Some Remarks on Case-Shifting Transformation

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I

Charles J. Fillmore discusses at the outset of his noted monograph "The Case for Case,"[1] that past grammarians used to confuse grammatical relations which reside in the deep structure of a sentence with Cases which appear on the surface. They confused the so-called abstract structure with the formal structure. For instance, some grammarians, as represented by Henry Sweet, claimed that wherever a Nominative Case is, Subject is.

It is extremely difficult to get hold of the essence of the syntactic structure of a language without breaking the past traditional superstition of the absolute authority of the surface formalism.

II

In Traditional Grammar, it was generally held that Case-Shifting only takes place semantically. For instance, when a nominal in Accusative Case acts as Subject of a clause as in,

(1) Everybody believes him to be a linguist.

this can be rewritten as,

(2) Everybody believes that he is a linguist.

In (1) "him" is in Accusative Case and is considered to be a "Sense Subject" of the verbal expression "to be a linguist."[2]

One more example of semantic interpretation is given in such a genitive construction as,

(3) John's story book

The ambiguity of this construction is very well-known. This construction is ambiguous in five ways.[3] Namely, this can mean:

(4) a) the story book John possesses
     b) the story book John wrote
     c) the story book in which John plays a part
     d) the story book John is talking about
     e) the story book in which John is mentioned

In each of these different interpretations, "John" acts as Subject in a), b), c) and d), but as Object in e). These varied interpretations are based on the differences of the interpretation of the function of a genitive construction "John's," which is formally (grammatically) in Genitive Case on the surface, but semantically plays the role of Nominative and Accusative Cases. In other words, this construction has been interpreted according to its grammatical relations to the following nominal, *i.e.* "the story book."

In the transformation of (2) to (1), it is obvious that the Case-Shifting takes place by the change from Nominative to Accusative through Infinitivization and Accusativization. This is no doubt a formal surface-syntactic Case-Shifting. However, in the varied interpretations of (3), the Case-Shifting takes place only in deep syntactic level. To put it more specifically, it takes place semantically.

In English, the occurrence of Case-Shifting of the first kind is rare. It only appears as the result of a certain transformation. On the contrary, in Japanese, many instances of Case-Shifting can be observed as surface phenomena.

The aim of this paper is to discuss Case-Shifting phenomena in Japanese in connection with transformations.

III

Kuno argues that the Two Subject Construction in Japanese is generated as the result of Subjectivization.[4] Shibatani attempts to revise this by proposing Nominativization which changes NP-no NP Construction to NP-ga NP Construction.[5] Shibatani also suggests the existence of Double- or Multiple-Nom Sentences.[6] However, in his design, it is difficult to show its underlying structure. I would like to argue both Kuno and Shibatani are incorrect by assuming that NP-no NP Construction is the original structure of NP-ga NP Construction. Namely, although they claim that

(5)   Yamada sensei ga okusan ga wakai.[7]
           teacher Nom wife Nom young
      (Mr. Yamada's wife is young.)

                                        (Nom=Nominative)

is gained from

(6)   Yamada sensei no okusan ga wakai.
                    Gen   Nom
      (Mr. Yamada's wife is young.)

                                        (Gen=Genitive)

it seems to be more adequate to postulate another sort of underlying structure to explain the generation of the structure in question. My approach starts by examining the following examples.

(7) Suzuki ga kodomo ga tiisai desu.
        Nom child- Nom small are
             ren
    (Suzuki's children are   small.)

(8) Tanaka ga tenisu ga umai desu.
        Nom tennis Nom skill- is
                ful
    (Lit. Tanaka's tennis is good. (Tanaka plays tennis well).)

The following diagrams briefly show the underlying structures of the above examples and the arrow heads indicate the Case-Shifting that generates

(9) Suzuki wa kodomo ga tiisai desu.
        Top   Nom
    (As for Suzuki, his children are still small.)
                            (Top＝Topic)

and

(10) Suzuki no kodomo ga tiisai desu.
         Gen   Nom
     (Suzuki's children are still small.)

Also,

(11) Tanaka wa tenisu ga umai desu.
         Top   Nom
     (As for Tanaka, his tennis is good.)

(12)   Tanaka no tenisu ga umai desu.
             Gen   Nom
       (Lit. Tanaka's tennis is good.)

