Japanese ‘tough’ Sentences Revisited*

KAZUKO INOUE  
Kanda University of International Studies

On the basis of the review of Inoue (1978) and reorganization of its contents, this paper arrives at a new proposal for an analysis of the four types of ‘tough’ sentences previously proposed by the author. Some important works on both English and Japanese ‘tough’ sentences are referred to as important theoretical and empirical sources. This paper is based on the following basic assumptions of crucial syntactic mechanisms: (i) the choice of nitotte as a matrix adjunct, (ii) the choice of vP. The choice of both (i) and (ii) derives Type I. The choice of only (ii) leads to the sentences like the following: Momentmono-wa kawak-asti-yasu-i (‘Cotton textiles are easy to dry’). Choosing neither (i) nor (ii) results in Type III. Type IV is derived without choosing (i), (ii), and Verb-raising. Type II is exceptional in choosing a matrix subject, which is coreferential with the complement subject.

It is further assumed that topic phrases (TopPs) and focus phrases (FPs) as well as grammatical subjects play the function of sentence building in Japanese. The particle ga marking a focus is treated as one of the delimiters. Both topics and foci, marked with wa and ga respectively, are raised to TopP and FP respectively. It is assumed that these phrases carry specific features attracted by the same features in TopP and FP.

1. Introduction

The purpose of this paper is, first of all, to reintroduce the problems raised in Inoue (1978) concerning the so-called ‘tough’ sentences in Japanese, and secondly, to revise the analysis presented there in terms of a new theoretical perspective. Section II, Review of Inoue (1978), reorganizes that paper with slight modifications in order to clarify the points in the recent framework of generative grammar. Section III gives a brief summary of some previous analyses, followed by Section IV with a proposal for a new approach.

---

* I am grateful to the participants in the seminars at Center for Language Sciences, Kanda University of International Studies, in particular to Kazuma Fujimaki, Naoko Okura, Yukiko Ueda, and Kyoko Watanuki. I am also much indebted to Masasi Yamada for helping me in editing, and Mr. Anthony R. Black for checking my English.
2. Review of Inoue (1978)

Inoue (1978) claims that there are four types of ‘tough’ sentences in Japanese.

2.1. Type I and II:

Type I:

(1) a. Gakusei-ni- wa kono zisyo- ga tukai-yasu-i
student for TOP this dictionary NOM use- easy-PRES
‘This dictionary is easy for students to use.’

b. Tosiyori- ni wa kono toori-ga kaimono-o si -niku-i
aged people for TOP this street nom shopping-ACC do-hard-PRES
‘This street is hard for aged people to shop around.’

(2) a. *Wakamono- ni wa atarasii ryuukoo-ga konomi-yasu-i
young people for TOP new trend NOM like-easy-PRES
(lit.)*‘A new trend is easy for young people to like.’

b. *Taro-ni hasiri-yasu-i
for run- easy-PRES
(lit.)*‘For Taro is easy to run.’

c. Taro-ni-wa kono miti- ga hasiri-yasu-i
for TOP this street NOM run- easy-PRES
‘This street is easy for Taro to run along.’

Type II:

(3) a. Saikin watasi-wa kooon- de utai- niku-i
recently I TOP high-pitched note in sing- hard-PRES
‘It has recently been hard for me to sing high-pitched notes.’

---

1 Note that in most of the following examples the topic marker *wa* is attached to the *ni* phrases in Type I and the subject *ga* phrases are replaced by the topic phrases in Type II, III, and IV. This is a device to render a natural interpretation to sentences with stative predicates, whose subjects marked with *ga* are given the reading as foci. This interpretation is called ‘exhaustive listing’ by Kuno (1973). The replacement of *ga* with *wa* has the function of preventing the subject *ga* phrase from getting the sense of ‘exhaustive listing’. These are important facts relevant to the formulation of a new analysis in Section 4.

The asterisk (*) marks ungrammaticality. “Lit.” stands for a literal translation, which often results in an ungrammatical sentence, but it is used here to show that English does not permit a sentence like the one marked with an asterisk.
b. Watasi-wa kega-o site-ite, aruki-niku-i
   I TOP hurt ACC get walk-hard-PRES
   ‘I hurt my leg, and it is hard for me to walk.’

(4) a. *Kimi-wa koon-de utai-niku-i
   you TOP high-pitched tone in sing hard-PRES
   (lit.)*‘You are hard to sing in a high-pitched tone.’

b. *Taroo-wa aruki-niku-i
   TOP walk hard-PRES
   (lit.)*‘Taro is hard to walk.’

(5) a. *Gakusei-wa kono zisyo-ga tukai-yasu-i
   student TOP this dictionary NOM use easy-PRES

b. Watasi-wa kono zisyo-ga tukai-yasu-i
   I TOP this dictionary NOM use- easy-PRES
   (lit.)*‘I am easy to use this dictionary.’

(6) a. *Wakamono wa atarasi ryuukoo-ga tori-ire- yasu-i
   young people TOP new trend NOM take-up-easy-PRES
   (lit.)*‘Young people are easy to take up a new trend.’

b. *Wakamono- wa atarasi ryuukoo-ga konomi yasui-i
   young people TOP new trend NOM like- easy-PRES
   (lit.)*‘Young people are easy to like a new trend.’

Compare the examples (1a) and (1b) with (2a). They show that Type I ‘tough’ sentences require complement verbs with the feature [+self-controllable]. This means they require agentive complement subjects. (2a) is rejected because konom-u (be fond of) requires subjects with the theta role Experiencer, not Agent. The same restriction is also imposed on Type II ‘tough’ sentences, as is evidenced by (6b). (5a) with tuka-u (use) with the feature [+self-controllable] is still ungrammatical due to Condition (b) placed on Type II. However, the important point is that (5a) is better than (6b). Assuming that these sentences have sentential complement structures, let us state this restriction as Condition (a) imposed on Type I and II ‘tough’ sentences.

---

2 The feature [self-controllable] is first used by Kuno (1973). According to him verbs with the feature [+self-controllable] “represent actions that their subject can take by self-control.” (ibid. p. 77)
**Condition (a):**
The complement predicate has the feature [+self-controllable].
As a natural consequence, the complement subject must have the theta role Agent.

