1996: 243))} \\
(14) & \text{b. Taroo-ga home-rare-ni ki-ta} \\
& \text{Taro-Nom praise-Pass come-Past} \\
& \text{`Taro came to be praised'}
\end{align*}

Cinque's theory also makes the incorrect prediction that motion verbs,

\textsuperscript{9} The acceptability of (12) can be handled if one follows Cinque (2006: Ch. 2) in assuming that the Completive aspect head can also be higher than Voice.
placed lower than Voice in the hierarchy, can be passivized but not embed a passive. Based on these observations, it is reasonable to conclude that an analysis along the lines of Nishigauchi (1993) goes a long way towards handling the data with respect to the patterning of passives in terms of restructuring. This in turn entails that there are restructuring verbs which take an external argument.

3.2. The Absence of Internal Arguments

Cinque’s approach makes another prediction regarding the thematic properties of restructuring verbs, i.e. that they do not select internal arguments. As Kayne (1989) observes, there is a general tendency for the absence of restructuring effects in object control structures. Cinque argues that this is just a representative case of a more general property of restructuring verbs, i.e. their inability to take internal arguments. He notes that restructuring effects are absent not only in object control structures, but also in raising structures containing an indirect object.

(15)  a. Gianni non lo sembra apprezzare abbastanza
        Gianni Neg it seem appreciate enough
        ‘Gianni does not seem to appreciate it enough’

    b. *Gianni non ce lo sembra apprezzare abbastanza
        Gianni Neg to-us it seem appreciate enough
        ‘Gianni does not seem to us to appreciate it enough’

(Cinque (2006: 22))

The contrast in (15) shows how the indirect object of sembrare ‘seem’ blocks clitic climbing in (15b). Cinque attributes the absence of clitic climbing to the idea that when it takes an indirect object, sembrare is not a restructuring verb, but rather a lexical one with a clausal complement. In similar fashion, object control verbs are not considered as restructuring verbs on Cinque’s definition.

Although the absence of restructuring effects in object control- and raising structures with indirect objects seems to point to a general tendency whereby restructuring occurs only in the absence of internal arguments, this tendency does not necessarily support Cinque’s view of restructuring. An alternative

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10 This leads Cinque to argue that there are two distinct sembrares, one functional and the other lexical (see Haegeman (2006) for discussion). Likewise, volere ‘want’ and motion verbs would have a similar dual status. His treatment of these verbs slightly weakens the proposal that restructuring verbs are always functional.
account of the relevant facts is readily available. Along the lines of bi-
clausal approach, for example, Zushi (1995, 2001) proposes that the lack of
restructuring effects in object control (e.g. clitic climbing) follows straight-
forwardly from the idea that the two objects in the object control construc-
tion—the matrix object and the lower clitic—compete for a single licensing
position. This follows on the assumption that the clitic that undergoes
climbing is licensed by a functional head in the matrix clause (see Zushi
(1995, 2001) for details). Such an analysis can be easily reformulated in
terms of minimalism. Suppose that a clitic in the embedded clause is to be
attracted by a matrix v in order to climb into the matrix clause. When a
matrix object is present in object control and raising structures, the matrix
object is closer to v than the clitic associated with the lower verb. This
prevents the clitic from successfully being attracted by v and raised to the
matrix clause.

The crucial difference between this minimalism-based line of analysis
and Cinque’s is that while the former takes the presence of a matrix object
to block the application of an operation (movement) that would otherwise
produce a transparency effect, the latter takes the matrix object to be an
indication of the total absence of restructuring. The two analyses also
have different implications for the status of the matrix object with respect
to the restructuring effect independently of movement. The minimalism
analysis predicts that an internal argument of the restructuring verb will not
block such a transparency effect, while Cinque’s analysis predicts that it
will. One candidate to test for such an effect is the phenomenon of auxiliary
shift found in Romance. The following examples from Burzio (1986)
demonstrate that even when a raising verb takes an indirect object, it has an
effect on the choice of a higher auxiliary.