(9) and (10) are generated from (7), and (11) and (12) are from (8)
respectively through the processes I am going to discuss below.
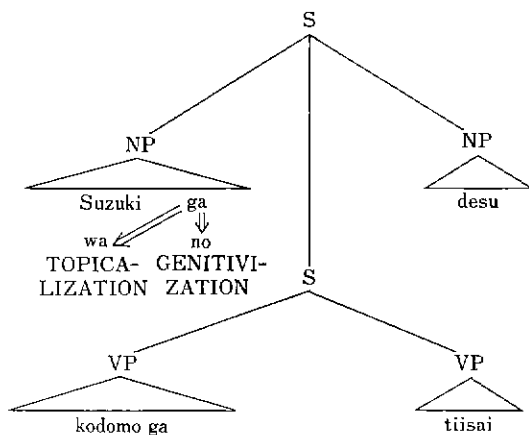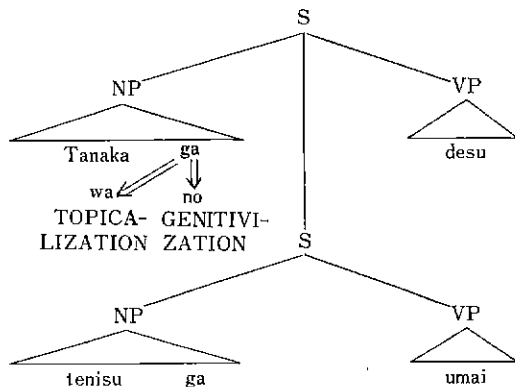
Diagram 1

Diagram 2

Diagram 1 shows that the Nominal Phrase in the matrix sentence

(13)   Suzuki ga _____ desu.

embeds the constituent sentence:

(14)   Kodomo ga tiisai.

Also, the Case-Shifting from "ga" to "no" takes place in order to generate a more natural sentence

(15)   Suzuki no kodomo ga tiisai desu.

This Case-Shifting is optional and called Genitivization.[8] By this transformation in these sentences there is no doubt that a grammatical sentence is obtained; however, some native Japanese whom I asked to be my consultants[9] claim that there still remains some awkwardness in this sentence.   They insist that the sentence

(16)   Suzuki wa kodomo ga tiisai desu. (same as (9))

is more natural.   Next, let me examine the example in Diagram 2.

(17)   Tanaka ga tenisu ga umai desu.

By applying Genitivization transformation on this,

(18)   Tanaka no tenisu ga umai desu.

is obtained.   However the awkwardness increases in comparison with the case of the former structure.   This should be, my consultants ascertain,

(19)   Tanaka wa tenisu ga umai desu.

in order to get rid of the slight awkwardness in (18).

Now how about the sentence,

(20)   Yamada no ie ga hiroi desu.

In this case also, there is still some slight awkwardness recognized
according to my consultants.   They claim again that this should be

(21)   Yamada wa ie ga hiroi desu.

in order to get the most natural utterance.

However, both Kuno and Shibatani seem to be satisfied with the
least or compromised intelligibility of the derived structure from the
original which is obtained as a result of their suggested transformations
by Subjectivization and Nominativization.   This fact may suggest
that Two Step Case-Shifting transformation is necessary.   Namely,
whereas the original structure of their design is

(22)   [NP-no NP] $\Rightarrow$ [NP-ga NP][10]

I propose that

(23) $_s$[NP-ga $_s$[NP-ga V] V]

should be the more appropriate underlying structure for this con-
struction in question, and the two kinds of transformation should be
applied on this in the order:

  1)   Genitivization

  2)   Topicalization

And by these,

(24) [NP-ga NP] $\Rightarrow$ [NP-no NP]

and

(25) [NP-no NP] $\Rightarrow$ [NP-wa NP]

are obtained.