Next let us consider the reason for the ungrammaticality of (2b), which meets Condition (a). The contrast between (2b) and (2c) suggests that intransitive sentences like (2b) must at least have one more noun phrase (NP) or postpositional phrase (PP) besides the subject. Similar contrastive pairs are given in (7) through (9).

(7) a. *Kodomo-ni- wa suwari-niku-i
   child for TOP sit- hard-PRES
   (lit.)*’For a child is hard to sit.’
   b. Kodomo-ni- wa ano isu- ga suwari-niku-i
      child for TOP that chair NOM sit on- hard-PRES
      ‘That chair is hard for a child to sit on.’

(8) a. *Seito- ni- wa aruki-yasu-i
      pupils for TOP walk-easy-PRES
      (lit.)*’For pupils are easy to walk.’
      b. Seito- ni- wa uradoori- ga aruki-yasu-i
         pupils for TOP back alley NOM walk-easy-PRES
         ‘Back alleys are easy for pupils to walk along.’

(9) a. *Sensyu-ni- wa tobi- niku-i
      athlete for TOP jump-hard-PRES
      (lit.)*’For athletes are hard to jump.’
      b. Sensyu-ni- wa kono dai-kara- ga tobi- niku-i
         athlete for TOP this spring board NOM jump-hard-PRES
         ‘This springboard is hard for athletes to jump from.’

It is clear that Condition (b) given below is at work in these Type I examples.

---

(99) These verbs are often called volitional verbs. This class of verbs require agentive noun phrases for their subjects.
Condition (b):
If the complement predicate is not transitive, the complement sentence has at least one more NP or PP besides the subject\(^3\).

Let us now look at Type II more closely. All the examples given as Type II lack \(ni\), contrary to the examples for Type I. For example, (5a) without \(ni\) is ungrammatical in contrast with (1a) with \(ni\). The change of the subject to the first person \(watasi\) makes the sentence grammatical as is shown by (5b). The sentences (5a), (1a), and (5b) are repeated below in (10).

(10) a. *Gakusei-wa kono zisyo- ga tukai-yasu-i (=5a))
    student TOP this dictionary NOM use easy-PRES
    (lit.)*’Students are easy to use this dictionary.’
  b. Gakusei-ni- wa kono zisyo- ga tukai-yasu-i (=1a))
    student for TOP this dictionary NOM use- easy-PRES
    ‘This dictionary is easy for students to use.’
  c. Watasi-wa kono zisyo- ga tukai-yasu-i (=5b))
    I TOP this dictionary NOM use- easy-PRES
    (lit.)*’I am easy to use this dictionary.’

The sentences in (3) as well as (10c), with the first person subject, are all grammatical, while those in (4) and (10a), with the second and the third person subjects, are ungrammatical. Observe that (3a), an intransitive sentence, which contains only the subject, is licit, even though it violates Condition (b). On the basis of this fact we can conclude that Condition (b) is imposed on Type I, but not on Type II. It is obvious that another restriction is at work on Type II sentences.

---

\(^3\) The question has to be raised as to why Condition (b) is needed. One plausible explanation is that the complement subject of Type I is typically realized as \(ni\) or \(nitotte\), which requires another NP or PP capable of bearing nominative case. It is commonly held that without at least one NP with nominative case the sentence is ungrammatical. Kuroda (1978, p. 226) proposes Canonical Sentence Patterns:

I Transitive sentence pattern: NP ga NP o
II Ergative sentence pattern: NP ni NP ga
III Intransitive sentence pattern: NP ga

This claim is questioned by Inoue (1998). A counter argument to this idea is given in Section 4.3
There is a general condition, given below as Condition (c), which is imposed on sentences with adjectives expressing emotions, emotional states, sensations, or perceptions (atu-i ‘hot’, kurusi-i ‘painful’, kowa-i ‘fearful, be afraid of’, and hos'i-i ‘want’). Let us call these adjectives psychological predicates. Since the ‘tough’ morphemes express perceptions as to the easiness of actions, they are included in this group.

**Condition (c):**
In the reportive style, as Kuroda (1973)\(^4\) defines it, declarative sentences with psychological predicates in the present tense must have first person subjects, unless the predicates are followed by modals. Interrogative counterparts of such sentences must have second person subjects.

Condition (c) is obviously at work on Type II ‘tough’ sentences. With nominative animate subjects the ‘tough’ morphemes express the subject’s judgment or perception of easiness of the action. Japanese is sensitive to the question of whether the speaker can directly perceive the experience or the judgment expressed by psychological predicates in the present tense. The ‘tough’ morphemes in the present tense used by Type II, which express the subject’s judgment, permit only the first person subject, since the speaker, the first person, can recognize only his own concurrent judgment. The ungrammaticality of the sentences like (4a, b) and (5a) is removed if they have modals expressing the speaker’s judgment, such as no da (assertion), rasi-i, yoo da (look like, seem), or gatte-i-ru (the speaker’s observation).

---

\(^4\) Kuroda (1973, p. 283-4) states “we have two categories of stories, reportive and nonreportive”, and that “A story is reportive if it is told by a narrator who may be omnipresent but not omniscient; otherwise, a story is non-reportive.” In other words reportive stories are those written from the speaker’s point of view.
(11) a. Taroo-wa kooon-de utai-niku-gatte-i-ru (cf. (4a))
   TOP high-pitched tone in sing-hard showing sign-PRES
   ‘Taro is showing signs of feeling it hard to sing high pitched
   notes.’
   
b. Kono kodomo-wa kega-osite ite, aruki-niku-
   This child TOP hurt get walk hard
   gatte i-ru
   showing the sign-PRES
   ‘This child got hurt, and is showing signs of feeling it hard to
   walk’

(12) Gakusei-wa kono zisyo-ga tukai-yasu-i rasi-i
   students TOP this dictionary NOM use- easy seem-PRES
   ‘The students seem to feel it is easy to use this dictionary.’

