THE NOTION OF SUBJECT SELECTION IN CASE GRAMMAR

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I

In most grammar books of Traditional English Grammar, the notion of Subject and Object have always been considered to be an essential issue when we discuss syntax of the English language. Nevertheless no clear and accurate definitions which satisfy everybody have been given. For instance, Otto Jespersen, in Chapter XI of *The Philosophy of Grammar*, introduces various definitions of subject such as psychological subject, logical subject, and grammatical subject. However none of these are satisfactory, and because of some shortcomings in their consistency, even the seemingly most formal interpretation of the third kind cannot offer a convincing argument.[1]

Structuralists neither succeeded in providing any adequate explanation or definition as to this matter. Although Charles C. Fries endeavors to give a structuralist's point of view of what a subject is considered to be and how it should be analyzed in Chapter II, "What Is a Sentence?" and Chapter IX, "Structural Meaning: Subjects and Objects" in his *The Structure of English*, his argument appears to be still illogical and inadequate.[2]

Noam Chomsky in his *Aspects of the Theory of Syntax* defined the

notion Subject, "as distinct from the notion 'NP,' whereby it designates a *grammatical function* rather than a *grammatical category*. It is, in other words, an inherently relational notion."[3]

While Japanese grammarians, except for a few,[4] have accepted the notion of subject and object from European grammatical theories ever since they started writing textbooks of Modern Japanese grammar in the 1920s.[5] However they greatly differ in their opinions as to the status of subject in Japanese syntax.

II

In this brief paper, I would like to introduce and discuss the notion of subject in Case Grammar proposed by Charles J. Fillmore whose idea was innovational among other generative grammarians in the point that he did not approve of the existence of subject in the so-called deep structure. Fillmore's idea of the issue can be observed most clearly in his discussion in "The Case for Case"[6] and other papers.[7]

Fillmore's standpoint is against the general idea of the Chomskian model in many points. He always argues that every syntactic problem cannot be discussed separately from the semantic aspects which are involved in a structure.[8] For instance, in the Chomskian model as proposed in *Aspects*, we must prepare at least three categories for the verb BREAK in the following examples:

1) The window broke.
2) John broke the window.
3) A rock broke the window.

In semantic interpretation, we must differentiate the three kinds of

subjects in these examples as follows: the subject of 1) *the window* is objective; the subject of 2) *John* is agentive and the subject of 3) *a rock* is instrumental. And the verb BREAK in these examples is different in three ways as its strict subcategorization frames are not the same and its selectional restrictions are different in each case. Therefore the subcategorization rules[9] work in three different ways. Here we have to face a syntactico-semantic problem; otherwise, we are completely lost in our process of description.

Considering this matter further and expanding my analysis, I notice that sentences 2) and 3) seem to have a similar construction on the surface, but they are different. Namely I can add an instrumental phrase to 2), but not to 3):

2') John broke the window with a hammer.

3') *A rock broke the window with a hammer.

Neither can I combine the subjects of 2) and 3) with an *and*,

4) *John and a rock broke the window.

as the above is not acceptable. These facts prove that the sentences with superficial similarities in their construction can be basically different in their semantic interpretation.

The verb BREAK is assigned to bear the restriction concerning the selection of subject and object; therefore, as a result, according to the *Aspects* model, three BREAKs should have three different categories. While the NP *the window* can be interpreted as having the same function in its semantic interpretation, it appears as the subject in 1), but the object in 2) and 3). Unfortunately, these facts indicate a deficien-

cy in the *Aspects* model because this is far from the ideal of linguistic description where generalization is counted as one of the most significant principles.