IV

In the former section, I maintained that the [NP-no NP] construction is obtained as the result of Genitivization transformation on [NP-ga NP], and I conclude that both Kuno's and Shibatani's Single-Based Transformations by Subjectivization (Kuno) and Nominativization (Shibatani) were wrong.   They are both mistaken at the outset because

Diagram 3
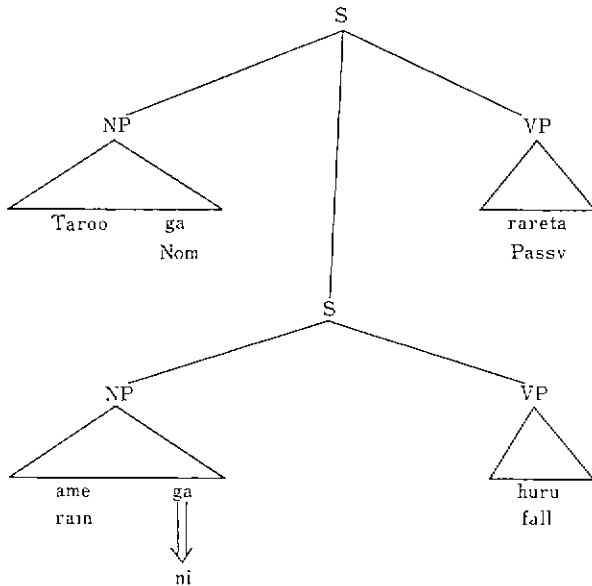
they based their analyses from the result. The right transformation
must be started in the reverse order to obtain the most natural
utterance.

When embedding operates between the matrix structure(s) and the
constituent structure(s) such as Passivization transformation,[11] a
peculiar case of Case-Shifting is observed. The diagram above well
illustrates the process. It explains the generation of the following
structure:

(26)

    Taroo ga _____ rareta.————————⟩
    Ame ga huru.————————————————⟩ ⟶

    Taroo ga ame ni hurareta.
    (Taroo suffered from the falling rain.)

Diagram 4

The diagram above shows the generation of the following structure:
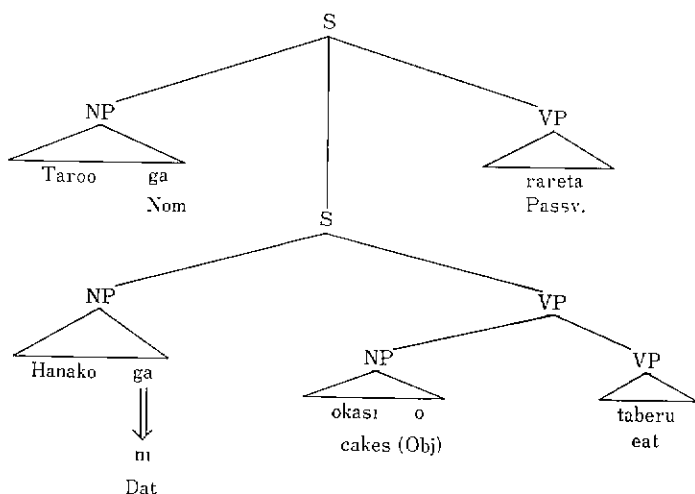
(27)

Taroo ga _____ rareta.——————————⟩———→
Hanako ga okasi o taberu.————————————

Taroo ga Hanako ni okasi o taberareta.
(Taroo had his cakes eaten by Hanako.)

Passv = Passivization
Obj = Objective
Dat = Dative

Diagram 5
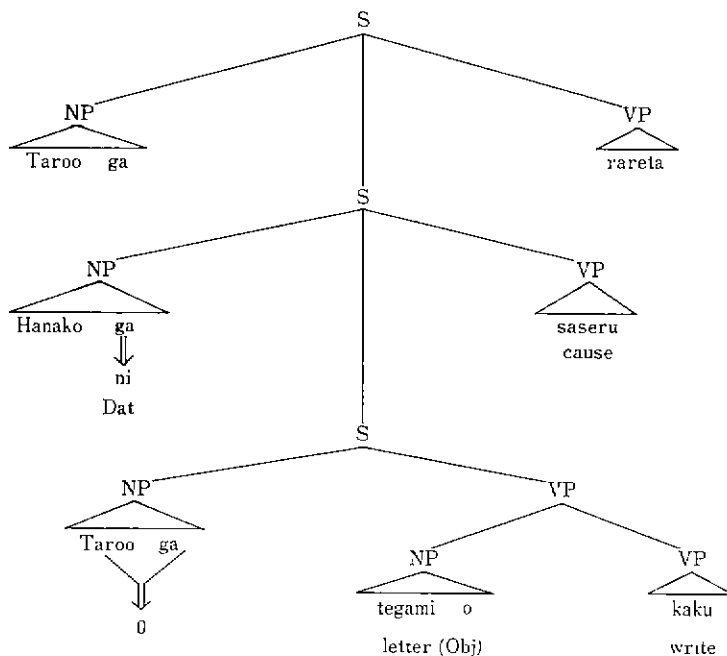
The diagram above illustrates the generation of the following structure.