Gatte i-ru is incompatible with Type I, as is indicated by the
examples in (13) and (14), the counterparts to (1a) and (2c).

(13) a. *Gakusei-ni-wa kono zisyo-ga tukai-yasu-gatte i-ru
   b. *Gakusei-ni-wa kono zisyo-o tukai-yasu-gatte i-ru
   b’. Gakusei-ni-wa kono zisyo-ga tukai-yasu-i (1a)

(14) a. *Taro-ni-wa kono miti-ga hasiri-yasu-gatte i-ru
   b. *Taro-ni-wa kono miti-o hasiri-yasu-gatte i-ru
   b’ Taro-ni-wa kono miti-ga hasiri-yasu-i (2c)

The fact that gatte i-ru is incompatible with Type I supports the
assumption that the ‘tough’ sentences of this type express the speaker’s
judgment, so the addition of gatte -i-ru, a statement as the speaker’s
observation, is redundant. This assumption is supported by the fact that
the NPs with ni, the underlying complement subjects, are not restricted

---

5 Ueda pointed out (via personal communication) that gatte-i-ru can be followed by another
modal like rasi-i (look like), yoo da (seem), no da (the speaker’s assertion), or soo da (hearsay).
If only one modal is permitted in a sentence as in the case of English, it is impossible to regard
gatte-i-ru as a kind of modal. However, Japanese permits sequences of two modals, as in rasi-i
no da (seem-assert), no da soo da (assert, hearsay). This fact motivates the idea that gatte-i-ru
has modal-like properties.
6 Gar is not a stative verb, so it requires o-assignment to the object.
7 Kuroda (1978) proposes the rule called Subject-ni Raising, which assigns ni to the complement
subject and raises it to the matrix sentence. In the case of potentials, with matrix and
in terms of person, which means that Type I sentences express the speaker's judgment of easiness of the actions carried out by agentive NPs of any person.

**Summary:**

The characteristics shared by Type I and II are: (i) Their complement verbs must have the feature [+self-controllable], (ii) The underlying objects are marked with *ga*.

The differences between Types I and II are:

(i) I : Use of *ni* for the underlying subject.
   II : Use of *ga*, instead of *ni*, for the underlying subject.

(ii) I : Subject to Conditions (a) and (b) but not to (c).
    II : Subject to Conditions (a) and (c) but not to (b).

(iii) I : ostpositional phrases in complement sentences can be marked with *ga*.
     II : Subjects are marked with *ga*.

(iv) I : Not compatible with *gatte-i-ru*.
    II : Compatible with *gatte-i-ru*.

(v) I : Expresses the speaker's judgment.
    II : Expresses the subject's judgment or feeling.

**2.2. Type III and IV:**

**2.2.1. Type III**

Type III with intransitive complement sentences

(15) a. Senzai- wa yu- ni toke- yasu-i
detergent TOP warm water in dissolve easy-PRES
(lit.)*'Detergent is easy to dissolve in warm water.'

---

complement subjects as in (37a), his Counter-Equi NP Deletion deletes the matrix subject, and the complement subject undergoes Subject-ni Raising. This analysis has some problems though; especially the Counter-Equi NP Deletion is a questionable rule. However, it is tentatively used here, because assumption of the *ni*-phrase in 'tough' sentences to be the matrix subject comparable to that of the Type II requires a certain amount of discussion, which will be given in Section 4.8.

In the Extended Standard Theory (EST), objects of stative predicates are marked with *ga* by a rule called object-*ga* marking.  (Kuno 1973)
b. Nuno-ga atukute, harig-ga toori-niku-i
cloth NOM thick needle NOM pierce hard-PRES
(lit.)*'The cloth is thick, and the needle is hard to pierce it through.'

Type III with passive complement sentences

(16) Takai tokoro-no harigami-wa hito-ni hagas-are-high place GEN poster TOP people by take down-PASS-niku-i
hard-PRES
(lit.)*'Posters put up in high places are hard to be taken down.'

Type III with [-self-controllable] predicates

(17) a. Watasi-ni-wa poriburo-no sooz-i-ga
I for TOP polyethylene bathtub GEN cleaning NOM
deki9-niku-i
can-hard-PRES
'It is hard for me to clean a bathtub made of polyethylene.'
b. Tyoosyyuu-ni wa kimi-no koe-ga kikoe9-niku-i
audience for TOP your voice NOM hear-hard-PRES
(lit.) ?'Your voice is hard for the audience to hear.'
c. Yoi koohosya-ga mituk-ari-niku-i
good candidate nom be found hard-PRES
(lit.)*''Good candidates are hard to be found.'
d. Anata-no setumei-wa wakari-niku-i
your explanation TOP be understood hard-PRES
'Your explanation is hard to understood.'

9 The complement verbs of the sentences in (17) are a kind of unaccusative, not potentials.
They can be a one-place or two-place-predicate, the former requiring ga and the latter the ni-ga case pattern. Potential sentences like those in (i) below do not appear as complements of 'tough' sentences.

(i) a.*Watasi-ni-wa kanzi-ga kak-e-niku-i
I to TOP Chinese character NOM write-POT-hard-PRES
(lit.)*'Chinese characters are hard for me to be able to write.'
b. *Otona-tati-ni-wa asa hayaku oki-rare-yasu-i
adults to TOP morning early get up-POT-easy-PRES
(lit.)*'It is easy for adults to be able to get up early in the morning.'
Observe that none of the examples in (15) through (17) are with agentive subjects. This means that they are distinct from Type I and II in that they do not meet Condition (a). They neither meet Condition (b) nor (c). The examples in (15) contain only their subjects, thus violating Condition (b), but they are still grammatical. Furthermore, their subjects are not restricted to the first person noun phrases, contrary to what is required by Condition (c).

Summary:
Both Type I and II require complement verbs with the feature [+self-controllable]. Type I permits both ga-marked objects and postpositional phrases (PPs). These generalizations do not hold with Type III.

Next let us try to see whether or not Type III expresses the subject’s judgment by adding *gatte-i-ru* to some sentences of this type.