(16) a. Giovanni gli { sarebbe/??avrebbe } potuto sembrare già ad
Giovanni to-him be/have can seem already
un buon punto
at a good point
‘Lit. Giovanni would have been able to seem to him already
at a good point’

b. Non so quanti studenti gli
No know how many students to-him
{ siano potuti/?abbiano potuto } risultare essere iscritti
be can/have can appear be enrolled
‘I don’t know how many students may have been able to ap-
pear to him to be enrolled’ (Burzio (1986: 366))
Since the higher verb *potere* 'be able' normally takes the auxiliary *avere* 'have,' the presence of *essere* in (16) must be due to a property of the lower raising verb, which does take *essere*. An important point here is that the raising verb takes an indirect object, which then cliticizes to the higher functional head. Nevertheless, an auxiliary shift is observed. This fact suggests that although the matrix object in control/raising structures may block an operation that moves an element over it (hence nullifying the transparency effects associated with movement) it does not block other transparency effects that do not involve movement. This leads us to conclude that the minimality analysis is preferable to Cinque’s view.

To conclude this section, I have shown that members of a subclass of restructuring verbs in Japanese take an external argument, which runs counter to Cinque’s proposal that restructuring verbs are universally functional in nature. I have also shown that a lack of transparency effects in object control- and raising structures with an indirect object does not necessarily support Cinque’s claim that restructuring verbs do not take an internal argument.

4. The Optionality of Transparency Effects

The idea that restructuring verbs are always functional heads leads Cinque to claim that restructuring constructions have an unambiguous monoclausal structure. This argument is based on the fact that the rigid ordering of restructuring verbs is maintained even when transparency effects such as clitic climbing are absent:

(17) a. Suole {provare a farle / provarle a fare} da solo
   'Lit. He uses to try to do them by himself'
   
   b. *Prova a {soler farle / solerle fare} da solo
   'He tries to use to do them by himself' (Cinque (2006: 34))

According to Cinque, facts like these confirm the hypothesis that restructuring verbs are always functional, regardless of whether transparency effects obtain or not. He argues that their presence is not the result of restructuring, but rather of optional application of processes like clitic movement. Whether a clitic is placed on a higher verb or a lower one is a matter of choice.

This aspect of Cinque’s theory is in conflict with the general view, whereby transparency effects indicate the obligatory occurrence of restruc-
turing. It has been widely assumed that the presence of one such effect entails the presence of another. Thus, when long-distance object preposing takes place, clitic climbing must also occur:

(18) a. Questi libri gli si vorrebbero proprio dare
    these books to-him Si would want really give
    ‘We would really want to give these books to him’
b. *Questi libri si vorrebbero proprio dargli
    these books Si would want really give-to-him
    ‘We would really want to give these books to him’

(Burzio (1986: 327))

The co-occurrence of both clitic climbing and long object shift in (18a) is taken an instance of obligatory restructuring (or whatever process derives restructuring effects). The failure of clitic climbing in the restructuring context of (18b) thus yields ungrammaticality.

Nevertheless, transparency effects do not totally correlate with each other. Thus, Rizzi (1982: fn. 26) notes that the presence of auxiliary shift does not always entail clitic climbing. This sort of fact is often noticed, but usually ignored or put aside (see also Burzio (1986: 327)). Cinque examines the interaction of transparency effects in great detail, and acknowledges that the implicational relation of restructuring and transparency effects does not always hold. Thus, the possibility of clitic climbing does not imply that long-distance object preposing will occur.

