秋　田　大　学
教養基礎教育研究年報
55 － 71　（2016）

Scrambling, Light Verb Construction and Parameters

Hiroto Hoshi
Akita University

1. Introduction

Based on a detailed study of scrambling, light verb construction, etc., Saito (2003) proposes the following macro parameter (cf. Hale 1982, Jelinek 1984, Fukui 1986, Kuroda 1988, Baker 1996, Miyagawa 1997, etc.):

(1) The Derivational Configurationality Parameter:
Configurational languages are subject to (1a-b), but Japanese-style non-configurational languages are not.

(a) Merge applies only to satisfy selectional requirements. (Merge implies selection.)
(b) Selectional requirements must be satisfied by Merge. (Selection implies Merge.)

The Derivational Configurationality Parameter above is important, because, if correct, it implies that there is indeed a truly radical difference between configurational languages and Japanese-style non-configurational languages in the core part of grammar, i.e. Merge and selection (cf. Chomsky 1981, 1986, among others). In this paper, I try to explain as explicitly as possible how Saito (2003) motivates the parameter, and I attempt to examine the validity of the proposed parameter (cf. Chomsky 1981, 1986, Hawkins 1988, 1994, 2004, 2014, Phillips 1996, Newmeyer 1998, 2005, Kempson et al. 2001, Borseley and Börjars 2011,Clark and Lappin 2011, among others).

More specifically, in the following section, I attempt to demonstrate how Saito motivates the first part of the Derivational Configurationality Parameter in (1), i.e. (1a). In particular, in the section, I show Saito's analysis of free word order phenomenon in Japanese which leads him to hypothesize (1a). In section 3, I try to show how the latter half of the Derivational Configurationality Parameter, i.e. (1b), is motivated by Saito (2003). There, I show how Saito (2003) proposes (1b) based on Saito and Hoshi's (2000) LF incorporation analysis of Japanese light verb construction. Then, in section 4, I point out a potential empirical problem for the Derivational Configurationality Parameter in (1a-b). By doing so, I argue that we cannot maintain both (1a) and (1b) as they are, because either one of them seems to be empirically incorrect. In section 5, I conclude the discussion of this paper (cf. Chomsky 1981, 1986, Bowerman 1988, Hawkins 1994, 2004, 2014, Phillips 1996, Kempson et al. 2001, Newmeyer 1998, 2005, Borseley and Börjars 2011, Clark and Lappin 2011, etc.).

2. Scrambling

The purpose of this section is to show how Saito (2003) motivates the first part of the Derivational Configurationality Parameter, (1a). To propose (1a), Saito first maintains that scrambling in Japanese is different from topicalization in English based on the following data and argument (cf. Saito 1985, Whitman 1987, among others). Namely, a topicalized phrase in English must be interpreted as a topic, whereas a scrambled phrase in Japanese need not be interpreted as such. Moreover, Saito claims that unlike English operator movement, Japanese scrambling does not create an operator-variable relation, and thus a scrambled phrase in the language can be literally

'undone' in LF (Saito 1989).

Observe first that in example (2b), the object [*that book*]$_j$ is topicalized within the embedded clause, and the example is acceptable for native speakers who accept topicalization quite generously.

(2) a. Who$_i$ t_i said that John bought that book
b. Who$_i$ t_i said [that [that book]$_j$, John bought t_j]

In example (3b), on the other hand, the Wh-object [*which book*]$_j$ is topicalized inside the embedded clause, and the example cannot be accepted even by the above mentioned speakers, who accept topicalization rather freely as in (2b).

(3) a. Who$_i$ t_i said that John bought which book
b. *Who$_i$ t_i said [that [which book]$_j$, John bought t_j]

Given the contrast between (2b) and (3b), Saito (2003, p. 326) suggests the generalization in (4), and accounts for the difference between (2b) and (3b) as follows:

(4) A Wh-phrase cannot be interpreted as a topic.

The topicalized phrase [*that book*]$_j$ in (2b) is not a Wh-phrase. Hence, in (2b), [*that book*]$_j$ is allowed to be interpreted as a topic in accordance with generalization (4). The topicalized phrase [*which book*]$_j$ in (3b), on the other hand, is a Wh-phrase, and thus, may not be interpreted as a topic due to (4).

Observe now that in (5b), the object Wh-phrase [*dono hon-o*]$_j$ is scrambled within the embedded clause, but is fully acceptable. Notice that the acceptability of (5b), which involves Japanese scrambling, contrasts sharply with the unacceptability of (3b), which involves English topicalization.

(5) a. Taroo-wa [Hanako-ga dono hon -o katta to] omotteiru no
-Top -Nom which book-Acc bought that think Q
'[Q [Taroo thinks that Hanako bought which book]]'

b. Taroo-wa [[dono hon -o]$_i$ Hanako-ga t_i katta to] omotteiru no
-Top which book-Acc -Nom bought that think Q
'[Q [Taroo thinks that which book$_i$, Hanako bought t_i]]'

If scrambling in Japanese paralleled topicalization in English, and if a scrambled phrase in Japanese had to be interpreted as a topic, example (5b) would be as unacceptable as (3b) according to generalization (4). However, this is contrary to fact. To account for the contrast between (3b) and (5b), Saito (2003, p. 327) therefore claims that scrambling in Japanese is distinct from topicalization in English in that unlike a topicalized phrase in English, a scrambled phrase in Japanese need not be interpreted as a topic. Hence, a Wh-phrase can be scrambled in Japanese as in (5b), whereas a Wh-phrase cannot be topicalized in English as in (3b), due to (4).

Furthermore, Saito claims that scrambling in Japanese does not create an operator-variable relation unlike Wh-movement in English, and significantly, that Japanese scrambling can be literally 'undone' in LF (Saito 1989), based on the data below. Saito (1989, 2003, etc.) first observes that English example (6) and Japanese example (7) are both unacceptable. Saito cites example (7) from Harada (1972).

(6) *John asked who to find out [$_{CP}$ what$_i$ [Mary bought t_i]]

(7) *Taroo-ga dare-ni [$_{CP}$ Hanako-ga nani -o katta ka] tazuneta (koto)
-Nom who-to -Nom what-Acc bought Q asked (fact)
'(the fact that) Taroo asked who [Q Hanako bought what]'

To rule out these two examples, Saito suggests generalization (8).

(8) A Wh-phrase can only take scope at a CP that contains it.

The generalization in (8) rules out English example (6), because the Wh-phrase [*who*] is a phrase of the matrix clause, and is not contained by any interrogative CP. Similarly, the Japanese example in (7) is excluded by (8), because the indirect Wh-object [*dare-ni*] is an element of the matrix clause, and is not contained within any interrogative CP. To put it differently, in both (6) and (7), not the matrix CP but the embedded CP is an interrogative CP, but the embedded clauses in (6) and (7) do not contain the above mentioned Wh-phrases, [*who*] and [*dare-ni*]. Hence, neither [*who*] nor [*dare-ni*] is allowed to take scope within the interrogative clause in (6) and (7), due to generalization (8).