(18) a. *Senzai- wa yu-ni toke-yasu-gatte-i-ru*  
detergent top warm water in dissolve-easy-showing signPRES  
(lit.) **‘Detergent is showing signs of feeling it easy to dissolve in warm water.’**

b. Senzai-wa yu-ni toke-yasu-i (=14a))  
(lit.) **‘Detergent is easy to dissolve in warm water.’**

(19) a. *Tyooosyuu-ni- wa kimi-no koe- o kikoe-niku-audience for TOP your voice ACC hear-hard gatte-i-ru*  
showing sign PRES  
(lit.) **‘To the audience your voice is showing signs of feeling it hard to be heard.’**

Cf. b. Tyooosyuu-ni-wa kimi-no koe-ga kikoe-niku-i  
‘Your voice is hard for the audience to hear.’ (=17b))

c. Tyooosyuu-wa kimi-no koe-o kiki-niku-gatte-i-ru (Type II)

Obviously Type III does not permit *gatte-i-ru*, showing that it expresses the speaker’s judgment
Summary:
Type III displays the following characteristics:
(i) It is not subject to Conditions (a), (b), and (c).
(ii) It requires complement verbs with the feature [-self-controllable].
(iii) It does not permit *gatte-i-ru*.
(iv) It expresses the speaker’s judgment.

2.2.2. Type IV:
Unlike ‘tough’ sentences in English, some Japanese sentences with the same class of predicates such as *yasu-i* and *niku-i* carry the meanings of ‘tend to’ and ‘tend not to’. The sentences in question are paraphrasable into those with *gati da* ‘tend to’\(^{10}\), which is never possible for Types I, II, and III. On the other hand, Type IV can never appear with *gatte i-ru*, one of the characteristics shared by the other types of ‘tough’ sentences excepting Type II.

(20) a. awatemono- wa ziko- o okosi-yasu- i
    hasty people TOP accident ACC cause tend to-PRES
    ‘Hasty people tend to cause accidents.’

    b. Awatemono-wa ziko o okosi-gati da
    ‘Hasty people tend to cause accidents.’

    c. *Awatemono-wa ziko-o okosi-yasu-gatte-i-ru
    ‘Hasty people are showing signs of feeling it easy to cause accidents.’

(21) a. Wareware-wa kodomo-no bimyoo-na henka-ni
    we TOP children GEN subtle change of
    kizuki- niku-i
    become aware-hard-PRES
    (lit.)*‘We are hard to become aware of subtle changes in children.’

    b. *Wareware-wa kodomo-no bimyoo-na henka-ga kizuki-niku- i

\(^{10}\) Watanuki (via personal communication) commented that ‘tend to’ or *gati da* implies a repeated occurrence of events. It is true that this reading is easily given in such a context.
(22) a. Eriito-wa tuyoi zasetukan-o aziwai-yasu-i
elettes TOP strong sense of frustration ACC feel tend to PRES
‘Members of the elite tend to have a strong sense of frustration.’

b. Eriito-wa tuyoi zasetukan o aziwai-gati da
‘Members of the elite tend to have a strong sense of frustration.’

c. *Eriito-wa tuyoi zasetukan o aziwai-yasu-gatte-i ru
?‘Members of the elite show signs of feeling it easy to have a
strong sense of frustration.’

(23) a. Nihonzin-wa ryuukoo-ni tobituki-yasuku, aki- yasu-i
Japanese TOP fad at jump tend to be tired tend to PRES
‘Japanese tend to jump at a fad, and become tired of it easily.’

b. Nihonzin-wa ryuukoo-ni tobituki-gati de ...

c. *Nihonzin-wa ryuukoo-ni tobituki-yasuku-gatte-i-ru
(lit.) ?‘Japanese show signs of feeling it easy to jump at a fad.’

(24) a. Onna no hito-wa taizin-kankei-de-wa betatuki-
women TOP interpersonal relation at TOP be sticky
yasu-i
tend to PRES
‘Women tend to be coquettish or sentimental in interpersonal
relations.’

b. Onna no hito-wa taizin-kankei-de-wa betatuki-gati-da

(25) a. Wareware-wa kibun-ni sayuu-sare-yasu-i
we TOP mood by influence PASS tend to PRES
‘We tend to be influenced by moods.’

b. Wareware-wa kibun ni sayuus-are-gati da

The complement verbs of this group are [- self-controllable], thus
excluding agentive subjects. In (23) and (24) the [+self-controllable]
predicates tobituk-u (‘jump at’) and betatuk-u (‘be coquettish or
sentimental’) are used. However, there emerges a transferred sense in
these cases; that is, the original meaning of a self-controllable physical
action is changed to a mental or psychological state of an experiencer.
The sentence (25a) is an example of a passive sentence as the
complement of yasu-i. A notable characteristic of Type IV is that it does
not permit the object-

Summary:
Type IV displays the following characteristics:
(i) It requires complement verbs with the feature [-self-controllable].
(ii) It is not subject to Conditions (a), (b), and (c).
(iii) It does not permit gatte-i-ru.
(iv) It is not subject to the object-ga-marking.
(v) It expresses the speaker’s judgment.

It should be noted in this connection that there are certain semantic
overlaps between Type III and IV when complements are simple
intransitive sentences. Some examples are given below.

(26) a. Momenmono-wa kawaki-yo-i
cotton textile TOP dry easy PRES
i. ‘Cotton textiles get dry easily.’
ii. ‘Cotton textiles tend to get dry.’

b. Reitoo-niku-wa toke- niku-i
frozen meat TOP defrost hard-PRES
i. ‘Frozen meat does not defrost easily.’
ii. ‘Frozen meat tends not to defrost.’

c. Kibo no ookii akuzi-wa roken-si- gata-i
scale large crime TOP reveal do-hard-PRES
i. ‘Large scale crimes do not reveal themselves easily.’
ii. ‘Large scale crimes tend not to reveal themselves.’

d. Unagi no kabayaki-wa sake no sakana ni
eel broiled top wine accompaniment to
nari- yasu-i
become-easy-PRES
i. ‘Broiled eel easily lends itself to being a good
accompaniment of wine.’
ii. ‘Broiled eel tends to be a good accompaniment of sake.’