(19) a. Gli si vuole vendere queste case a caro prezzo
    to-him Si want to-sell these houses at a high price
    ‘One wants to sell him these houses at a high price’
b. Queste case gli si vogliono vendere a caro prezzo
    these houses to-him Si want to-sell at high price

(Cinque (2006: 32))

Based on these and similar facts, Cinque casts doubt on the argument for the obligatory linking of restructuring with transparency effects. Consequently, he offers a different treatment for the ungrammaticality of (18b), suggesting that it is not due to the failure of climbing (gli ‘to-him’) but rather to the presence of the two clitics (gli and si) whose functions are split, assuming that si undergoes clitic climbing independently.11 Cinque

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11 The possibility of the clitic si climbing in impersonal constructions is explored in Zushi (1995, 2001), but ultimately rejected based on the fact that the presence of negation does not affect object preposing in the impersonal constructions:
concludes that the occurrence of restructuring does not imply the presence of transparency effects, and claims that processes such as clitic movement and object preposing are in fact optional.

Cinque’s argument against the obligatory linking of transparency effects seems factually well-grounded. Theoretically, however, it does not seem to hold. This is because the notion of optionality of transparency effects remains quite vague in his theory. The idea that an operation like object preposing is optional is theoretically undermotivated, and its status is not at all clear in the current syntactic theory that Cinque assumes, where there is a tendency to eliminate optionality in derivations. Thus, it does not follow that optionality of object preposing should be permitted by UG.

One way of dealing with the problem of optionality in restructuring is to incorporate the idea proposed by Zushi (2005). She argues that a process such as object preposing involves an adjunction operation akin to scrambling, followed by a movement operation triggered by a higher functional head. (Here, the term “adjunction” is simply a cover term for free merger in more recent frameworks (see Chomsky (2006)).) This suggests that the optionality of object preposing is reduced to the optionality of an adjunction operation. Without discussing the details of how such an operation is licensed, let us assume for the present purposes that the optionality of adjunction is permitted by UG (see Saito and Fukui (1998) for discussion), and that adjoining to a syntactic object is permitted only when the latter is not closed off by agreement (see Fukui (1986, 1995)), i.e. only when the object’s edge feature remains undeleted (Chomsky (2006)).

To illustrate, let us take object preposing in the impersonal construction (20a) as an example. This sentence has the structure as (20b) at an earlier stage of derivation in which the lower object adjoins to the projection of T,

(i) Quei libri *si* potrebbero *non* leggere subito
these books *Si* would be able Neg to-read immediately
‘One would be able not to read those books immediately’ (Zushi (2001: 77))

Assuming with Kayne (1989) that the presence of negation blocks clitic climbing, the (near) grammaticality of (i) suggests that the general property of clitic climbing does not extend to *si* climbing, which in turn implies that *si* does not originate in the embedded clause. Still, Cinque claims that the assumption that negation blocks clitic climbing is debatable. Thus, he observes no significant contrast between (i) and (ii):

(ii) *Li* *potresti* non leggere subito
them could not to-read immediately
‘You could not read them immediately’ (Cinque (2006: 62, fn. 65))
an edge of the complement clause. Note that in languages like Italian and Japanese, it is assumed that the projection of T is not closed off via agreement (see Zushi (2005) for details).

(20) a. Queste case si vogliono vendere a caro prezzo
   these houses Si want to-sell at a high price

b. ... [ν [vogliono [t' queste casei [t'... [νp ti ]]]]]

The raised object in (20b) is accessible to the matrix functional head ν, hence can be moved into the matrix clause. The key factor here is that adjunction of the lower object to the projection of T is optional—just like scrambling. If adjunction takes place, the raised object in T-joined position will be accessible to the higher ν, which then attracts and induces movement into the matrix clause. If adjunction does not apply, the lower object will remain in its original position, where it is not accessible to the higher ν, and no object preposing takes place. This analysis of object preposing also carries over to clitic climbing, if one follows Sportiche (1992) in assuming that clitic movement involves phrasal movement followed by cliticization onto a functional head.

On the view of Zushi (2005) outlined here, the failure of object preposing in the presence of clitic climbing—as in (19a), repeated here as (21)—can be naturally accounted for.