Barbara Hall in her dissertation "Subject and Object of Modern English" introduced a very interesting discussion about subject structure. She argues, examining the sentences,

5) John has broken the window.
6) The window has broken.
7) The window has been broken.

as follows:

> The sentence 7) is a passive with deleted agent phrase, which can be assumed to be transformationally derived from 'X has broken the window,' where X may be variously argued to be (i) the word 'someone,' (ii) an abstract bundle of features containing whatever is common to all subjects of the verb 'break,' or (iii) a completely specified NP. All of these correspond essentially to the remark that the sentence 7) has a deleted indefinite underlying subject.[10]

Further, she continues

> The sentence 6) is not semantically identical to the sentence 7), and hence must not have an identical underlying structure. Whereas the sentence 7) definitely conveys the idea that the window was broken by some active agent but gives no information about what that agent was, the sentence 6) is even more indefinite in that it does not indicate whether any outside agent was involved or not.[11]

Hall defends her own theory with the aid of Curme's comment on the peculiarity of the force of the passive with an intransitive form,[12] which is rather subjective than speculative. Later in the same dissertation, she gives three other examples as,

8) John broke the window with the hammer.
9) The hammer broke the window.
10) *The hammer broke the window with John.

Sentence 9) is obviously unacceptable, but if one accepts

11) James Bond broke the window with the Russian (by hurling him through it).

then the following might be regarded as an ambiguous construction;

12) The Russian broke the window.

Hall's conclusion then is, "any NP in an instrumental *with*-phrase can be used as a subject with the same class of verbs discussed above, while not every subject can be used in a *with*-phrase."[13] According to her concept, the underlying structure of the sentence 8) is something like

John—broke—with the hammer—the window

and that of the sentence 9) is,

broke—with the hammer—the window

and by the following simple transformation

$$\begin{matrix} V & - & Prep & NP & - & NP \\ 1 & & & 2 & & 3 \end{matrix} \Longrightarrow 1 - 3 - 2$$

the correct word order for 8) is gained, and by

$$\underset{1}{\#\#}-\underset{2}{\text{Aux}}-\underset{3}{\text{V}}-\underset{4}{(\text{Prep})}-\underset{5}{\text{NP}} \Longrightarrow 1-5+2-3-\emptyset-\emptyset$$

the sentence 8) is gained.[14]

Hall's idea has much similarity to that of traditional grammarians in which the subject of a transitive construction is always the actor.[15]

Fillmore's idea is in a sense more radical. He considers that the notions of subject and object only have superficial values in surface structures. He denies the idea that the first rewriting rule for the base structure is

$$S \longrightarrow NP\ AUX\ VP$$

as proposed by traditional generative grammarians, but he argues it should be

$$S \longrightarrow M+P^{16}$$

M (Modality) stands for the constituents denoting Negation, Mood, Aspect, Tense, etc, while P (Preposition) is the remainder of the constituents that constitute a sentence which consists of a chain of at least one verb and one case category. Namely, P takes the following structure:

$$P \longrightarrow V+C_1+\ \ldots\ Cn$$

Fillmore obtained the basic idea of this theory from his profound study of the Japanese language and French grammarian Lucien Tesnière's theory of case category.[17]

Tesnière observed the relationship between the predicate verb and

various NPs in a sentence and argues that the meaning of a sentence is deeply rooted in the dynamic interrelationship between each NP and the predicate. These NPs, namely case categories, appear in a sentence as *actants* whose case functions are Agentive, Instrumental, Objective, Dative, Locative and so on. Fillmore considers that when a Proposition is developed some of these *actants* (sometimes only one) are selected from the deep structure of the sentence. Each *actant* is indicated by K(Case) and NP. Namely

C(Case Category) $\longrightarrow$ K + NP

is the rewriting rule for the case category.

Furthermore, each NP with a case is required to have its own features and it is shown as something like[18]

N $\longrightarrow$ [+ Animate]/[X___Y] A, D

N $\longrightarrow$ [− Animate]/[X___Y] I

A : Agentive
D : Dative
I : Instrumental

Each verb is required to give its environment in which it can occur in the lexicon.[19] For instance, the verbs "run," "open," "give" are given the following environments:

run : [___A]; John runs.

open : [___O + A]; John opened the window.

give : [___O + D + A]; John gave Tom the camera.

O : Objective

Japanese has a peculiar category, the so-called "Adjectival Verb", as

shown in the underlined words in the following examples:

Hanako wa kirei da
"Hanko is good-looking."
Kirei na hito ga iru
"There is a good-looking person."