(28)

Taroo ga _____ rareta.
Hanako ga _____ saseta.
Taroo ga tegami o kaku.

Taroo ga Hanako ni tegami o kakaserareta. (kakasareta)
(Taroo was made to write a letter by Hanako.)

In these examples, Case-Shifting from Nominative to Dative takes place as observed in (26) and (27). And when Causativization operates in connection with Passivization, the same Case-Shifting occurs together with Identical NP Deletion as in (28).

V

The Japanese Case Particles "ga" and "wa" are commonly categorized as follows:

"ga" for indication of Subject

"wa" for indication of Topic

and a sentence with "wa" is obtained after Topicalization transformation is applied on a sentence with "ga" as the Subject indicator. For instance:

(29)   Taroo ga Tokyo e itta.   (Taroo went to Tokyo.)
       ⇓
(30)   Taroo wa Tokyo e itta.   (Lit. As for Taroo, he went to Tokyo.)

(31)   Boku ga tomato ga kiraida.   (I hate tomatoes.)
       ⇓
(32)   Boku ga tomato wa kiraida.   (Lit. As for tomatoes, I hate them.)

In these examples, (30) and (32) are the results of (29) and (31) respectively.   Also in the following example,

> (33)   Boku wa tomato wa kiraida.   (As for me, I hate tomatoes.)

two particles "ga", which indicate the double Subject, in (31) are topicalized.   In the examples

> (34)   Boku ga tomato o kinoo tabeta.   (I ate tomatoes yesterday.)
>
> (35)   Boku wa tomato o kinoo tabeta.   (As for me, I ate tomatoes
>   [Topicalization of boku]   yesterday.)
>
> (36)   Boku ga tomato wa kinoo tabeta. (As for tomatoes I ate them
>   [Topicalization of tomato]   yesterday.)
>
> (37)   Boku ga tomato o kinoo wa tabeta.   (As for yesterday, I ate
>   [Topicalization of kinoo]   tomatoes.)

The three NPs before the final predicator in each sentence above can be interchanged by the phenomenon "Scrambling."[12]

However, there are some cases where

> (38)   [ga ⇒ wa]

transformation (*i.e.* Topicalization) does not occur.   Note the following examples:

> (39)   Taroo ga byoki[13] ga omoi.   (Taroo's disease is serious.)
>
> (40)   *Taroo ga byoki wa omoi.   (*As for his disease, Taroo is
>   [Topicalization of byoki]   serious.)

When either Topicalization or Genitivization of the first NP-ga is applied, the sentences

(41)   Taroo wa byoki ga naotta.   (As for Taroo, his disease was
                                              healed.)
       [Topicalization of Taroo]

(42)   Taroo no byoki ga naotta.   (As for Taroo's disease, it was
                                              healed.)
       [Genetivization of Taroo]

are obtained.

Next, let me compare them with their English counterparts.[14]

(43)   *The doctor healed John the disease.

(44)   The doctor healed the disease for John.

(45)   The disease was healed for John by the doctor.

(46)   John was healed the disease by the doctor.

There are more examples:

(47)   The teacher lent John the book.

(48)   John was lent the book by the teacher.

(49)   The book was lent John by the teacher.

(50)   The book was lent by the teacher to John.

In the examples presented above, the active structure (43)

(51)   *The doctor healed John the disease. (same as (43))

is not acceptable.   Then, where was "John" in the sentence

(52)   John was healed the disease by the doctor.

obtained from? This might have been obtained from the Genitive structure

(53)   John's disease was healed by the doctor.

As I discussed in my last paper, the Genitive construction "Taroo no" was obtained by simple transformation from [NP-wa⇒NP-no]

(54)   Taroo wa byoki ga naotta.   (As for Taroo, his disease was
                                    healed.)

(55)   Taroo no byoki ga naotta.   (Taroo's disease was healed.)

This Case-Shifting transformation was introduced as Genitivization.

