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A Dynamic Syntactic Analysis of Scrambling and WH Movement

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1. Introduction

Developing Hale's (1982) Configurationality Parameter, Saito (2003) proposes the following (cf. 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 in (1), I believe, does provide us with an invaluable insight into the properties of both configurational and Japanese-style non-configurational languages. In this paper, however, I examine the nature of the first part of the parameter, (1a), which concerns free word order phenomenon in Japanese; I claim that precisely because (1a) has much theoretical significance in that it implies a radical difference between configurational and Japanese-style non-configurational languages in core grammar, it should be worthwhile attempting to consider an alternative analysis from a different perspective (cf. Hawkins 1988, 1994, 2004, 2014, Phillips 1996, Newmeyer 1998, 2005, Kempson et al. 2001, Borseley and Börjars 2011, among others).

In the following section, I attempt to demonstrate how Saito motivates the first part of the Derivational Configurationality Parameter in (1). More specifically, in the section, I show Saito's data of free word order phenomenon in Japanese together with his analysis. In section 3, I try to show why (1a) is theoretically important, and that because of its importance, it should be worth trying to consider an alternative analysis to account for Saito's data in a different way, i.e. without relying on any parameter. There, I suggest that we might be able to account for his data naturally by appealing to the dynamics of language (Hawkins 1994, 2004, 2014, Phillips 1996, Kempson et al. 2001, Borseley and Börjars 2011, etc.). In section 4, I conclude the discussion of this paper.

2. The Derivational Configurational Parameter (Saito 2003)

Based on the following data and argument, Saito first maintains that scrambling in Japanese is different from topicalization in English (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
-Top -Nom which book-Acc
katta to] omotteiru no
bought that think Q
'[Q [Taroo thinks that Hanako bought which book]]'

b. Taroo-wa [[dono hon -o]$_i$ Hanako-ga t_i
-Top which book-Acc -Nom
katta to] omotteiru no
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
-Nom who-to -Nom what
-o katta ka] tazuneta (koto)
-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 generalization (8). Consider now example (10b).

(10)a. [$_{TP}$ Taroo-ga [$_{CP}$ [$_{TP}$ Hanako-ga dono hon
-Nom -Nom which book

-o yonda] ka] siritagatteiru] (koto)
-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 [$_{CP}$ [$_{TP}$
which book-Acc -Nom
Hanako-ga t_i yonda] ka] siritagatteiru]] (koto)
-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
-Nom all -Nom -Nom
dono hon -o yonda to] omotteiru ka]
which book-Acc read that think Q
siritagatteiru] (koto)
want-to-know (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
-Nom which book-Acc read
to]$_i$ [$_{TP}$ Taroo-ga [$_{CP}$ [$_{TP}$ minna-ga t_i omotteiru]
that -Nom all -Nom think
ka] siritagatteiru]] (koto)
Q 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
<operator>----------
[$_{CP}$ who$_i$ t_i bought ***t***$_j$]] (LF)
----------<variable>

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

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)

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

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
|_____
'radical reconstruction' => ok
[**dono hon -o**$_i$] yonda] ka] siritagatteiru] (LF)
_____↑

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).

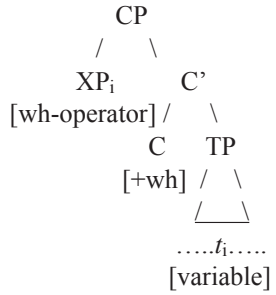
Finally, to explain why movements such as topicalization or Wh-movement in English establish an operator-variable relation, while scrambling in Japanese does not, Saito (2003) proposes the Derivational Configurationality Parameter in (1a), repeated here as (15a).

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

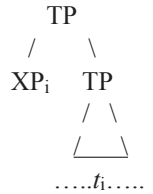
(a) Merge applies only to satisfy selectional requirements. (Merge implies selection.)
(b) Selectional requirements must be satisfied by Merge. (Selection implies Merge.)

And Saito (2003) illustrates the difference between Wh-movement in English and scrambling in Japanese as in (16a) and (16b), respectively:

(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. 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. Hence, scrambling has nothing to do with any selectional requirement, and the scrambled phrase is simply merged at the (TP) root freely and optionally. 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, independently of any selectional requirements in Japanese style non-configurational languages. In other words, due to (15a), configurational languages lack scrambling, whereas Japanese-style non-configurational languages possess it

3. Theoretical Implications and an Alternative Dynamic Syntactic Analysis

Saito's (2003) Derivational Configurationality Parameter in (15a) accounts for the contrast between (9b) and (10b/11b) in a principled manner, as desired. Notice, however, that the parameter in (15a) implies that there is a truly radical difference between configurational languages and Japanese type non-configurational languages in core grammar. Namely, Merge, which is a fundamental grammatical operation, necessarily implies selection in configurational languages, while the same operation, Merge, does not (have to) imply selection in Japanese-style non-configurational languages. Furthermore, because (15a) is a parameter, it must be part of Universal Grammar, i.e. our innate knowledge of language (cf. Chomsky 1981, 1986, among others). Hence, (15a) has to be part of genetic information which all humans are born with.