In addition, Saito shows that generalization (8) accounts for the interpretive possibilities of the following data as well, which are cited from Riemsdijk and Williams (1981):

(9) a. [$_{CP}$ Who$_i$ t_i knows [$_{CP}$ [which picture of whom]$_j$ Bill bought t_j]]
b. ??[$_{CP}$ [Which picture of whom]$_j$ does John know [$_{CP}$ who$_i$ t_i bought t_j]]

In (9a), the matrix Wh-subject [*who*] is attracted to the matrix interrogative CP Spec, and takes matrix scope; the embedded Wh-object [*which*] is attracted to the embedded question CP Spec, and takes embedded scope, according to (8). In (9a), however, the Wh-element [*whom*] is not attracted to any CP Spec. Hence, [*whom*] may take scope freely. In (9a), the Wh-phrase [*whom*] is contained by both the matrix and the embedded interrogative CPs, and thus, [*whom*] may take either matrix or embedded scope in accordance with generalization (8).

(9b) is worse than (9a), because (9b) violates a Wh-island constraint (Ross 1967, etc.), but the interpretive property of (9b) seems to be clear. In (9b), the Wh-element [*which*] is attracted to the matrix question CP Spec, and takes matrix scope. [*Who*] is attracted to the embedded interrogative CP Spec, and takes embedded scope, according to (8). The Wh-phrase [*whom*] in (9b), on the other hand, is not attracted to any CP Spec, and is contained only by the matrix interrogative CP. Hence, [*whom*] in (9b) is allowed to take only matrix scope in accordance with generalization (8). To repeat, the scope interpretation of [*whom*] in (9b) differs from that of [*whom*] in (9a), because the Wh-phrase [*whom*] in (9b) is inside the matrix CP, but not inside the embedded CP. On the other hand, [*whom*] in (9a) is contained by both the matrix and embedded CPs.

Significantly, Saito (1989, 2003) discovers that the Japanese examples in (10b) and (11b), both of which involve scrambling, appear to pose a problem for apparently well-founded generalization (8). Consider now example (10b).

(10) a. [$_{TP}$ Taroo-ga [$_{CP}$ [$_{TP}$ Hanako-ga dono hon-o yonda] ka] siritagatteiru] (koto)
-Nom -Nom which book-Acc read Q want-to-know fact
'(the fact that) Taroo wants to know [Q Hanako read which book]'

b. ?[$_{TP}$ [Dono hon -o]$_i$ [$_{TP}$ Taroo-ga [$_{CP}$ [$_{TP}$ Hanako-ga t_i yonda] ka] siritagatteiru]] (koto)
which book-Acc -Nom -Nom read Q want-to-know fact
'(the fact that) [which book]$_i$, Taroo wants to know [Q Hanako read t_i]'

In (10b), the embedded direct object [*dono hon-o*] is scrambled to the sentence-initial position, and is not contained by any interrogative CP. Hence, generalization (8) appears to predict that the scrambled object [*dono hon-o*] in (10b) cannot take scope, and thus, example (10b) is unacceptable. However, the scrambled phrase [*dono hon-o*] takes embedded scope, and example (10b) sounds almost perfect.

Consider next the example in (11b), which is structurally quite similar to English example (9b) in relevant respects.

(11) a. [$_{TP}$ Taroo-ga [$_{CP}$ [$_{TP}$ minna-ga [$_{CP}$ Hanako-ga dono hon-o yonda to] omotteiru ka] siritagatteiru]
-Nom all -Nom -Nom which book-Acc read that think Q want-to-know
(koto)
(fact)
'(the fact that) Taroo wants to know [Q everyone thinks that Mary read which book]]'

b. ??[$_{TP}$ [$_{CP}$ Hanako-ga dono hon-o yonda to]$_i$ [$_{TP}$ Taroo-ga [$_{CP}$ [$_{TP}$ minna-ga t_i omotteiru] ka]
-Nom which book-Acc read that -Nom all -Nom think Q
siritagatteiru]] (koto)
want-to-know (fact)
'[That Hanako read which book]$_i$, Taroo wants to know [Q everyone thinks t_i]'

In (11b), the most deeply embedded CP is scrambled to the sentence-initial position, and the Wh-phrase [*dono hon-o*] is contained inside the scrambled CP. Because of the scrambling operation, the Wh-phrase [*dono hon-o*] is located outside the interrogative CP in (11b). Hence, Saito argues that under generalization (8), it should be predicted that there is no way for the Wh-phrase [*dono hon-o*] to take scope in (11b), but contrary to this prediction, [*dono hon-o*] takes embedded scope in (11b). Recall that in (9b), the object of the embedded clause, [*which picture of whom*], is similarly moved to the sentence-initial position, and the Wh-phrase [*whom*] is contained by the preposed object. [*Whom*] is thus not contained inside the embedded interrogative CP, and generalization (8) correctly predicts that the Wh-phrase [*whom*] may not take embedded scope in (9b).

Thus, a question arises as to why the Wh-phrase [*dono hon-o*] can take embedded scope in (11b), while [*whom*] cannot in (9b). To answer this question, Saito proposes that Wh-movement in English establishes an operator-variable relation, but scrambling in Japanese doesn't. Consequently, a scrambled phrase in Japanese may be literally 'undone' in LF, whereas a Wh-phrase in English cannot be. Examine the following LF configurations, which illustrate Saito's proposal. LF structures (12a-b) are for English example (9b); LF representations (13a-b) are for Japanese example (11b). In (12a), [*which picture of* ***whom***] is an operator and t_j a variable.

(12) a. [$_{CP}$ [Which picture of **whom**]$_j$ does John know [$_{CP}$ who$_i$ t_i bought ***t***$_j$]] (LF)
<operator>----------<variable>

b. [$_{CP}$ _____ does John know [$_{CP}$ who$_i$ t_i bought [which picture of **whom**]]] (LF)
|_____↑
radical reconstruction => *

Under Saito's analysis, because operator movement like Wh-movement must create an operator-variable chain as in (12a), the operator [*which picture of* ***whom***] cannot be 'literally' undone, i.e. cannot undergo 'radical reconstruction,' as shown in (12b). As a consequence, as in (12a), the Wh-phrase [***whom***] is necessarily contained by the matrix CP,

but cannot be contained by the embedded CP in LF. [***Whom***] thus takes only matrix scope in (9b).

On Saito's account, on the other hand, Japanese scrambling does not establish an operator-variable relation as in (13a). In other words, in (13a), the scrambled CP, [*Hanako-ga **don hon**-o yonda to*], is not an operator, and its trace is not a variable.

(13) a. $[_{TP}\ [_{CP}$ Hanako-ga **dono hon**-o yonda to$]_i\ [_{TP}$ Taroo-ga $[_{CP}\ [_{TP}$ minna-ga t_i omotteiru] ka] siritagatteiru]]
(LF) (cf. 12a)

b. __ $[_{TP}$ Taroo-ga $[_{CP}\ [_{TP}$ minna-ga $[_{CP}$ Hanako-ga **dono hon**-o yonda to] omotteiru ka] siritagatteiru] (LF)
|_____↑
'radical reconstruction' => ok

Hence, as illustrated in (13b), the CP [*Hanako-ga **don hon**-o yonda to*], fronted by means of scrambling, can undergo lowering into its original/trace position. Consequently, the Wh-phrase [***dono hon**-o*] inside the most deeply embedded CP can end up being contained within the interrogative CP in LF. Hence, [***dono hon**-o*] is allowed to take embedded scope in (11b) in accordance with generalization (8), as desired.