VI

Case-Shifting transformation may exist on the trans-language level. As I have observed, the shift from Nominative to Genitive is commonly found as shown in the examples:

(56)   John was healed the disease by the doctor.
       [Nominative]

(57)   John's disease was healed by the doctor.
       [Genitive]

Also, in Japanese,

(58)   Taroo wa byoki o naositemoratta.   (Taroo had his disease
                                           healed.)

(59)   Taroo no byoki wa naositemoratta. (Taroo's disease was
                                           healed.)

However, the sentence

(60)   *Taroo no byoki ga isya ni sono kusuri de naositemoratta.
       (Taroo's disease was healed by the doctor with the medicine.)

cannot be considered as the underlying structure of either

(61)   Taroo no byoki wa isya ni sono kusuri de naositemoratta.
       (As for Taroo's disease, it was healed by the doctor with the
       medicine.)

or

(62)   Taroo wa byoki o isya ni sono kusuri de naositemoratta.
       (As for Taroo, his disease was healed by the doctor with the
       medicine.)

Topicalization [NP-ga $\Rightarrow$ NP-wa] is only applied on a complete mean-
ingful sentence having an NP-ga Phrase as Subject to result in the
topicalized NP at the top of the sentence in the surface structure;
whereas the sentence (60) cannot fulfill the requirement that it is
complete and meaningful.   In other words, it is an unacceptable
sentence.   Thus, the underlying complete sentence for both (61) and
(62) must be

(63)   Taroo ga byoki o isya ni sono kusuri de naositemoratta.
   (Taroo had his disease healed by the doctor with the medicine.)

Upon this structure, Genitivization [NP-ga $\Rightarrow$ NP-no] and Topicaliza-
tion [NP-o $\Rightarrow$ NP-wa] were applied.

(64)   Taroo ga byoki o isya ni sono kusuri de naositemoratta.
       Taroo no byoki wa isya ni sono kusuri de naositemoratta.
       [Geniti-   [Topicalization]
        vization]

(65)   Taroo ga byoki o isya ni sono kusuri de naositemoratta.
       Taroo wa byoki o isya ni sono kusuri de naositemoratta.
       [Topicalization]

The Japanese verb "NAOSU" is a transitive verb and the passive construction in question is generated as exemplified in the following diagram.

Diagram 6
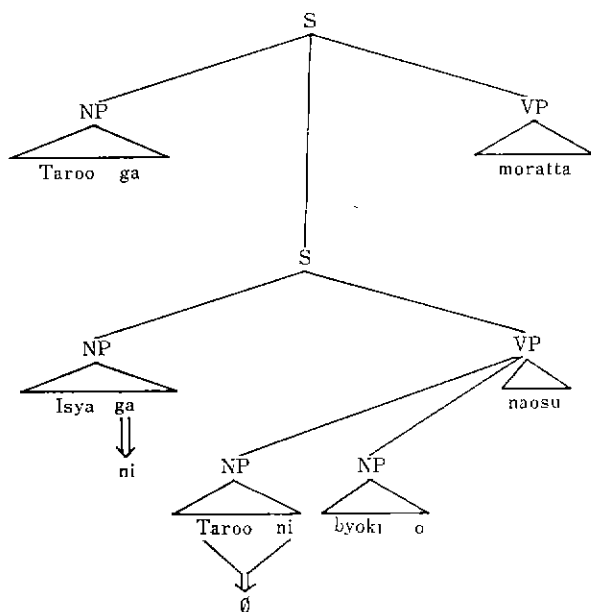
Then it is clear that the basic design of this Case-Shifting transformation was hinted in my former thesis.[15]   Namely, the sentence

(66)   Taroo ga isya ni byoki o naositemoratta.
       (Taroo had the doctor heal the disease.)

is gained as the result of embedding transformation as shown above. Therefore, the sentence

(67) Taroo no byoki wa isya ni naositemoratta.
       (Taroo's disease was healed by the doctor.)

is the outcome of two transformations applied on (66). This process can be illustrated in the following:

(68) Taroo ga byoki o isya ni naositemoratta.
                 ‖
           [Genitivization]
                 ⇓
(69) Taroo no byoki o isya ni naositemoratta.
                     ⌐⌐
              [Topicalization]
                 ⇓
(70) Taroo no byoki wa isya ni naositemoratta.

Case-Shifting transformations such as Topicalization and Genitivization generate stylistic variants of the original for better communication. Together with marking such as Word Order Change or Inversion, Case-Shifting occurs as a kind of psychological phenomenon.