On the basis of these facts, Inoue (1978) claims that Type III and
IV should be classified into one type with semantic differences accounted
for by semantic interpretation rules. The parallelism between Type I and
II is discussed in terms of their largely shared characteristics on part with that between Type III and IV, naturally leading to the conclusion that Type I and II should also be put together into one type.

However, further research has revealed that Type I and III must be put together rather than separating Type I and II from III and IV. Before presenting a new analysis, some previous analyses of 'tough' constructions in English are reviewed below.

2.3. Problems involved in the above descriptive generalization.
A. The classification of Type I, II, III, and IV into two groups simply by the presence and absence of the feature [self controllable] among the feature specifications of a predicate.
B. The absence of consideration of nitotte superficially alternating with ni.

3. Previous Analyses

3.1. English 'tough' sentences
The English 'tough' construction has been extensively studied since Postal (1971) and Chomsky (1973, 239-241, 263), in which Chomsky made the following characteristics clear. First let us look at some relevant English examples.

(27) a. To please John is easy.
    b. It is easy to please John.
    c. John is easy to please.
(28) a. For Mary to please John is hard.
    b. It is hard for Mary to please John.
    c. John is hard for Mary to please.
    d. For Mary, John is hard to please.
(29) a. *It is easy for there to be snow in June.
    (Chomsky 1973, (40), (41))
    b. It is intolerable for there to be snow in June.
(30) a. *It is easy for the car to be so poorly constructed.
    (Cf. It-is Predicate for NP-[sPRO-VP])
    (Chomsky)-(36) slightly modified)
    b. It is intolerable for the car to be so poorly constructed.
(31) a. It is tough for me [COMP PRO to stop [COMP Bill’s looking at Harriet]]
    (C-(166a))
b. It is tough for me [COMP PRO to stop [COMP PRO looking at Harriet]]
    (C-(166b))

(32) a. *Harriet is tough for me to stop Bill’s looking at.
    (C-(167a))
b. Harriet is tough for me to stop looking at $t$.
    (C-(167b) slightly modified)

The points Chomsky made clear using these examples are:

(a) The matrix subject of the ‘tough’ construction is a non-theta position, so $it$ and $John$ can replace it. 
   $((27)(28) \ b, \ c))^{11}$

(b) The $For \ NP$ belongs to the matrix sentence; as is shown by (28d) it can be moved to the sentence initial position, which is impossible for the $for \ NP$ standing as the complement subject.

(c) $There$ and $the \ car$ in (29) and (30) are complement subjects, not coreferential with the null NP (meaning “people in general”) after $for$, which make these sentences ungrammatical. The fact that the complement subject must be coreferential with the NP following $for$ is indicated by the use of PRO in (30a,cf.).

(d) It is possible to move the object of a deeply embedded clause to the matrix subject position, as shown by the sentence in (32b). As ‘tough’ sentences obey major constraints placed on $wh$-movement$^{12}$, Chomsky (1977) derives ‘tough’ sentences like (27c), (28c) and (32b) by moving the complement object ($wh$-phrase) to the COMP of the top complement clause. Then he relates the surface subject and the moved $wh$-phrase by the “rule of predication”, which yields the

---

$^{11}$ According to Postal’s (1971) proposal, the b-sentences of (27) and (28) were derived by extraposition. The vacated subject position is filled by the expletive $it$, which means that this is a non-theta position. This was argued to be the reason why the object of the complement verb $John$ with the theta role assigned by the verb could be moved to the matrix subject position replacing it. The three sentences in (27) and (28) have the same theta relations. It became a kind of standard in the early part of the 70s to regard the b-sentences as the deep structures of the c-sentences and derive the latter by movement of the objects of the complement verbs to the matrix subject position.

$^{12}$ Noun phrases with lexical heads, sentential subjects, $wh$-clauses, and coordinate construction, and so on are called “islands”, which block movements of elements out of these clauses. The definite NPs like $Bill$ in the a-sentences of (31) and (32) are called specified subjects, which make the clauses, which they are the subject of, a kind of island.
interpretation that the ‘tough’ clause is the predicate of the matrix subject. The long distance relation between the antecedent and the gap (t), as in (32b), is accounted for in this way. Chomsky (1981) uses a null operator in place of the wh-phrase. (32a) indicates that the movement involved here obeys the subjacency condition\(^\text{13}\), as is the case with wh-movement, with Bill's serving as the specified subject of the noun phrase. (Specified Subject Condition)

There are, however, serious problems involved in this analysis. Only some of the major problems are pointed out here, which are relevant to the study of Japanese ‘tough’ sentences. The matrix subject has to be generated somehow in this position. Chomsky claims that it is inserted in the surface structure. (Chomsky 1981, 313)\(^\text{14}\) Free insertion of lexical items into a non-theta position is a violation of the theta theory. Since wh-movement is a movement into the specifier of CP (a non-argument (A') position) not to an argument (A) position, the movement of the wh-phrase (complement object) to the matrix subject position by an operation like wh-movement is from an A' to A movement, which is illegitimate.

The analysis given by Chomsky (1977) and (1981) involves a serious conflict. That is, to relate sentences like (28b) and (28c) the matrix subject should be a non-theta position. In other words, the ‘tough’ morphemes should not assign a theta role to their subjects. Now the question is how to assign a theta role to the matrix subject of the ‘tough’ construction like (76c), (28c), and (32b). To solve this problem, Chomsky (1981) proposes a reanalysis, “with easy-to-please (etc.) taken as a complex adjective (p. 312),” as shown by the following.

(33) John, is [AP[A easy to please] t] (C-(19))

Now the empty category t is an anaphor, whose antecedent is the subject

\(^{13}\) Chomsky (1977) proposed the subjacency condition, which subsumes individual island conditions. “I will understand the subjacency condition as holding that a cyclic rule cannot move a phrase from position Y to position X (or conversely) in (6):

(6) \[ \ldots \ X \ldots [a \ldots [b \ldots Y \ldots ] \ldots ] \ldots X \ldots, \] where a and b are cyclic nodes.