Saito (1989, 2003) accounts for the marginal grammaticality of (10b) in the same way as follows: The structures in (14a-b) are Saito's LF configurations for (10b).

(14) a. $[_{TP}\ [$**Dono hon** -$o_i]\ [_{TP}$ Taroo-ga $[_{CP}\ [_{TP}$ Hanako-ga t_i yonda] ka] siritagatteiru] (LF)

b. $[_{TP}$ ___ $[_{TP}$ Taroo-ga $[_{CP}\ [_{TP}$ Hanako-ga $[$**dono hon** -$o_i]$ yonda] ka] siritagatteiru] (LF)
|_____↑
'radical reconstruction' => ok

The scrambling operation by the object [***dono hon**-o*] in (14a) does not create an operator-variable relation, and thus, can be literally undone in the LF component, as illustrated in (14b). As a result, in (14b), [***dono hon**-o*] is contained by the embedded interrogative CP in LF, and is allowed to take embedded scope in accordance with (8).

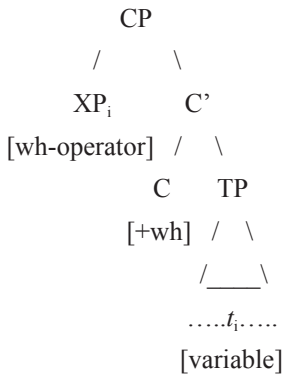
Finally, to explain why movements such as topicalization or Wh-movement in English establish an operator-variable relation, while scrambling in Japanese does not, Saito (2003) proposes a macro parameter, i.e. the Derivational Configurationality Parameter in (1), repeated here as (15).

(15) The Derivational Configurationality Parameter:
Configurational languages are subject to (15a-b), but Japanese-style non-configurational languages are not.

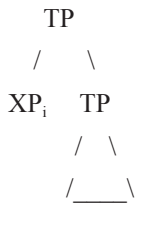
(a) Merge applies only to satisfy selectional requirements. (Merge implies selection.)
(b) Selectional requirements must be satisfied by Merge. (Selection implies Merge.)

Saito's (2003) illustration of the difference between Wh-movement in English and scrambling in Japanese is given in (16a) and (16b):

(16) a. Wh-movement



b. Scrambling



In the case of Wh-movement in English, as in (16a), an interrogative CP has a C head with [+wh] feature, and the head requires a Wh-operator in its Spec. Hence, a Wh-phrase must move into the Spec of CP obligatorily in order to satisfy this selectional requirement, establishing an operator-variable relation between XP_i and t_i. On the other hand, in the case of scrambling in Japanese, as in (16b), there is no head with [+operator] feature, which requires an operator in its Spec position. In short, scrambling has nothing to do with any selectional requirement, and the scrambled phrase is simply merged at the (TP) root freely and optionally. Hence, in (16b), XP_i and t_i do not hold an operator-variable relation of any type. Moreover, Saito (2003) argues that this fundamental difference manifests itself because configurational languages such as English are subject to the first part of the Derivational Configurationality Parameter in (15), whereas Japanese-style non-configurational languages are not. That is, there is a deep-seated difference between English and Japanese with respect to the nature of core grammar: Merge applies only to satisfy selectional requirements in configurational languages such as English, while Merge applies freely and optionally, independently of any selectional requirements in Japanese style non-configurational languages. In other words, due to (15a), configurational languages lack scrambling, i.e. free word order phenomenon, whereas Japanese-style non-configurational languages possess it.

3. Light Verb Construction

The aim of this section is to demonstrate how Saito (2003) motivates the latter half of the Derivational Configurationality Parameter, i.e. (15b), based on Saito and Hoshi's (2003) covert incorporation analysis of Japanese light verb construction. Because Saito and Hoshi's LF incorporation analysis heavily relies on Grimshaw and Meter's (1988) observation, let us consider first some of the properties of Japanese light verb construction that Grimshaw and Mester revealed.

Two instances of light verb construction in Japanese are given below:

(17) a. Hanako-ga Taroo-ni [$_{NP}$ toti -no zyooto]-o sita
-Nom -Dat land-Gen giving -Acc did
'Hanako gave a piece of land to Taroo'

b. Honda-ga ohaio-de [$_{NP}$ akoodo -no seisan] -o site -iru
-Nom Ohio -in Accords-Gen production-Acc doing-is
'Honda is producing Accords in Ohio'

(17a) and (17b) are instances of Japanese light verb construction. In (17a), the past tense form of the light verb *su* is used, and in (17b), the present progressive form of the light verb is used. Observe that in (17a), the theme

argument of *zyooto*, i.e. *toti*, appears to be inside the nominal projection of *zyooto*, because the theme is attached by the Genitive Case marker *-no*. Likewise, in (17b), the theme argument of *seisan*, i.e. *akoodo*, seems to be within the NP of *seisan*, because *akoodo* is marked by the Genitive Case *–no*. In (17a), however, the goal argument of *zyooto*, i.e. *Taroo*, is not marked by *–no*, but is marked by the Dative Case marker *–ni*. Grimshaw and Mester thus claim that the goal argument, *Taroo*, seems to be not inside but outside the nominal projection of *zyooto*. Similarly, the locative argument of *seisan* in (17b) is not marked by the Genitive Case marker, but is attached only by the locative postposition *–de*. This might imply, Grimshaw and Mester argue, that the locative argument, *ohaio-de*, appears to be not inside the NP of *seisan*, but seems to be at the sentential level.

Grimshaw and Mester discover also that the theme argument of *zyooto* in (17a) and that of *seisan* in (17b) could be outside the NPs, as shown below:

(18) a. ??Hanako-ga Taroo-ni toti -o [$_{NP}$ zyooto]-o sita
-Nom -Dat land-Acc giving -Acc did
'Hanako gave a piece of land to Taroo'
b. ??Honda-ga ohaio-de akoodo -o [$_{NP}$ seisan] -o site -iru
-Nom Ohio -in Accords-Acc production-Acc doing-is
'Honda is producing Accords in Ohio'

Observe that in (18a), the theme argument of *zyooto*, i.e. *toti*, is not attached by the Genitive Case marker *–no*, but is attached by the Accusative Case marker *–o*. As Grimshaw and Mester claim, this seems to imply that the theme, i.e. *toti*, appears to be outside the nominal projection of *zyooto* at the sentential level. In (18b), the theme of *seisan*, i.e. *akoodo*, is also attached by Accusative Case *–o*, not by Genitive Case *–no*. This might also imply that the theme argument of *seisan*, i.e. *akoodo*, seems to be outside [$_{NP}$ *seisan*] at the sentential level. As Grimshaw and Mester argue, it cannot be the case that in (18a), the light verb *sita* takes the two Accusative Case marked arguments, *toti-o* and *zyooto-o*, as its semantic arguments. It should not be the case, either, that in (18b), the two Accusative Case marked object NPs, *akoodo-o* and *seisan-o*, are co-arguments of the light verb *site-iru*. The light verb cannot select any argument, because the verb lacks its semantic content.