VII

As observed briefly in the previous sections, Case-Shifting is not a phenomenon peculiar to Japanese. Professor Luzares states that a similar phenomenon is very popular in Cebuano, a language in the Philippine Islands in her description of its Case system.[16] She points out that Case-Shifting takes place in accordance with the change of Aspect in Cebuano. It seems that Case-Shifting occurs more frequently in a Case language in which Case markers are placed after each NP

as postpositions. As it is generally known, Japanese is a typical Case language, while English is one of the Non-Case languages. The more frequent occurrences of Case-Shifting in Japanese in comparison with the case in English may be due to the typological difference of the two languages concerning their Case Systems. However, according to my speculation, this semantic phenomenon may reside universally.

Notes

1　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.

2　Otto Jespersen explains this phenomenon as one of Nexus functions. *Cf. The Philosophy of Grammar* (London: George Allen and Unwin, 1924) pp. 117–32.

3　A similar kind of ambiguity arises as to the Japanese counterpart, "Taroo no hon (Taroo's book)": it can have four different readings. For the detailed comment of this general linguistic phenomenon, *cf.* Otto Jespersen, *op. cit.* p. 169ff. Jespersen analyzes this in his discussion of "subjective genitive" in the book cited above.

4　Susumu Kuno, *The Structure of the Japanese Language* (Cambridge, MA: MIT Press, 1973) pp. 70–78. This is cited in Masayoshi Shibatani's paper listed in the next note.

5　Masayoshi Shibatani, "Grammatical Relations and Surface Cases," *Language*, Vol. 53, No. 4, p. 795, 1977.

6　*Ibid.* p. 796.

7　These examples are taken from the works by Kuno and Shibatani mentioned above.

8　Although I used this term for the first time in my former papers, this is by my original coinage. *Cf.* Teruhiro Ishiguro, "Case in Deep Structure," *Doshisha Studies in English* (Henceforth, *DSE*) Nos. 47 and 48, 1989. "The Interplay of Case and Aspect," *DSE*, No. 49, 1989. "The Domain of Transitivity," *DSE*, No. 50, 1990.

9　My consultants consist of my friends and students in the English Department

of Doshisha University. It is an interesting fact that students of literature are more strict as to the awkwardness of a sentence. It was often not easy to obtain their consensus when there resided even the slightest awkwardness that the author noticed remaining in the sentence. On the other hand, students in linguistics are somehow more generous as to the acceptance of any intelligible utterance as good ones.

10 Shibatani, *op. cit.* pp. 795–6.

11 *Cf.* Teruhiro Ishiguro, "Japanese Passive and Causative Constructions," *Jim-bungaku*, No. 105, 1968 and "A Study of Japanese Verb Phrase Embedding Constructions," *Doshisha Literature*, No. 25, 1969. This scheme was first discussed in my MA thesis of the same title submitted to the Ohio State University in 1966.

12 S-Y. Kuroda, "Whether we Agree or not: a contrastive syntax of English and Japanese," in William J. Poser, ed. *Papers from the Second International Workshop on Japanese Syntax* (Menlo Park, CA: Center for the Study of Language and Information, 1988. pp. 103–43. Especially, p. 116. Kuroda gives the following formulae as the underlying structure of the Japanese sentence "Zoo wa hana ga nagai (Lit. As for the elephant, its trunk is long.)"

[Max (I) [Max (X) [e]] [I′ [Max (V) [Max (N) zoo-ga]

[Max (V) [Max (N) [Max (N) [t]] hana-ga] [V′ [V naga]]]] [I i]]]

The process of the generation of the sentence in question is minutely explained on p. 128 in the paper cited above.

13 In the classical Japanese language, the Nominative Particle "ga" was used as an equivalent for the Genitive Particle "no". Still even at present, such expressions as "ora *ga* kuni (my hometown)", "wa *ga* tuma (my wife)" and "Taroo *ga* uma (Taroo's horse)" are often observed not only in dialects but also in daily usage. I am not positive whether this took place as a historical change or not. Of the semantic ambiguity of some Japanese particles, I will discuss in my forthcoming papers.

14 Concerning the peculiarity of the English verb "heal", I presented some of my speculations in my last paper. *Cf.* Teruhiro Ishiguro, "The Domain of Transitivity," *DSE*, No. 50, 1990.