(21) Gli si vuole vendere queste case a caro prezzo
   to-him Si want to-sell these houses at a high price
   ‘One wants to sell him these houses at a high price’

Whereas the dative clitic undergoes adjunction to the edge of a T-projection, the direct object does not. Thus, only the former is allowed to move into the matrix clause. If the direct object and the dative clitic undergo adjunction to the T-projection, both of them will move into the matrix clause. This accommodates the co-occurrence of object preposing and clitic climbing in (18a), repeated here as (22).

(22) Questi libri gli si vorrebbero proprio dare
   these books to-him Si would want really give
   ‘We would really want to give these books to him’

Adjunction of two elements to a T-projection is possible, since the non-closed T (with its edge feature undeleted) allows free recursion. Both elements can therefore be raised to the matrix clause.

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12 See Zushi (2005) for the argument that the complement clause of restructuring verbs is a bare TP.
The above analysis can also be carried over to the monoclausal structure assumed by Cinque. For example, (20a) may have a structure such as (23) at an early stage of the derivation.

(23) \[ F \text{ vogliono} ... [vP queste case,] [vP ... [VP ti]] \]
Here, the object has adjoined to the edge of vP, a phase assumed in Chomsky (2000), where it is accessible to a higher functional verb and thus allowed to move into a higher position. The object is not required to undergo adjunction, as this process is optional. If it does not adjjoin, it remains in situ, inaccessible to the higher verb—hence no object preposing. Incorporating Zushi’s analysis into the monoclausal approach thus enables us to refine the notion of optionality with regard to the transparency effects discussed by Cinque.

The different position to which the object adjoins in (20b) and (23) has important consequences for the variation in transparency effects across languages. While adjunction to the \( v \)-projection is available in every language, adjunction to the \( T \)-projection is possible only in some, as argued by Zushi (2005). Thus, the adjunction-to-\( T \) approach predicts that a limited class of languages would exhibit restructuring effects such as long-distance object preposing, while the adjunction-to-\( v \) approach predicts that every language will exhibit transparency effects in restructuring. As we will see in the next section, cross-linguistic variation in restructuring effects receives a better treatment in the adjunction-to-\( T \) approach than the adjunction-to-\( v \) approach.

5. Parametric Variation in Restructuring

5.1. Restructuring and Null Subjects

The analysis sketched above (Zushi (2005)) is designed to capture—among other things—the fact that familiar sorts of transparency effects such as long-distance object preposing can be observed in languages like Italian and Japanese, but not in e.g. French or English. It follows Kayne (1989) in assuming that the difference is related to the presence vs. absence of null subjects. In pro-drop languages like Italian and Japanese, adjunction to a \( T \)-projection is possible, allowing for a lower element to become visible to a matrix functional head. In non-pro-drop languages like French and English, by contrast, adjunction to a \( T \)-projection is not possible, hence no transparency effects can be observed.

In Cinque’s theory, on the other hand, no principled account for the differences between the two types of languages can be proposed. He argues
(Ch. 4) that French does have restructuring along with prepositional clitic climbing, long movement in tough constructions being taken as an example of the former. However, he does not discuss in detail the question of how French—unlike Italian—systematically lacks (non-prepositional) clitic climbing, long-distance object preposing, or auxiliary shift. Only a brief remark appears about this issue (Cinque (2006: 32)), i.e. that clitics appear only in a lower position in French. This leaves open the question of why it is the case that only a lower position is available for clitics in French, but not Italian. This idea raises a further question with respect to clitic placement in causative constructions, where clitics must climb in French, as well as in Italian:

(24) a. Elle le fera manger à Jean
   she it will-make eat to Jean
   'She will make Jean eat it'

b. *Elle fera le manger à Jean
   she will-make it eat to Jean (Kayne (1975: 269–270))

This difference between causatives and restructuring in French with respect to clitic placement cannot be captured in terms of the relative ordering of causative and restructuring verbs. According to Cinque (2006: Ch. 2), some aspectual restructuring verbs are placed lower than causative verbs in the hierarchy. Thus, it is not clear why clitics should appear only in a lower position in restructuring, while in a higher one in French causatives. The issue of the lack of transparency effects in relation to the absence of null subjects certainly deserves further discussion.