This claim concerning the nature of Japanese light verb constructions in (18a-b) is supported by Sells' (1988) observation based on Harada's (1973) and Shibatani's (1973) finding. Observe now the examples below:

(19) a. Taroo-ga hasiru
-Nom run
'Taroo runs'
b. Hanako-ga [Taroo-ni / -o hasir]-aseru
-Nom -Dat/-Acc run -make
'Hanako makes Taroo run'

(19a) is a Japanese intransitive sentence, and (19b) is a causative sentence based on (19a).

(20a) is, on the other hand, is a Japanese transitive sentence with the direct object *hon-o*, and (20b) a causative sentence derived from (20a).

(20) a. Taroo-ga hon -o yomu
-Nom book-Acc read
'Taroo reads a book'

b. Hanako-ga [John-ni /*-o hon -o yom]-aseru
-Nom -Dat/*-Acc book-Acc read -make
'Hanako makes Taroo read a book'

By showing the sharp contrast between (19b) and (20b), Harada (1973) and Shibatani (1973) propose the so-called 'abstract' double-*o* constraint, i.e. that a single predicate in Japanese may take at most one Accusative Case marked argument NP in a clause. Notice that in (19b), there is only one *–o* marked object argument, i.e. the causee *Taroo-o*, selected by the causative predicate *hasir-aseru*. On the other hand, there are two Accusative Case marked argument NPs in (20b), i.e. the causee *Taroo-o* and the (embedded) direct object *hon-o*, taken by the predicate *yom-aseru*. Hence, (19b) is well-formed, but (20b) is not due to the abstract double-*o* constraint under Shibatani's and Harada's account.

Keeping this abstract double-*o* constraint in Japanese in mind, compare next (20b) with (21b).

(21) a. Taroo-ga hamabe-o hasiru
-Nom beach -Acc run
'Taroo runs on the beach'
b. Hanako-ga [Taroo-ni /??-o hamabe-o hasir]-aseru
-Nom -Dat/??-Acc beach -Acc run -make
'Hanako makes Taroo run on the beach'

(21a) is another intransitive sentence with the adverbial pharse *hamabe-o* 'on the beach,' and (21b) a causative example derived from (20a). As indicated above, the Accusative Case marked causee, *Taroo-o*, is marginally allowed in (21b). In (20b), on the other hand, the Accusative Case-marked causee *Taroo-o* can never be allowed and accordingly, there is a clear contrast between (21b) and (20b).

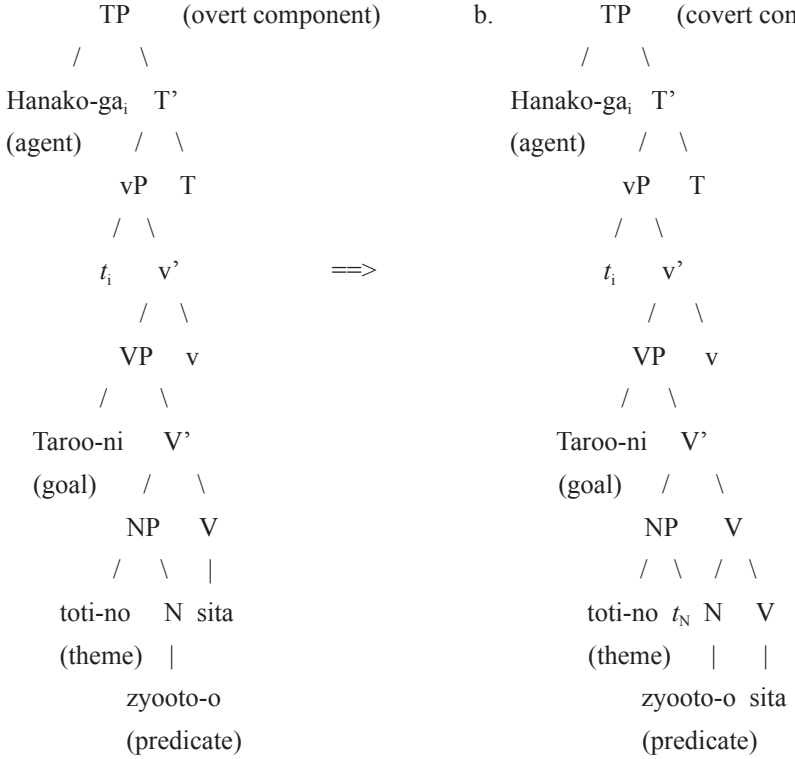
According to Harada (1973) and Shibatani (1973), the contrast between (21b) and (20b) is successfully accounted for as well under their proposal. To repeat, in (20b), the causee *Taroo-o* and the direct object *hon-o* are both Accusative Case marked argument NPs selected by the single causative predicate *yom-aseru*. Under Harada's and Shibatani's analysis, (20b) is thus ruled out by the strong condition, i.e. the abstract double-*o* constraint, which prohibits a predicate from taking more than one Accusative Case marked argument NP in Japanese. (21b), on the other hand, cannot be ruled out by this strong constraint, but is excluded by a weak surface filter, i.e. the 'surface' double-*o* condition, which rules out sentences with more than one *–o* marked phrase in Japanese. Observe that in (21b), *Taroo-o* is an Accusative Case marked causee argument, but *hamabe-o* is not an argument, but an adverbial phrase. Hence, example (21b) does not violate the abstract double-*o* constraint, but is in violation of the surface double-*o* constraint. The difference between (20b) and (21b) is thus accounted for under Harada's and Shibatani's proposal with the two types of double-*o* constraint in Japanese. (To be precise, on Harada's and Shibatani's proposal, (20b) violates both the abstract and surface double-*o* constraints, causing a severe/* violation. (21b), on the other hand, violates only the surface double-*o* constraint, inducing a weak/?? violation.)

Given Harada's (1973) and Shibatani's (1973) analysis of the differences among (19b), (20b) and (21b), Sells (1988) points out that the Japanese light verb constructions in (18a) and (18b) parallel (21b), not (20b), with respect to the degree of acceptability. Namely, like causative example (21b), both (18a) and (18b) do not sound perfect, but they are marginally acceptable to native speakers of Japanese. Sells (1988) claims further that in (18a), *toti-o* and *zyooto-o* cannot therefore be two Accusative Case marked argument NPs selected by the single predicate *sita*; in (18b), *akoodo-o* and *seisan-o* cannot be two Accusative Case marked arguments taken by the single verb *site-iru*, either. If *toti-o* and *zyooto-o* were argument NPs selected by the light verb in (18a), and if *akoodo-o* and *sensan-o*

were arguments taken by the light verb in (18b), both (18a) and (18b) would be as totally unacceptable as Japanese causative (20b), contrary to fact. On the basis of considerations such as the one above, Grimshaw and Mester (1988) thus draw a conclusion that in (18a), *toti-o* and *zyooto-o* are not co-arguments of the light verb *sita*, but *toti-o* is an argument of the nominal predicate *zyooto-o* which forms a complex predicate with the light verb. In (18b), *akoodo-o* and *seisan-o* are not co-arguments of the light verb *site-iru*, either, but *akoodo-o* is an argument taken by the nominal predicate *seisan-o* which builds a complex predicate with the light verb. This analysis of (18a-b) in turn suggests that in (17a), the Dative argument *Taroo-ni* could be an argument selected by the nominal predicate *zyooto-o* which constructs a complex predicate with the light verb *sita*. In (17b), the locative argument *ohaio-de* could be an argument taken by the predicate *seisan-o* which constructs a complex predicate with the light verb *site-iru*.