15 The original idea of this transformation was introduced for the first time in my thesis in 1966. Some transformational rules that I gave then were as follows:

Transformational Rules

T Ia (Passive Embedding Deletion Rule)

$$\text{SD:} \quad \underline{\underline{X}} \quad \underline{\underline{N}} \quad \underline{\underline{ga}} \quad \underline{\underline{N \ \ ga}} \quad \underline{\underline{N}} \quad \underline{\underline{o}} \quad \underline{\underline{X \quad V+Y}}$$
$$\phantom{\text{SD:}} \quad 1 \qquad 2 \qquad 3 \qquad 4 \qquad\quad 5 \qquad 6 \qquad\quad 7$$

SC: $\quad 1\text{–}2\text{–}3\text{–}4\text{–}5\text{–}6\text{–}7 \Rightarrow 1\text{–}2\text{–}3\text{–}4\text{–}0\text{–}0\text{–}7$
$\phantom{\text{SC:} \quad} \text{if } 2 = 5$

T Ib (General Embedding Deletion Rule)

$$\text{SD:} \quad \underline{X} \quad \underline{N} \quad \begin{bmatrix} ga \\ o \end{bmatrix} \quad \underline{N} \quad \underline{ga} \quad \underline{Y \quad V+Z}$$
$$\phantom{\text{SD:}} \quad 1 \qquad 2 \qquad\ \ 3 \qquad 4 \qquad 5 \qquad\quad 6$$

SC: $\quad 1\text{–}2\text{–}3\text{–}4\text{–}5\text{–}6 \Rightarrow 1\text{–}2\text{–}3\text{–}0\text{–}0\text{–}6$
$\phantom{\text{SC:} \quad} \text{if } 2 = 4$

T IIa (Particle Replacement Rule I)

$$\text{SD:} \quad \underline{X-} \quad \underline{\begin{bmatrix} N \quad ga-Y \end{bmatrix}^S} \quad \underline{Z}$$
$$\phantom{\text{SD:}} \qquad 1 \qquad\quad\ \ 2 \qquad\quad\ 3$$

SC: $\quad 1\text{–}2\text{–}3 \Rightarrow 1\text{–ni–}3$

T IIb (Particle Replacement Rule II)

$$\text{SD:} \quad \underline{N} \quad \underline{o} \quad \begin{bmatrix} \begin{bmatrix} S \\ \begin{bmatrix} N & o & X \end{bmatrix}^S \end{bmatrix}^S \end{bmatrix} \quad Y$$
$$\phantom{\text{SD:}} \quad 1 \qquad 2 \qquad\qquad\qquad 3$$

SC: $\quad 1\text{–}2\text{–}3 \Rightarrow \begin{bmatrix} 1 & ni & 3 \ (\text{optional}) \\ 1 & ni & 3 \ (\text{obligatory}) \end{bmatrix}$

T IIc (particle Replacement and Copula Deletion Rule)

$$\text{SD:} \quad X \quad \begin{bmatrix} Y & \underline{N} & de & \underline{ar \quad Z} \end{bmatrix}^S \quad \begin{bmatrix} nar \\ sur \end{bmatrix}$$
$$\phantom{\text{SD:}} \quad 1 \qquad\quad\ 2 \quad\ \ 3 \qquad 4 \qquad\qquad 5$$

SC: $\quad 1\text{–}2\text{–}3\text{–}4\text{–}5 \Rightarrow 1\text{–}2\text{–ni–}0\text{–}5$

T III (Auxiliary Deletion Rule)

$$\text{SD:} \quad \underline{X} \quad \begin{bmatrix} Y & \underline{Aux} \end{bmatrix}^S \quad \underline{V+Z}$$
$$\phantom{\text{SD:}} \quad 1 \qquad\quad 2 \qquad\qquad 3$$

SC: $\quad 1\text{–}2\text{–}3 \Rightarrow 1\text{–}0\text{–}3$

T IV (Topicalization Rule)

SD: $\underline{X} - \underline{N+PART+Top} - \underline{W}$
          1   2   3

SC: 1–2–3 $\Rightarrow$ 2–1–3

16   Casilda Edrial Luzares, *The Morphology of Selected Cebuano Verbs: A Case Analysis*
     (Canberra: Pacific Linguistics, Series B, No. 63, 1979.)