5.2. The Lack of Functional Properties in Japanese Restructuring

In sections 2 and 3, it was shown that restructuring predicates in Japanese exhibit none of the functional properties that Cinque claims that restructuring verbs in Romance have. Those in Japanese freely appear with no restrictions in their ordering relation and select an external argument. These facts concerning Japanese naturally support an approach that takes restructuring predicates to be lexical, rather than functional elements.

Moreover, Cinque claims that restructuring is universal across languages. This is a direct consequence of his theory, whereby restructuring verbs are functional heads arranged according to a universal hierarchy of functional projections. Thus, the lexical nature of restructuring predicates in Japanese raises a problem for his overall theory. One could argue that restructuring phenomena in Japanese should be distinguished from their counterparts in Romance with only the latter being taken as bona fide cases
of restructuring. This idea is unattractive, given that the types of restructuring predicates in Japanese essentially correspond, one by one, to those in Romance, a fact that clearly calls for a unified treatment. The transparency effects in Japanese restructuring are also very similar in nature to those in Romance, suggesting once again that the same grammatical process is operative in both types of languages.

The Japanese data also raise a theoretical question for the view taken by Cinque, inasmuch as there should be no difference in the inventory of functional projections across languages (see also Kayne (2005)). On this view, even if functional categories are not phonetically manifested by, say, restructuring predicates (as it seems to be the case in Japanese) the same categories are expected to be there, even though they are not active or visible. This view is in contrast to a more restricted theory of functional categories put forth by Fukui and Sakai (2003). They argue that a functional category should be “detectable” in the primary linguistic data. This means that if a functional category which induces no phonetic effect in its neighborhood cannot be detected, it cannot be licensed. According to this view, the very functional categories assumed by Cinque to be associated with the restructuring predicates would not be licensed in Japanese. The data from Japanese restructuring discussed above in fact tend to support an approach where the relevant items (predicates) are really “lexical,” not functional, thereby weakening the universal applicability of Cinque’s brute force treatment of restructuring predicates as functional heads cross-linguistically. Languages do seem to vary with respect to the functional/lexical character of restructuring predicates. The restructuring predicates are, if Cinque is right, functional in Romance, while they are apparently quite lexical in nature in languages like Japanese. Parametric differences of this kind can be readily captured under Fukui and Sakai’s restricted theory of functional categories, yet it is not clear how these cross-linguistic differences can be handled in the approach epitomized by Cinque, which assumes a very rigid inventory of functional categories.

6. Conclusion

Cinque’s work on the universal organization of functional heads in the higher region of clausal architecture has been quite influential in the field, facilitating much empirical work on the distribution and properties of adverbs, particularly in European languages. At present, it remains to be seen why the postulated universal hierarchy of functional heads (cf. (1)) should
hold, and as such, the Cinque hierarchy still remains one of those “UG stip-
ulations” (postulated conditions/principles in the theory of universal gram-
mar) that ought to be given principled explanations in terms of organism-
independent laws and/or interface conditions (assuming a strict adherence to 
minimalist goals—as Cinque does). To the extent that the Cinque hierarchy is 
empirically valid, it offers a great challenge to anyone interested in truly 
explanatory theories of universal grammar.

In this book, Cinque extends the empirical domain in which his func-
tional hierarchy plays an important role. By so doing, he provides new 
insight into the nature of restructuring phenomena and the class of restruc-
turing verbs as they relate to the organization of functional heads he has 
independently motivated in his previous work. As I have argued in this 
article, Cinque’s theory faces empirical as well as theoretical problems when 
the relevant data are extended beyond Romance, particularly when one seri-
ously considers the facts about restructuring in Japanese. Quite apart from 
these specific problems, however, the scientific merit of Cinque’s proposals is 
unquestionable, and his work will continue to enhance lively debate over 
a wide range of issues regarding restructuring phenomena, as well as the cartography project in general.

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