To account for the above mentioned properties of Japanese light verb constructions such as (17a-b) and (18a-b), Grimshaw and Mester (1988) propose an analysis involving complex predicate formation, called Argument Transfer, in the lexicon. Saito and Hoshi (2000), on the other hand, set forth a covert incorporation analysis like the one below. Because Saito (2003) motivates the latter half of the Derivational Configurationality Parameter, i.e. (15b), based on Saito and Hoshi's (2000) LF complex predicate formation analysis, let us consider now Saito and Hoshi's derivation in (22a-b) for Japanese light verb construction (17a).

(22) a. TP (overt component) ==> b. TP (covert component)



(Saito and Hoshi 2000)

As shown in (22a), on Saito and Hoshi's LF incorporation analysis, the nominal predicate *zyooto-o* first merges the theme argument *toti-no*, assigning its theme theta role within its N projection, NP, in overt syntax. The light verb *sita* then merges the NP [*toti-no zyooto-o*], constructing V'. At the next step, V' merges the goal argument *Taroo-ni*, projecting the maximal projection, VP. As illustrated in (22b), the nominal predicate *zyooto-o* raises to the light verb *sita*, assigning its goal theta role to *Taroo-ni* in the Spec of VP in the covert component, i.e. LF. On the covert head movement analysis, a complex predicate like [$_V$ [$_N$ *zyooto-o*] [$_V$ *sita*]] is thus permitted to be formed in LF, and a theta marking is allowed to be completed in the covert component (cf. Chomsky 1995, etc.).

Saito and Hoshi (2000) attempt to strengthen their covert incorporation analysis with another discovery by Sells (1988) which is also based on Harada's (1973) and Shibatani's (1973) observation. Consider first Harada's (1973) and Shibatani's (1973) observation that the severe violation of the abstract double-*o* constraint cannot be eliminated, even if one of the Accusative Case marked arguments NPs is replaced by empty categories such as a trace. This is shown below:

(23) a. *[$_{CP}$ Op$_i$ [$_{TP}$ Hanako-ga Taroo-o t_i yom-aseta] no] -wa hon-o$_i$ da
-Nom -Acc read-made Comp-Top book-Acc is
'It is a book that Hanako made Taroo read'

b. *[$_{CP}$ Op$_i$ [$_{TP}$ Hanako-ga t_i hon-o yom-aseta] no] -wa Taroo-o$_i$ da
-Nom book-Acc read-made Comp-Top -Acc is
'It is Taroo that Hanako made read a book'

(23a-b) are cleft counterparts of Japanese causative example (20b). Although one of the Accusative Case marked argument NPs in (20b) is replaced by a trace left behind by the movement of OP, both of the examples in (23) remain to be as unacceptable as (20b).

Harada (1973) and Shibatani (1973) also observe that in contrast, the weak violation of the surface double-o constraint disappears entirely, if one of the Accusative Case marked NPs is replaced by an empty category. This is illustrated below:

(24) a. [$_{CP}$ Op$_i$ [$_{TP}$ Hanako-ga Taroo-o t_i hasir-aseta] no] -wa hamabe-o$_i$ da
-Nom -Acc run -made Comp-Top beach -Acc is
'It is on the beach that Hanako made Taroo run'

b. [$_{CP}$ Op$_i$ [$_{TP}$ Hanako-ga t_i hamabe-o hasir-aseta] no] -wa Taroo-o$_i$ da
-Nom beach -Acc run-made Comp-Top -Acc is
'It is Taroo that Hanako made read a book'

The cleft examples above are based on the causative example in (21b). In (24a-b), one of the Accusative Case marked NPs is replaced by a trace left by the movement of an empty operator, and as a result, the weak violation of the surface double-*o* constraint has vanished.

Consider now Sells' (1988) observation in (25).

(25) [$_{CP}$ Op$_i$ [$_{TP}$ Hanako-ga Taroo-ni t_i zyooto-o sita] no] -wa toti-o$_i$ da
-Nom -Dat giving -Acc did Comp-Top land-Acc is
'It is a piece of land that Hanako gave to Taroo'

(25) is a cleft counterpart of the Japanese light verb construction in (18a). Here, one of the two Accusative Case marked NPs, i.e. the theme argument *toti-o*, is replaced by the trace of OP, and *toti-o* is placed in the focus position. As expected, the weak violation of the surface double-*o* constraint is eliminated completely here, and (25) sounds as acceptable as (24a-b). This observation could thus confirm Sell's (1988) claim that (18a-b) are indeed in violation of the surface double-*o* constraint, not the abstract double-*o* constraint.

Sells (1988), however, discovers as well that the following cleft construction based on (18a) is totally unacceptable:

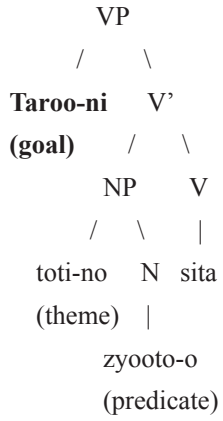
(26) *[$_{CP}$ Op$_i$ [$_{TP}$ Hanako-ga Taroo-ni toti -o t_i sita] no] -wa zyooto-o$_i$ da
-Nom -Dat land-Acc did Comp-Top giving-Acc is
'*Lit*. It is giving that Hanako did a piece of land to Taroo'

In cleft example (26), one of the two Accusative Case marked NPs, i.e. the nominal theta marker *zyooto-o*, is replaced by the trace of the movement of OP, but in contrast with (25), (26) is even worse than the original light verb construction in (18a). Importantly, the unacceptability of (26) in contrast with the acceptability of (25) thus appears to pose a problem for Sells' (1988) claim that (18a-b) are instances of a weak violation of the surface double-*o* constraint. That is, a question arises as to why the unacceptability is eliminated in (25), but cannot be in (26).