For the present, I will take the cyclic nodes to be S' and NP;... (Chomsky 1977: p.73).

\(^{14}\) Chomsky (1995: 188) says, “in non-θ-position a lexical item, such as John, can be inserted in the course of the derivation and assigned its θ-role only at LF (and irrelevantly, S-Structure).”
John. The theta-role assigned to \( t \) by the verb (*please* in this case) is transferred to the subject. This analysis seems to be ad hoc, leading to many problems. Setting aside these problems, it is to be noted that ‘tough’ sentences with the expletive *it*, such as (27b) and (28b) have the underlying structure with the empty subject position like (34).

(34) \( \underline{\text{_____}} \) \( \text{be tough} \) (for NP) \( [S:\text{COMP PRO VP}] \)

The insertion of *it* into the empty subject position results in sentences like (27b) and (28b). Those with lexical subjects involve the null operator movement to this structure, insertion of lexical elements in the subject position, and reanalysis, shown by (33).

### 3.2. Japanese ‘tough’ sentences

#### 3.2.1. Kuroda (1987)

Kuroda admits only Type I as the genuine ‘tough’ sentence, in which *nitotte* is an argument of the matrix sentence. Some typical examples follow:

(35) a. Masao nitotte sono yuubin kyoku kara ga kozutumi o

\[ \text{that post office package} \]

okuri-yasui

send

‘It is easy for Masao to send packages from that post office.’

\( (K(uroda)-(14)) \)

b. *Masao ni sono yuubinkyoku kara ga kozutumi o okur-eru

‘Masao is able to send packages from that post office.’ \( (K-(15)) \)

(36) a. Hanako nitotte Nihon (de) ga eigo o hanasi-yasui

\[ \text{Japan in English speak} \]

‘It is easy for Hanako to speak English in Japan.’ \( (K-(16)) \)

b. *Hanako ni Nihon (de) ga eigo o hanas-eru

‘Hanako is able to speak English in Japan.’ \( (K-(17)) \)

The differences between the ‘tough’ and potential constructions are: (1) *nitotte* for the former and *ni* for the latter\(^{15}\), (2) postpositions can be followed by *ga* in the former, but not in the latter. In order to account

\(^{15}\) See note 6 for the *ni*-assignment in potential sentences.
for these differences, the deep structures in (37) are proposed.

(37) a. the ‘tough’ construction:
NP₁ nitotte [e][NP₁...(NP₂-p)...(NP₃) V] A (K-(48))

b. the potential constuction
NP₁ [NP₁ ... V] eru

The crucial point in the above analysis is that the deep structure of the ‘tough’ construction (37a) has a non-theta subject position, which is empty and permits NP₂-p (PP) or NP₃ (object) to move to this position. The particle ga is assigned to the element in this subject position. The deep structure of the potential construction (37b) is without an empty subject position, so a PP has no chance of getting ga assigned, and the only possibility is assigning ga to the object of a stative predicate. In this way the difference between these two constructions, as shown by the sentences in (35), is accounted for. Since Kuroda does not consider the cases of ‘tough’ subjects coreferential with deeply embedded objects or PPs, such as (32b), there seems to be no problem in the use of direct movement of these elements to the empty subject positions.

Next, Kuroda takes up multiple ga phrases in ‘tough’ sentences.

(38) a. Masao nitotte wa sono yuubinkyoku kara ga kozutumi ga okuri-yasui (K-(81))

b. Masao nitotte wa Nihon (de) ga eigo ga hanasi-nikui (K-(82))

Since the ga assignment is permitted only once in each cycle according to Kuroda’s system¹⁶, it is impossible to have two or more phrases assigned with ga in the same cycle. This motivates the proposal for the following rule, which is iteratively applied and generates multiple empty subject positions¹⁷.

---

¹⁶ Kuroda’s case marking system is called Linear Case Marking System (LCM) (1978), which consists of the following rules, “Mark the leftmost unmarked NP with ga, and the remaining one with o”, and Subject-ŋ Raising.

¹⁷ Kuno (1973) proposed the rule called Subjectivization, which is applied iteratively.

(i) Subjectivization (tentative formulation) [optional]: Change the sentence-initial NP-no to NP-ga, and make it the new subject of the sentence. (Kuno: p. 71)

(ii) Bunmeikoku no dansei no heikin-zyumyoo ga mizikai.
Civilized ‘s male ‘s average life-span is short
‘It is the average life-span of men of civilized countries that is short.’
(39) \( S \rightarrow e \ S \)  \( (e = \text{empty subject}) \)

The deep structure of ‘tough’ sentences with multiple subjects are given in (40).

(40) a. \([e]...[[e] [...NP...]_s]..._s\)
    b. \([e] [\text{Masao nitotte} [e] [\text{Masao sono yuubinkyoku kara kozutumi} \text{ okuri} yasui}]] \)  \( (K-(102)) \)

If no movement takes place, the result is (41a); if \( \text{sono yuubinkyoku kara} \) is moved to the first empty subject position, (41b) emerges.

(41) a. \([e] [\text{Masao nitotte} [e] \text{ sono yuubinkyoku kara kozutumi ga} \text{ okuri-} yasui] \] 
    b. \( \text{sono yuubinkyoku kara ga Masao nitotte} [e] [t] \text{ kozutumi ga} \text{ okuri-} yasui \)

The object \( \text{kozutumi-ga} \) can stay in situ or be moved to the second empty subject position. Kuroda calls the elements moved to the empty subject positions major subjects. More than two major subjects can appear, “even though the acceptability deteriorates rapidly (Kuroda, 270).” (42) given below is the final version of the deep structure of the ‘tough’ construction, which permits the iterative generation of major subjects.

(42) \([e] ...[[e] [...NP ...]_s]_s ...]_s \) 

4.2. Takezawa (1987)

Takezawa (1987) gives evidence against Kuroda’s NP and PP movement
to the matrix subject position. Observe the following example.