This category is discussed by John Anderson and by many other grammarians.[20] The adjectival-verbs in Japanese may be described as

[+V] [−VB] [−ADJ]

while regular verbs and adjectives in Japanese may be given the following description respectively:[21]

Regular Verbs: [+V] [+VB] [−ADJ]
Adjectives: [−VB] [+ADJ]

English being a typical SVO language, in order to derive a well-formed surface structure from the underlying structure, transformations by which proper subject is selected and placed at the subject position are positively necessary. But a non-SVO language such as Japanese does not need such transformations. In Japanese,

Taroo ga Ziroo ni syasinki o ageta.
Taroo ga syasinki o Ziroo ni ageta.
Ziroo ni Taroo ga syasinki o ageta.
Ziroo ni syasinki o Taroo ga ageta.
Syasinki o Taroo ga Ziroo ni ageta.
Syasinki o Ziroo ni Taroo ga ageta.

the above six sentences are of the same meaning, although the English

equivalents for these are only two,

Taroo gave *Ziroo* a camera.
Taroo gave a camera to *Ziroo*.

Interestingly, these and Japanese counterparts share the same description as to the features of their predicate verbs "*ageru*" and "give."

Japanese:
ageru: [____O + D + A]
English:
give: [____O + D + A]

This seems to explain the adequacy of Fillmore's theory that the deep or underlying structures of two different languages can be similar, and the generation of the different surface structures is just the result of the difference of transformational rules which are applied in its process. Therefore by setting a deeper underlying structure for each construction as in this Case Grammar model, restriction for generation of a surface structure would be much looser and the span of universality that the generative theory looks for is much widely expanded.

Ⅲ

Now I would like to investigate whether Fillmore's hypothesis introduced so far has validity from the viewpoint of language universality. Harada points out that Japanese base rules correspond to those of English in mirror image.[22] He observes what will happen when we approve his hypothesis that the greatest difference in the surface structures of Japanese and English sentences does not originate in

their base structures but in the application of transformational rules.[23]

However, it is the case that there exists a very complicated process of operations to select the exact sentence subject in a Japanese sentence, and the rules to pin down this process have not been discovered yet.[24] In Japanese, an NP with case (an *actant*) can be topicalized. In many cases this is done with addition of the particle "wa."

Imooto wa tomato ga kirai da.
"My sister doesn't like tomatoes."
⟹*Imooto wa tomato wa kirai da.*
topicalized
"Tomatoes, my sister doesn't like."

while the sentence,

Tomato wa imooto ga kirai da.[25]

is also acceptable. Maybe the English equivalent would be

"Tomatoes are what my sister doesn't like (hates)."

In this case, a simple Topicalization rule (*ga-wa*) and Topic pre-position rule (optional) are applied to the base sentence.[26]

The semantic difference of the English sentences
John didn't give Bill a cámera.
and
John didn't give a camera to Bíll.

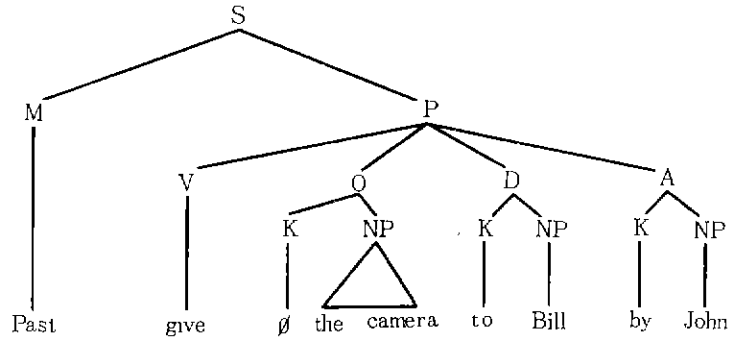
is signaled by the shift of stress in the sentence elements ("a camera" and "Bill"), but in Japanese the difference is signaled by topicalization

as follows:

Taroo wa Ziroo ni syasinki wa agenakatta.
"*Taroo* didn't give *Ziroo* a camera."
Taroo wa Ziroo ni wa syasinki o agenakatta.
"*Taroo* didn't give a camera to *Ziroo.*"[27]

In Japanese the negated element is topicalized with the addition of the particle "*wa.*" Namely, in English the secondary topicalization is signaled by a suprasegmental device, whereas in Japanese it is signaled syntactically.