Given this, Saito and Hoshi (2000) argue that the contrast between (25) and (26) is not a problem at all for Sell's (1988) claim for the nature of light verb constructions (18a-b). In particular, Saito and Hoshi (2000) maintain that both the acceptability of (25) and the unacceptability of (26) are in fact expected under their covert head movement analysis. This is because in (25), the nominal theta marker *zyooto-o* is in the c-command domain of the light verb *sita*. Hence, on their LF complex predicate formation analysis, there is no problem for *zyooto-o* to incorporate into the light verb *sita* in the covert component to discharge its theta roles in (25). The unacceptability of (26) is also expected under their LF incorporation analysis, because in (26), the nominal predicate *zyooto-o* is in the focus position, and OP$_i$, which is coindexed with *zyooto-o*$_i$, is in the Spec of CP. Because both *zyooto-o* and the empty operator occupy semantically significant positions, neither of them should be able to undergo lowering and to incorporate into the light verb, forming an LF complex predicate to complete its theta marking in the covert component (cf. 22a-b). Hence, in addition to the acceptability of (25), the unacceptability of (26) seems to be adequately accounted for under the LF incorporation analysis of the Japanese light verb construction. Consequently, under the covert head movement analysis, Sell's (1988) claim is maintained that (18a) and (18b) are instances of a violation of the surface double-*o* constraint, as desired.

Furthermore, Saito (2003) goes on to argue that there are at least two theoretically notable features in the covert incorporation analysis above. First examine again an initial point of the derivation in (22), shown in (27):

(27)



(27) is an initial point of the derivation of light verb construction (18a). Here, the goal argument of the nominal predicate *zyooto-o*, i.e. *Taroo-ni*, merges V' whose head is the light verb *sita*. Notice that this Merge by *Taroo-ni* in (27) does not satisfy any selectional/theta requirement by anything within VP, because the light verb lacks its semantic content. Saito (2003) claims further that this type of Merge is exactly the same as scrambling of XP represented in (16b). In (16b), XP is allowed to merge the root TP freely and optionally, independently of any selectional requirement. Similarly, in (27), the goal argument NP *Taroo-ni* merges the projection of the light verb *sita* without satisfying any theta requirement of the predicate. Hence, Saito (2003) argues that (27) and (16b) parallel in a

theoretically important respect: (27) and (16b) show that Merge does not imply selection in Japanese. If this claim by Saito (2003) is indeed correct, the covert head movement analysis of Japanese light verb construction thus provides further evidence for the first part of the Derivational Configurationality Parameter in (15), repeated here as (28).

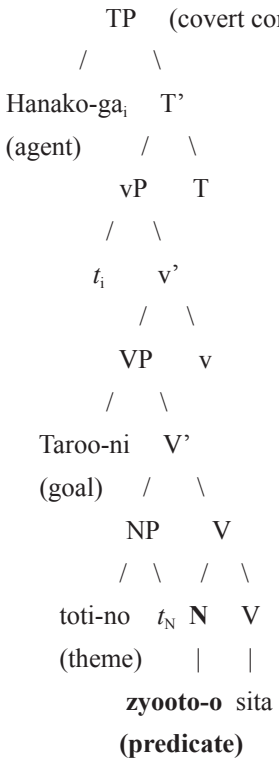
(28) The Derivational Configurationality Parameter:
Configurational languages are subject to (28a-b), but Japanese-style non-configurational languages are not.

(a) Merge applies only to satisfy selectional requirements. (Merge implies selection.)
(b) Selectional requirements must be satisfied by Merge. (Selection implies Merge.)

In short, according to Saito (2003), configurational languages such as English are subject to (28a), but Japanese-style non-configurational languages are not. Hence, Japanese permits structures such as (16b) or (27). On the other hand, English disallows them.

Consider further LF structure (22b), repeated here as (29).

(29)



In (29), theta role assignment by the nominal theta marker *zyooto-o*, i.e. a selectional requirement in a broad sense, is not satisfied by the Merge operation of any maximal projection XP, but by the incorporation of the head, i.e. [$_{N0}$ *zyooto-o*], in the covert syntax. According to Saito (2003), this is exactly because the latter half of the Derivational Configurationality Parameter, i.e. (28b): Selection implies Merge in configurational languages, but selection does not imply Merge in Japanese-style non-configurational languages. In other words, because of (28b), configurational languages such as English force a predicate to finish assigning theta roles to its arguments in situ at the initial point of the derivation (cf. Chomsky's 1995 configurational theta theory), whereas Japanese-style non-configurational languages do not. Consequently, a predicate in Japanese is allowed to incorporate into the light verb in LF, assigning its theta roles within the projection of the light verb in covert syntax. Hence, configurational languages lack light verb construction, whereas Japanese-style non-configurational languages have the construction.

In this manner, Saito (2003) explains successfully with the Derivational Configurationality Parameter in (28a-b) why Japanese-style non-configurational languages have both scrambling and light verb construction, whereas configurational languages such as English lack them.

4. A Potential Problem for the Derivational Configurationality Parameter

The Derivational Configurationality Parameter in (28) proposed by Saito (2003) is important, because it provides a new, very interesting perspective to look at the properties of the free word order phenomenon and light verb construction in Japanese. In addition, if correct, it suggests that there is a truly radical difference between configurational languages and Japanese-style non-configurational languages in the very core part of grammar, i.e. with respect to the nature of Merge and selection. Furthermore, because (28) is a parameter, (28) must be part of Universal Grammar, i.e. our innate knowledge of language (cf. Chomsky 1981, 1986, among others), and it has to be part of genetic information which all humans are born with.

Saito's (2003) Derivational Configurationality Parameter in (28) appears convincing. It seems, however, that a question could still arise as to if human languages could differ in such a drastic way in the very core part of grammar, i.e. Merge and selection, why this should be the case, if our gene could indeed contain information which could refer only to particular languages such as 'Japanese-style non-configurational' languages, etc. Recently, Newmeyer (2005) and others in fact question even the very existence of parameters, and Borseley and Börjars (2011) among others support Newmeyer's claim (cf. Bowerman 1988, Culicover 1999, Kirby 1999, Kayne 2000, Boeckx 2006, Boeckx 2011, Clark and Lappin 2011, etc.).

Given this debate, in this section, I would like to point out that there is at least one potential empirical problem for the Derivational Configurational Parameter in (28a-b) which could imply that we cannot maintain the two parts of the Derivational Configurationality Parameter as they are, because either one of them seems to be incorrect. Thus, if the argument provided in this section indeed holds, it implies that we have to find a way to revise the Derivational Configurationality Parameter in an adequate way, or it could provide further evidence for Newmeyer's (2005) claim that we have not yet discovered any (macro) parameter which is based on compelling evidence (cf. Chomsky 1981, 1986, etc.).

To see what kind of empirical problem the parameter in (28a-b) has, consider again examples (18a-b), repeated here as (30a-b), respectively.

(30) a. ??Hanako-ga Taroo-ni toti -o [$_{NP}$ zyooto]-o sita
-Nom -Dat land-Acc giving -Acc did
'Hanako gave a piece of land to Taroo'
b. ??Honda-ga ohaio-de akoodo-o [$_{NP}$ seisan] -o site -iru
-Nom Ohio -in Accords-Acc production-Acc doing-is
'Honda is producing Accords in Ohio'

(30a-b) are instances of Japanese light verb constructions. (30a-b) are marginally unacceptable due to the surface double-*o* constraint, which prohibits a clause from containing more than one *–o* marked phrase in Japanese.