(43) /kono te-no zasshi/- ga (Johnj-nitotte) [s. proj maituki eį this kind of magazine-NOM John-for every month 
teeikoodokusite-i-ru to] hito-ni ii- niku-i subscribe regularly-PRES COMP people-to say-hard-PRES (lit.) ‘[This kind of magazine] is hard (for Johnj) to say to other people [s. that hej takes eį regularly every month]’

(Takezawa)-(30a))

In (43) the matrix subject is not filled by the element in the sentential complement to the ‘tough’ morpheme niku-i, but by the element in the complement sentence of the complement verb iw-u (‘say’), as its trace eį indicates. If the derivation of this sentence involves the NP movement, as Kuroda claims, the trace is an anaphor and must be bound in the deeper complement S’. Since it is not, this sentence should be unacceptable, violating the binding condition A\(^{18}\). Since (43) is acceptable, the analysis with movement of a complement object directly to the matrix subject position is very questionable.

Recall that Chomsky treats this type of English ‘tough’ sentences with the trace further down from the matrix sentence by using the mechanism of wh-movement, and later by the null operator movement. It is well known that wh-movement obeys the conditions on moving an element out of the so called “islands.” If it is assumed that (43) involves the null operator movement, the prediction is that it is under the island conditions. However, this prediction is not borne out.

(44) [Kono te-no hanzai]-ga (keisatu-nitotte)[NP [s. ej eį okasi- ta] this kind of crime- NOM police-for commit-PAST ningenj]-o sagasi-yasu-i man- ACC search-easy-PRES

(lit.) ‘[This kind of crime] is easy (for the police) to search [NP a man [s. who committed eį]]’

\(^{18}\) Binding Theory (A): An anaphor is bound in its governing category. A governing category: α is the governing category for β if and only if α is the minimal category containing β and a governor of β, where α = NP or S.
In (44) the trace of the matrix subject *Kono te-no hanzai* is in an “island”, a noun phrase with a lexical head, called a complex NP, but still the sentence is grammatical, showing that this type of ‘tough’ sentence does not obey the complex NP constraint.

The situation is different in the case of PPs.

(45) ?*[[[_{PP} Sooiu kin’yuukikan—kara]_{ga} (John-nitotte) [_{NP} _{e1} such financial agency—from-NOM John-for itumo _{e1} okane-o takusan karite-i-ru] _{hitot}-o always money-ACC a lot borrow-PRES person-ACC sin’yoosi-niku-i trust-hard-PRES

(lit.)* ‘[From such a financial agency], is hard (for John) to trust
[_{NP} a person [_{S} who always loans a lot of money _{e1}]]’ (T-(54))

The trace of the PP in (45) is in the complex NP, so it is ungrammatical due to this island constraint. The examples like (45) show that ‘tough’ sentences with PP subjects are under the island constraints.

To account for this contrast between NP and PP subjects, Takezawa proposes the following deep structures.

(46) a. NP/PP subjects:

\[
_{\text{[S NP/PPi-ga [AP (NPj-nitotte) [_{S} O_{i} [_{S} \text{PRO}_{(j)} \ldots \text{f}_{i} \ldots \text{V}] yasu ] \]

\text{predication movement} \quad (T-(56a))
\]

b. NP subjects:

\[
_{\text{[S NPi-ga [AP (NPj-nitotte) [_{S} [_{S} \text{PRO}_{(j)} \ldots \text{pro}_{i} \ldots \text{V}] yasu ]}

\text{aboutness relation}
\]

The symbol *O* in (46a) stands for the null operator. The matrix subject is base-generated, and related to the trace by the null operator movement and the predication interpretation. Those with NP subjects, which do not involve movement, is assumed to have the underlying structure (46b), in which *pro* and its antecedent is related by the interpretation of
aboutness. *Pro* stands for not only a null subject or object, but also for topicalized or relativized NPs. *Pro* is often replaced by a resumptive pronoun, as shown by the sentences in (47).

(47) a. Kono gakusei-wa [(kare-no) imooto-ga kasyu-ni
This student-TOP his GEN sister-nOM singer
natté-i-ru rasi-i]
become-PRES seem-PRES
(lit.)?‘This student, his sister seems to have come to be a singer.’
(a topicalized phrase either with the resumptive pronoun *his* or *pro*.)

b. Watasi-wa [[(sono hito-no) keireki ga] hakkiri-si-nai
I-TOP that person-GEN career-NOM clear-NEG
hito,]-o suisen-su-ru] no-o yamete-i-ru
person-ACC recommend PRES that-ACC stop-PRES
‘I have ceased recommending persons whose careers are not
clear to me.’
(a relativized phrase either with the resumptive pronoun *sono hito* or *pro*)

The *e* in (43) and (44) can both be replaced by a resumptive pronominal *sore*, as in (48a, b).

(48) a. konote no zassí-ga (Johnj nitotte) [ proj maituki sorei o
teeikoodokusite-i-ru to]hito ni ii-niku-i

b. konote no hanzai-ga (keisatu-nitotte) [[ ej sorei o okasi-ta
ningenj]-o sagasi-yasu-i

Takezawa regards *ni* and *nitotte* in ‘tough’ sentences as free variants appearing in the matrix clause, contrary to Kuroda’s approach, which takes *nitotte* to be in the matrix clause of a ‘tough’ sentence, whereas *ni* is the complement subject of a potential sentence. Kuroda, however, admits that *nitotte* and *ni* may appear both in a ‘tough’ and a potential sentence in certain limited contexts.

The base generation of the matrix subject is supported by many investigators of English and Japanese ‘tough’ sentences. They argue on both syntactic and semantic grounds. The semantic argument relevant

---

19 "Aboutness" is a kind of contextually determined relation.
to this study is that the ‘tough’ morphemes express the property of the matrix subjects of these sentences.

The questions raised thus far are: (a) Whether the matrix subject is base-generated or not, (b) Whether nitotte or ni in ‘tough’ sentences belong to the matrix or not, and (c) Whether or not movement is involved in the derivation of ‘tough’ sentences.