There is, of course, a possibility that Saito's (2003) Derivational Configurationality Parameter in (15) is correct. A question, however, could arise as to if human languages could differ in such a drastic way in the core part of grammar, if our gene could indeed contain specific information which could refer only to particular languages such as 'Japanese-style non-configurational' languages, etc. In addition, recently, Newmeyer (2005) and others question even the very existence of parameters in general, 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, I believe that it could be at least worthwhile attempting to consider a possibility that English and Japanese do not differ within core grammar, and that there is not such a parametric difference between English and Japanese in the core part of grammar (Hawkins 1988, among others). To attain this aim, I wish to suggest tentatively the following alternative analysis of (9b) and (10b/11b). Under the alternative analysis, I adopt a dynamic view of syntax, following Phillips (1996), Kempson et al (2001), among others.

Given this consideration, observe again Saito's contrast in (9b) and (11b), repeated here as (17) and (18).

(17) ??[$_{CP}$ [Which picture of **whom**]$_j$ does John know [$_{CP}$ who$_i$ t_i bought t_j]]

(18) ??[$_{TP}$ [$_{CP}$ Hanako-ga **dono hon** -o yonda -Nom which book-Acc read to]$_i$ [$_{TP}$ Taroo-ga [$_{CP}$ [$_{TP}$ minna-ga t_i omotteiru] ka] 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]'

Recall that in English example (17), the Wh-phrase [***whom***] cannot take embedded scope, whereas in Japanese example (18), [***dono hon-o***] takes embedded scope. Based on this contrast, Saito (2003) proposes the first part of Derivational Configurationality Parameter, i.e. (15a).

To suggest another account for the contrast between (17) and (18) without appealing to a parameter, I wish to hypothesize that there is basically no radical difference between English and Japanese in core grammar, and would like to suggest the following alternative approach:

(19) **A Dynamic Syntactic Alternative**
- a. Both Wh-movement in English and long distance scrambling in Japanese establish an operator-variable relation. (Both Wh-movement and scrambling are semantically significant.)
- b. [+Wh-Q operator] feature requires an Wh-phrase in its Spec position, whereas [+S operator] feature requires a scrambled phrase in its Spec position.
- c. [+Q] feature determines the scope property of a Wh-phrase. (Saito 2003, etc.)
- d. Grammar, i.e. parser, checks as many features as possible in their 'surface' positions in the course of left-to-right incremental processing (cf. Phillips 1996, Kempson et al. 2001, etc.).

Under this tentative Dynamic Syntactic analysis, the scope property of the Wh-phrase [***whom***] in (17) is fixed at the initial point of the incremental processing. This is because English is a head-initial language and a C [+Wh-Q operator] head appears immediately after a Wh-phrase, as illustrated below:

(20) [+Wh-Q operator]
[$_{CP}$ [$_{DP}$ *which picture of* ***whom***] [$_C$ *does*]
<operator/filler>----------
……..…… ?*e* ……..….
----------<trace/gap>

Observe that in (20), grammar has finished parsing a string of words from [*which picture of* ***whom***] to [*does*], and has projected its structure. As illustrated in (20), because both [*which*] and [***whom***] are in the Spec position of [$_C$ +Wh-Q operator] feature on the 'surface,' both of those Wh-phrases can take matrix scope in (20), and thus are required to take matrix scope in their 'surface' positions at this stage, crucially in accordance with (19d). To put it differently, condition (19d) successfully blocks [*which*] and [***whom***] from taking embedded scope in the 'non-surface' (trace/gap) position later in the course of the left-to-right incremental processing (cf. Phillips 1996, Kempson et al. 2001, etc.).