Examine now the following examples:

(31) a. *[$_{NP}$ zyooto]-o$_i$ Hanako-ga Taroo-ni toti -o t_i sita
giving -Acc -Nom -Dat land-Acc did
'Hanako gave a piece of land to Taroo'

b. *[$_{NP}$ seisan] -o$_i$ Honda-ga ohaio-de akoodo-o t_i site -iru
production-Acc -Nom Ohio -in Accords-Acc doing-is
'Honda is producing Accords in Ohio'

In (31a), the nominal predicate [$_{NP}$ *zyooto*]-*o* is short scrambled to the sentence initial position; likewise, in (31b), the nominal theta marker [$_{NP}$ *seisan*]-*o* is preposed to the sentence initial position by short scrambling. Significantly, the examples in (31a-b) are by far worse than (30a-b), and the unacceptability of (31a-b) indeed parallels that of the cleft construction in (26).

Consider also the following examples:

(32) a. ??John-ga [$_{CP}$ Hanako-ga Taroo-ni toti -o [$_{NP}$ zyooto]-o sita to] omotteiru
-Nom -Nom -Dat land-Acc giving -Acc did that think
'John thinks [$_{CP}$ that Hanako gave a piece of land to Taroo]'

b. ??John-ga [$_{CP}$ Honda-ga ohaio-de akoodo-o [$_{NP}$ seisan] -o site -iru to] omotteiru
-Nom -Nom Ohio-in Accords-Acc production-Acc doing-is that think
'John thinks [$_{CP}$ that Honda is producing Accords in Ohio]'

In both (32a) and (32b), the light verb constructions in (30a-b) are embedded inside the matrix clauses. From a perspective of the surface double-*o* constraint, there is no difference between (32a-b) and (30a-b). Hence, as expected, (32a-b) are as marginally unacceptable as (30a-b).

Examine now the examples in (33a-b), both of which involve long distance scrambling of the nominal theta marker of the light verb construction (cf. 10a-b and 11a-b).

(33) a. *[$_{NP}$ zyooto]-o$_i$ John-ga [$_{CP}$ Hanako-ga Taroo-ni toti -o t_i sita to] omotteiru
Giving -Acc -Nom -Nom -Dat land-Acc did that think
'John thinks [$_{CP}$ that Hanako gave a piece of land to Taroo]'

b. *[$_{NP}$ seisan] -o$_i$ John-ga [$_{CP}$ Honda-ga ohaio-de akoodo-o t_i site -iru to] omotteiru
production-Acc -Nom -Nom Ohio-in Accords-Acc doing-is t that think
'John thinks [$_{CP}$ that Honda is producing Accords in Ohio]'

In (33a), the nominal predicate [$_{NP}$ *zyooto*]-*o* is long distance scrambled to the sentence initial position, crossing the CP boundary. Similarly, in (31b), the nominal theta marker [$_{NP}$ *seisan*]-*o* is preposed to the sentence initial position by means of long distance scrambling, crossing the CP. Notice that the examples in (33a-b) are also much worse than (32a-b), and that the unacceptability of (33a-b) parallels that of (26) and (31a-b).

A question thus arises as to why (31a-b) and (33a-b), which involve scrambling, are by far worse than (30a-b) and (32a-b). To put it differently, a question arises as to why we cannot scramble the nominal theta marker of the light verb construction in Japanese. Importantly, the total unacceptability of (31a-b) and (33a-b) appears to pose a potential problem for the Derivational Configurationality Parameter in (28a-b). To see why this should be so, let us consider first the derivation in (34a-b) that Saito's (2003) analysis based on the Derivational Configurationality Parameter assigns to light verb construction (31a).

(34) a. *[$_{TP}$ [$_{NP}$ **zyooto**]-o$_i$ [$_{TP}$ Hanako-ga Taroo-ni toti -o ***t***$_i$ sita]] (LF)

b. ___ [$_{TP}$ Hanako-ga Taroo-ni toti -o [$_{NP}$ **zyooto**]-o sita]] (LF)
|_____↑
'radical reconstruction' => ok

Recall that under Saito's proposal, scrambling does not establish an operator-variable relation, because Merge does not imply selection in Japanese due to the first part of the Derivational Configurationality Parameter, i.e. (28a). Hence, on his analysis, [$_{NP}$ *zyooto*]-*o* is not an operator, and its trace is not a variable in (34a); the scrambling of the nominal theta marker should be permitted to be literally undone, as illustrated in (34b) (cf. 13b and 14b). Thanks to this radical reconstruction operation, the nominal theta maker [$_{NP}$ *zyooto*]-*o* should be able to move back to the complement position of the light verb *sita*, as illustrated in (34b). Furthermore, due to the latter half of the parameter, i.e. (28b), the nominal theta marker should then be able to incorporate into the light verb, assigning theta roles to its arguments successfully in the LF component. Therefore, given Saito's (2003) Derivational Configurationality Parameter in (28a-b), we seem to predict that there should be nothing wrong with examples such as (31a) other than a violation of the surface double-*o* constraint, and that (31a-b) should parallel (30a-b) with respect to their unacceptability. However, this is not the case empirically. As we saw above, examples such as (31a-b) sound fairly bad, and the unacceptability of (31a-b) in fact parallels that of the cleft example in (26), not that of (30a-b).

Similarly, the Derivational Configurationality Parameter assigns the derivation in (35a-b) for example (33a).

(35) a. *[$_{NP}$ **zyooto**]-o$_i$ John-ga [$_{CP}$ Hanako-ga Taroo-ni toti -o ***t***$_i$ sita to] omotteiru

b. ___ John-ga [$_{CP}$ Hanako-ga Taroo-ni toti -o [$_{NP}$ **zyooto**]-o sita to] omotteiru
|_____↑
'radical reconstruction' => ok

As shown in (35a), under Saito's proposal, scrambling does not create an operator-variable chain due to the first part of the Derivational Configurationality Parameter in (28a). In other words, on his analysis, the nominal theta marker [$_{NP}$ *zyooto*]-*o* preposed by long distance scrambling is not an operator, and its trace is not a variable. Hence, it should be possible for [$_{NP}$ *zyooto*]-*o* to return to the c-command domain of the light verb *sita* by means of radical reconstruction, as illustrated in (35b). In addition, because of the latter half of the Derivational Configurationality Parameter in (28b), it should also be possible for the nominal predicate [$_{NP}$ *zyooto*]-*o* to adjoin to the light verb, successfully discharging theta roles to its arguments in LF. Hence, again, we seem to predict that there is no violation of any grammatical condition beside the surface double-*o* constraint in examples such as (33a-b). Namely, (33a-b) should be predicted to be as marginally unacceptable as examples such as (32a-b). However, this prediction is not borne out: (33a-b) are very much worse than (32a-b), which are only in violation of the surface double-o constraint. (33a-b) in fact sound very bad, and the ungrammaticality of (33a-b) indeed parallels that of (26) and (31a-b).