Next, I would like to explain how primary topicalization takes place in English. Consider the following base structure:



As it is clear from the diagram, this structure has three *actants*, and it is possible for each of these *actants* to be the subject of the five sentences; namely

13) John gave Bill the camera.
13') John gave the camera to Bill.
14) Bill was given the camera by John.

15) The camera was given Bill by John.

15') The camera was given by John to Bill.

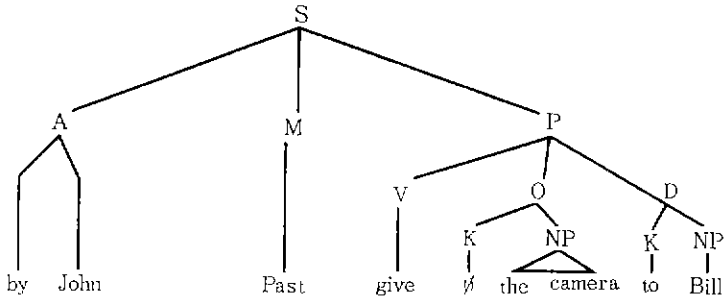
The commonest English structure would be 13) "John gave Bill the camera" and this sentence is generated by the most general rule as follows.

Rule 1: If A resides, then A becomes the subject.

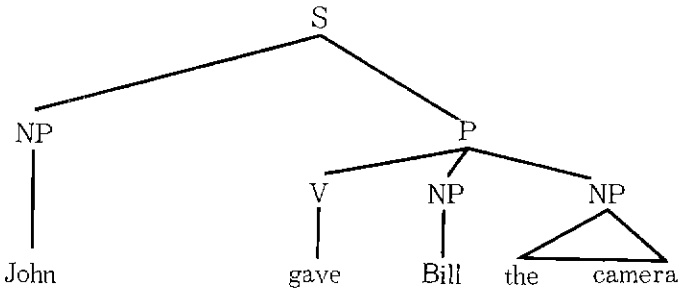
Rule 2: If A doesn't reside, then D becomes the subject.

Rule 3: Otherwise, O becomes the subject.

According to these rules, the most natural subject would be "John" and when "John" is selected as the subject of the sentence, the derivation would be diagramed as follows:



After the preposition deletion rule for the *actant* which occupies the subject position is applied, and by application of an optional rule which moves the D phrase "to Bill" to the indirect object position, we get the terminal structure:



It might be too much to add that if the verb "give" is endowed the feature [+Passive], then D or O is selected as subject instead of A and we get passive sentence as 14), 15) or 15').

The two sentences which have different structures on the surface, but identical or similar meanings share the same case frame; the difference only occurs in the process of subject selection and application of other transformational rules. For instance, the sentences

16) The picture pleases John.

17) John likes the picture.

have the same underlying structure as:

$$V + O + D$$

but in the case of 16), O is selected as subject, and in 17), D is selected as subject. The difference of the semantic category of the verb phrases in the following outwardly similar structure,

18) John hears the song.

19) John listens to the song.

is explained by the fact that the underlying structure for 18) is,

$$V + O + D$$

whereas, for 19)

$$V + O + A$$

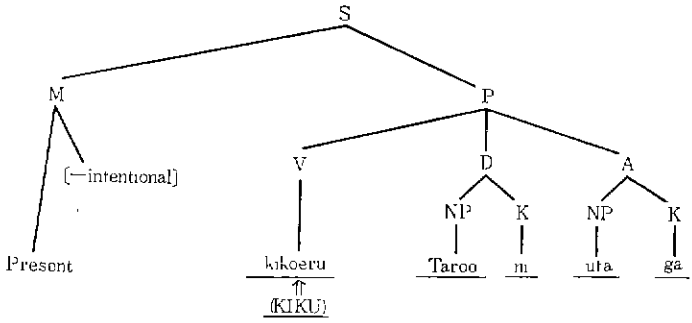
is its underlying structure.