On the other hand, to determine the scope property of [***dono hon-o***] in (18), grammar has to keep parsing a string of words from [*Hanako*] to [*siritagatteiru*] for example (18), and must project the following type of representation (cf. Phillips 1996, Kempson et al. 2001, etc.):

(21) [$_{CP}$ [$_{CP}$ Hanako-ga **dono-hon-o** yonda to]$_i$
<operator/filler>----------
[$_{TP}$ Taroo-ga [$_{CP}$ [$_{TP}$ minna-ga e_i omtteiru]
----------<variable/gap>
[$_C$ ka]] siritagatteiru] [$_C$ *e*]]
[+Q] [+S operator]

This is so, because Japanese is a head-final language and a C head appears after a whole TP domain. Hence, after having constructed structure (21), grammar, i.e. parser, recognizes [$_{CP}$ *Hanako-ga* ***dono-hon-o*** *yonda to*]$_i$ is a scrambled operator/filler in the Spec position of [$_C$ +S operator], and e_i is its variable/gap. Unlike [***whom***] in (20), the Wh-phrase [***dono hon-o***] in (21) cannot have its scope property determined in the 'surface' position. This is because [***dono hon-o***] is inside the Spec position of [$_C$ +S operator], not inside the Spec of [$_C$ +Q], on the 'surface.' Hence, parser has to fix the scope property of [***dono hon-o***] in the 'non-surface' variable/gap position of [$_{CP}$ *Hanako-ga* ***dono-hon-o*** *yonda to*]$_i$ in (21). Notice that in (21), the embedded C head [$_C$ *ka*] has [+Q] feature which c-commands the variable/gap. Consequently, the Wh-phrase [***dono hon-o***] is allowed

to take embedded scope in (21), as desired. It seems that it is not so easy for some native speakers to accept examples such as (18), and I speculate that this difficulty might arise, because the Wh-phrase [***dono hon-o***] cannot take scope in the 'surface' position in (18/21), in accordance with parsing condition (19d).

Last, I wish to show that the suggested Dynamic Syntactic analysis also accounts for Saito's (1989, 2003) example in (10b), repeated here as (22).

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

In example (22), the Wh-phrase [***dono hon-o***] is scrambled to the sentence-initial position. Hence, [***dono hon-o***] is not contained by the embedded interrogative CP, but the Wh-phrase takes embedded scope, as Saito observes.

Under the tentative Dynamic Syntactic analysis, to fix the scope property of [***dono hon-o***] in (22), grammar has to parse a string of words from [***dono hon-o***] to [*siritagatteiru*] as in (21), because Japanese is a head-final language and a C head shows up late in the parsing process. The structure grammar assigns to (22) is given below:

(23) [$_{CP}$ [**Dono hon-o**]$_i$ [$_{TP}$ Taroo-ga [$_{CP}$ [$_{TP}$
<operator/filler>----------
Hanako-ga e_i yonda] [$_C$ ka]] siritagatteiru]
---------<trace/gap> [+ Q]
[$_C$ *e*]](koto)
[+S operator]

In (23), [***dono hon-o***]$_i$ is a scrambled operator, i.e. filler, in the Spec of [$_C$ +S operator] feature, and e_i is its trace/gap. On the 'surface,' the scrambled phrase [***dono hon-o***] cannot have its scope possibility determined, because [***dono hon-o***] is not in the Spec of [$_C$ +Q operator], but in the Spec position of [$_C$ +S operator]. Consequently, the scrambled Wh-phrase [***dono hon-o***] is forced to take scope in the 'non-surface' trace, i.e. gap, position within the embedded TP (cf. constraint 19d). Notice that the C head of the embedded clause has [+Q] feature which c-commands everything inside the embedded clause. Again, some native speakers of Japanese seem to find it a little hard to accept examples such as (22), and I feel that this might be because the Wh-phrase [***dono hon-o***] in (22/23) cannot take its scope in the 'surface' position in accordance with grammatical, i.e. parsing, constraint (19d). If this speculation is indeed correct, it implies that long distance scrambling is not totally semantically vacuous (contra Saito 1989, 2003, etc.), but a scrambled phrase occupies a semantically significant position on the 'surface,' according to (19a).

4. Conclusion

In this paper, I have shown how Saito (2003) explains the nature of Wh-movement in English and scrambling in Japanese by means of his Derivational Configurationality Parameter. The proposed macro parameter, I believe, is an important one, because if it is correct, it implies that there is a radical difference between configurational languages and Japanese-style non-configurational languages in the very core part of grammar.

However, given the recent debate where Newmeyer (2005), Borseley and Börjars (2011), among others, seriously question the existence of (macro) parameters (cf. Chomsky 1981, 1986, etc.), I have attempted to suggest an alternative approach to account for the nature of Wh-movement and scrambling from a Dynamic Syntactic perspective without appealing to any parameter. If the suggested Dynamic Syntactic approach is indeed plausible, it could be the case that there is no such drastic parametric difference between English and Japanese in core grammar, and that it is worth considering if the suggested Dynamic Syntactic approach could indeed be superior to Saito's parametric approach.

I believe that precisely because of the theoretical significance that Saito's Derivational Configurationality Parameter provides for us, it should be very much worthwhile continuing to consider other possible ways to account for English Wh-movement and Japanese scrambling from a variety of formal and/or functional perspectives until we fully understand the nature of such grammatical operations (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).

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