The data in (31a-b) and (33a-b) thus appear to lead us to conclude that we do not seem to be able to maintain the both parts of the Derivational Configurationality Parameter as they are, and they could imply that either one of them seems to be incorrect. Finally, notice that while maintaining the Derivational Configurationality Parameter in (28a-b), Saito (2003) does not seem to be able to extend to examples (31a-b) and (33a-b) in a straightforward manner, Saito and Hoshi's (2000) analysis of the cleft construction in (26), repeated here as (36).

(36) *[$_{CP}$ Op$_i$ [$_{TP}$ Hanako-ga Taroo-ni toti -o t_i sita] no] -wa zyooto-o$_i$ da
-Nom -Dat land-Acc did Comp-Top giving-Acc is
'*Lit*. It is giving that Hanako did a piece of land to Taroo'

The Japanese cleft example in (36) is totally unacceptable, and (36) is indeed as unacceptable as (31a-b) and (33a-b). To account for the unacceptability of (36), Saito and Hoshi (2000) argue that in (36), the nominal predicate [$_{NP}$ *zyooto-o*] is placed in the focus position, and OP$_i$, which is coindexed with the nominal theta marker [$_{NP}$ *zyooto-o*]$_i$, is in the Spec position of CP. Because both [$_{NP}$ *zyooto-o*] and the empty operator are in the semantically significant positions, neither of them can move into the complement position of the light verb *sita* by means of radical reconstruction, in order to assign theta roles to its arguments in LF. As a consequence, in (36), the arguments of the nominal predicate [$_{NP}$ *zyooto-o*] cannot receive theta roles properly, and as desired, the ungrammaticality of (36) is accounted for on Saito and Hoshi's (2000) LF incorporation analysis of the Japanese light verb construction. Recall that under Saito's (2003) theory, scrambling is crucially a semantically vacuous operation, which allows radical reconstruction, whereas clefting is a semantically significant operation: scrambling and clefting are fundamentally different grammatical operations. Hence, on Saito's (2003) account, it does not seem to be able to capture straightforwardly the fact that (31a-b) and (33a-b), all of which involve scrambling, are as unacceptable as (36), which involves clefting.

5. Conclusion

In this paper, I have attempted to explain as clearly as possible how Saito (2003) motivates the Derivational Configurationality Parameter. In so doing, I have tried to explain the importance of the macro parameter. I have, however, pointed out that the unacceptability of (31a-b) and (33a-b) poses an potential problem for the Derivational Configurationality Parameter. Furthermore, I have argued that the problem could imply that we must find a way to revise the macro parameter properly, or it could provide further evidence for Newmeyer's (2005) claim that we have not yet discovered any (macro) parameter which is based on compelling evidence. I leave for my future research a question as to how we should account for the unacceptability of (31a-b) and (33a-b), if there exists any (macro) parameter, etc. (cf. Hawkins 1988, 1994, 2004, 2014, Phillips 1996, Newmeyer 1998, 2005, Culicover 1999, Kierby 1999, Kayne 2000, Kempson et al. 2001, Boeckx 2006, 2011, Borseley and Börjars 2011, Clark and Lappin 2011, among others).

References

Baker, M. (1996) *The Polysynthesis Parameter*, Oxford University Press.
Boeckx, C. (2006) *Linguistic Minimalism: Origins, Concepts, Methods, and Aims*, Oxford University Press.
Boeckx, C. (2011) 'Approaching Parameters from Below,' in Sciulo, A.-M. D. and C. Boeckx (eds.), *Biolinguistic Approaches to Language Evolution and Variation*, Oxford University Press.
Borseley, R. and K. Börjars (2011) *Non-transformational Syntax: Formal and Explicit Models of Grammar*, Wiley-Blackwell.
Bowerman, M. (1988) 'The 'No Negative Evidence' Problem: How Do Children Avoid Constructing an Overtly General Grammar?' in J. Hawkins (ed.), *Explaining Language Universals*, pp. 73-104.
Chomsky, N. (1981) *Lectures on Government and Binding*, Dordrecht: Foris.
Chomsky, N. (1986) *Knowledge of Language: Its Nature, Origin and Use*, New York: Praeger.
Chomsky, N. (1995) *The Minimalist Program*, MIT Press.
Clark, A. and S. Lappin (2011) *Linguistic Nativism and the Poverty of Stimulus*, Wiley-Blackwell.
Culicover, P. (1999) *Syntactic Nuts: Hard Cases, Syntactic Theory, and Language Acquisition*, Oxford University Press.
Fukui, N. (1986) *A Theory of Category Projection and its Applications*, PhD dissertation, MIT.

Hale, K. (1982) 'Preliminary Remarks on Configurationality,' in *NELS 12*, 86-96.

Harada, K. (1972) 'Constraints on *Wh-Q Binding, in Studies in Descriptive and Applied Linguistics 5*, Division of Languages, International Christian University, 180-206.

Hawkins, J. (1988) *Explaining Language Universals*, Blackwell.

Hawkins, J. (1994) *A Performance Theory of Order and Constituency*, Cambridge University Press.

Hawkins, J. (2004) *Efficiency and Complexity in Grammars*, Oxford University Press.

Hawkins, J. (2014) *Cross-linguistic Variation and Efficiency*, Oxford University Press.

Jelinek, E. (1984) 'Empty Categories, Case and Configurationality,' *Natural Languageand Linguistic Theory 2*, 39-76.

Kayne, R. (2000) *Parameters and Universals*, Oxford University Press.

Kempson, R., W. Meyer-Viol, and D. Gabbay (2001) *Dynamic Syntax: The Flow of Language Understanding*, Blackwell.

Kirby, S. (1999) *Function, Selection, and Innateness: The Emergence of Language Universals*, Oxford University Press.

Kuroda, S.-Y. (1988) 'Whether We Agree or not: A Comparative Syntax of English and Japanese,' *Linguisticae Investigationes 12*, 1-47.

Miyagawda, S. (1997) 'Against Optional Scrambling,' *Linguistic Inquiry 28*, 1-25.

Newmeyer, F. (1998) *Language Form and Language Function*, MIT Press.

Newmeyer, F. (2005) *Possible and Probable Languages: A Generative Perspective on Linguistic Typology*, Oxford University Press.

Phillips, C. (1996) *Order and Structure*, PhD dissertation, MIT.

Riemsdijk, H. van and E. Williams (1981) 'NP-structure,' *The Linguistic Review 1*, 171-217.

Ross, J. (1967) *Constraints on Variables in Syntax*, PhD dissertation, MIT.

Saito, M. (1985) *Some Asymmetries in Japanese and their Theoretical Implications*, PhD dissertation, MIT.

Saito, M. (1989) 'Scrambling as Semantically Vacuous A'-Movement,' in M. Baltin and A. Kroch (eds.), *Alternative Conceptions of Phrase Structure*, pp. 182-200.

Saito, M. (2003) 'On the Role of Selection in the Application of Merge,' *NELS 33*, 323-345.

Whitman, J. (1987) 'Confiturationality Parameters,' in Imai, T. and M. Saito (eds.), *Issues in Japanese Linguistics*, Dordrecht: Foris, pp. 351-374.