When we compare the structures in Japanese which are semantically corresponding to the English counterparts, we notice a striking fact.

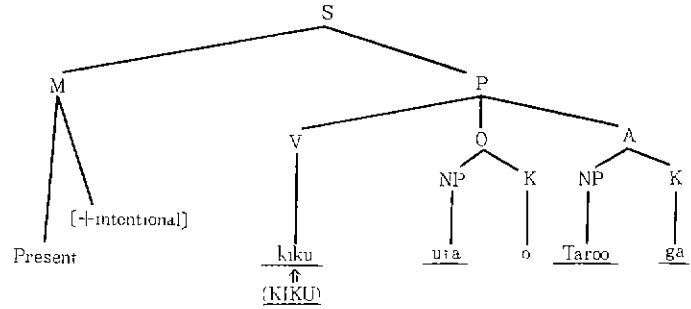
20) *Taroo ni uta ga kikoeru.*
"*Taroo* hears the song."

21) *Taroo ga uta o kiku.*
"*Taroo* listens to the song."

The first sentence seems to have the following underlying structure:



Whereas the underlying structure for sentence 21) might be,



It is noticeable that the Japanese counterparts also have the similar underlying structures as the English examples regarding the *actants*; namely,

$$V + O + A$$

for 21), and

$$V + O + D$$

for 20) respectively. It is interesting that as for these underlying structures, the mirror image can be observed, considering the semantic correspondence 18:20 and 19:21.[28]

Although the surface verbs "*kiku*" and "*kikoeru*" have different forms, from my intuition, I cannot separate these two verbs as belonging to totally different categories from the English counterparts "hear" and "listen to." Namely, in Japanese as is the case with the two verbs "see" and "look at" in English, "*mieru*" and "*miru*" function in the same way as "*kikoeru*" and "*kiku*," the semantic difference between these sets of verbs is determined by the selection of the feature [± intentional] in the Modal category. It can clearly be stated that in English the semantic difference between each set is explained by the difference of lexis, while in Japanese it is the problem of Modal features. In this point Fillmore's hypothesis of universality of verb phrase-structure finds some partial defects. Or maybe it must be necessary to expand the process of feature selection as a linguistic universal in a framework much wider than this.

Ⅳ

The aim of this brief sketch was to prove the fact that there exist

many similarities between English and Japanese in deeper structures as proposed in Fillmore's Case Grammar, but further research should be undertaken to establish the still unproven facts in the syntax of both languages.[29]

Notes

1 Otto Jespersen, *The Philosophy of Grammar* (London: George Allen and Unwin, 1924) pp. 145—56. Among Japanese grammarians of the English language, Kôtarô Ishibashi gives an excellent explanation on this issue. *Cf.* Kôtarô Ishibashi, *Eibumpô-Ron* (Of English Grammar) (Tokyo: Taishukan, 1963) pp. 462-81.

2 Charles C. Fries, *The Structure of English* (London: Longmans, Green and Company, 1957) pp. 9-28, pp. 173-201.

3 Noam Chomsky, *Aspects of the Theory of Syntax* (Cambridge, Mass.: MIT Press, 1965) p. 68.

4 Akira Mikami and Kanae Sakuma proposed their new theories of subject in the Japanese language. For example, Akira Mikami, *Nihongo no Ronri* (The Logic of Japanese) (Tokyo: Kuroshio Shuppan, 1963) and Kanae Sakuma, *Nihongo no Gengo Riron* (Linguistic Theory of Japanese) (Tokyo: Kôseikaku, 1959) are some representative discussions on this subject. Also Susumu Kuno, *Nihon Bumpô Kenkyû* (Study of Japanese Grammar) (Tokyo: Taishûkan, 1973) introduces his functional analysis of the same subject.

5 Daisaburô Matsushita was one of the pioneers who introduced the European notion of subject into Japanese Grammar. *Cf.* Daisaburô Matsushita, *Hyôjun Nihon Bumpô* (Standard Japanese Grammar) (Tokyo: Chûbunkan, 1928).

6 Charles J. Fillmore, "The Case for Case," in Emmon Bach and Robert Harms (eds.), *Universals in Linguistic Theory* (New York: Holt, Rinehart and Winston. 1968) pp. 1-90.

7 For instance, "The Grammar of *Hitting* and *Breaking*" in Roderick A. Jacobs and Peter S. Rosenbaum (eds.), *Readings in English Transformational Grammar*, (Waltham, Mass.: Ginn and Company, 1970) pp. 120-33.

8 Fillmore's lecture at Doshisha University on June 23, 1987.

9 Noam Chomsky, *op. cit.* pp. 75-111.

10 Barbara Hall, "Subject and Object in Modern English" Unpublished Ph. D. Thesis, MIT, 1965. p. 25.

11 *Ibid.* p. 26.

12 George O. Curme, *Syntax* (Boston: D. C. Heath & Company, 1931) p. 441.

13 Barbara Hall, *op. cit.* pp. 30-1.

14 *Ibid.* p. 32.

15 Otto Jespersen, *op. cit.* p. 145f.

16 Charles J. Fillmore, "The Case for Case."

17 Lucien Tesnière, *Éléments de Syntaxe Structurale* (Paris: Editions Klincksieck, 1982) and Fillmore's lectures at The Ohio State University, Spring Quarter, 1964.

18 Charles J. Fillmore, "The Case for Case," pp. 26-31.

19 This concept is very similar to that of Valence Theory which was introduced to me by Fillmore at his classes at The Ohio State University (1965-66) and University of California at Berkeley (1975-6).

20 Of the status of adjectival verbs in Japanese, John Anderson gives an interesting comment. *Cf.* John Anderson, *The Grammar of Case* (Cambridge: Cambridge University Press, 1971) p. 59. Also Gerald Gazdar *et al.* mention the peculiarity of Japanese adjectival verbs. *Cf.* Gerald Gazdar *et al. Generalized Phrase Structure Grammar* (Oxford: Basil Blackwell, 1985) p. 4.

21 This was suggested by Shinichi Harada in his "Nichi-Eigo no Shugo. Mokutekigo no Gainen no Sôi" (Of the Difference of the Notions of Subject and Object in Japanese and English) *Eigo Kyôiku* (English Teachers' Magazine) Vol. XVII, No. 7, 1968. pp. 18-22. This idea is discussed in my recent paper also. *Cf.* Teruhiro Ishiguro, "The Notion of Subject in Cognitive Grammar" in *Kimura Toshio Sensei Koki Kinen Ronbunshû* (To Commemorate Professor Kimura's Seventieth Birthday) to appear, March, 1988.

22 Shinichi Harada, *op. cit.* Also Satoru Nakai's MA thesis submitted to Doshisha University in 1973 was a good discussion of mirror image between English and Japanse structures.

23 Shinichi Harada, *op. cit.*

24 Some serious and attentive efforts have been made to solve this problem by grammarians both at home and abroad in these few years. *Cf. Lingua* Vol. 57, Nos. 2-4 (1982), *Syntax and Semantics* Vol. 5 (1976).

25 Topicalization Rule: *ga*+*wa*⟹*wa* works here. *Cf.* Teruhiro Ishiguro, "Topi-

calization and Subject in Japanese" Unpublished paper submitted to The Ohio State University in 1965.

26 *Ibid.*

27 The wavy lines indicate the negated elements.

28 *Cf.* Note 20.

29 Regarding the basic idea introduced in the present paper, I owe much to Shinichi Harada's article which was frequently mentioned previously above. Also Miss Katsuko Tomotsugu helped me to develop my analysis by providng many useful suggestions about Fillmore's case grammar. But for their aids, it must have been impossible for me to complete this paper. I would like to dedicate my deep felt gratitude to them.