4. A new analysis

4.1. The adopted framework
In the following proposal for a new analysis, a theoretical framework is broadly set as covering those proposed in recent years approximately from the late 80s to the early 90s, in order to avoid unnecessary complications due to many unsettled problems emerging as the result of fast developing theoretical reorganization. Restating it from another point of view, only certain already fairly well-attested assumptions are utilized in this proposal.

The sentential complement structures are assumed here for the four types of ‘tough’ sentences without discussion. The VP internal subject hypothesis is adopted, since it is well supported through the works of Fukui and Speas (1986) and Kuroda (1988). Verbs are classified by the presence or absence of the capacity of projecting an external argument\(^{20}\). It is claimed that Type II projects an external argument, whereas Type I and III do not. Type IV possesses a status similar to modals, which requires a treatment different from the other ‘tough’ constructions.

4.2. Case system

Following Kuroda (1987) nitotte is assumed to belong to the matrix sentence. As for ni, alternative analyses will be discussed in Section 4.8. The remaining question is concerned with the two types of ga marking, that is, the object ga marking by stative predicates and the subject ga marking. The former is a well-attested hypothesis concerning the case marking by stative predicates. However, Type I reveals that not only

\(^{20}\) The terms “external and internal argument” are first used by William (1981). An external argument in an argument structure corresponds to the subject in syntax, while internal arguments are the complements including the object of a verb.
objects but also PPs with postpositions like *de, ni, o,* and *kara* are marked with *ga.* Look at the b-sentences in (1), (7), (8), and (9), repeated below in (49), together with their complement sentences.

(49) a. Tosiyori-ni-wa kono toori-ga kaimono-o si-niku-i
   ‘This street is hard for aged people to shop around.’ (=1b)

   a’ Tosiyori-ga kono toori *de* kaimono-o su-ru

   b. Kodomo-ni-wa ano isu-ga suwari-niku-i
      ‘That chair is hard for a child to sit on.’ (=7b)

   b’. Kodomo-ga ano isu-ni suwar-u

   c. Seito-ni-wa uradoori-ga aruki-yasu-i
      ‘Back alleys are easy for pupils to walk along.’ (=8b)

   c’ Seito ga uradoori-o aruk-u

   d. Sensyu-ni-wa kono dai-*kara*-ga tobi-niku-i
      ‘This springboard is hard for athletes to jump from.’ (=9b)

   d’. Sensyu ga kono dai-*kara* tob-u

   It is clear that these *ga* phrases are focus phrases, which are most plausibly assumed to be in the C projection. The Case checking hypothesis in the late Principles and Parameters Approach (PPA) and the early MP induces raising of these *ga*-marked non-subjects to the specifier position of the focus phrase (FP) to get *ga* identified as a focus marker. Arguments supporting these claims will be given in Sections 4.3 and 4.4.

   The subject marked with *ga* in a sentence with a stative predicate is given the interpretation ‘exhaustive listing’, that is, focus reading. This semantic property requires it also to be in FP.

4.3. **Topic and focus in Japanese sentence building**

   In disagreement with the proposal that all the Japanese sentences have nominative subjects in the specifier position of Tense Phrase (TP) and get their nominative case marked by the head of TP (e.g. Takezawa), there exist various types of sentences without nominative subjects. Inoue (1998) deals with this problem, claiming that there is a universal requirement that sentences must have either the logical subject-predicate relation, which expresses ‘categorial judgment’, or the grammatical subject-predicate relation expressing ‘thetic judgment’. (See Kuroda
(1970, 1993) for details.). The terms 'categorial judgment' and 'thetic judgment' are roughly rendered as 'predicational' and 'descriptive'. The logical subject-predicate relation is held by the topic-comment or focus-presupposition construction, while the grammatical subject-predicate relation is expressed by the regular subject predicate construction. One group of languages meets this requirement by allowing only the logical subject-predicate relation, a second group only the latter, the grammatical subject-predicate relation, and a third employing both of them. English belongs to the second group, and Japanese to the third. This paper does not pursue the question as to whether there exist languages with only the logical subject-predicate relation.

Inoue's arguments are based on the existence of sentences without nominative subjects. This type of sentence are classified into four groups, those with NPs with kara and de, those with NPs with delimiters like dake, sae, mo, and those with topic phrases, all forming grammatical sentences without nominative subjects. As de phrases are treated as delimiter phrases, there are three groups in total. Typical examples are given below. The sentences in (50) contain kara NPs, (51) de NPs, (52) delimiter phrases, and (53) topic phrases. (See Inoue (2002) for a detailed analysis of sentences like those in (50).)

(50) a. Zikka-kara kome-o okut-te ki-ta
   home from rice ACC send-come-PAST
   'My family sent me some rice.'

   b. Seifu-kara zaidan ni enzyo o
      government from foundation to financial support ACC
      okut-ta
      send-PAST
      'The government sent financial support to the foundation.'

(51) a. Ketueki sentaa-de ketueki-gata siiru-o
   blood center at blood type seal ACC
   o- hari-si-mas-u
   POL-paste-do POL-PRES
   'The blood center will paste the seal of your blood type.'
b. Taroo to Hanako-de bokoo o otozure-ta
   and by alma mater ACC visit-PAST
   ‘Taro and Hanako visited their alma mater.’

(52) a. Sekinin-sya sura koozi genba -kara kaet-tesimat-ta
   person in charge even construction site from leave COMPL-PAST
   ‘Even the person in charge left the construction site.’

b. Ano ziken- wa kodomo demo sit-te i-ru
   that incident TOP children even know-PRES
   ‘Even children know that incident.’

(53) a. Kono gakusei-wa moo ronbun-o dasi- masi-ta
   this student TOP already paper ACC submit-POL- PAST
   ‘This student has already submitted his paper.’

b. Watasi-no kimono-wa okaasan ga itumo erabi- mas-u
   my kimono TOP mother NOM always pick out-POL-PRES
   ‘My kimonos, Mother always picks out.’

c. Tokyo-tte ii sigoto ga mitukari-mas-u yo
   Speaking of good job NOM be found- POL-PRES SFP
   ‘Speaking of Tokyo, good jobs can be found (there).’

The fact that the sentences in (50) through (53) are all fully acceptable supports my claim that Japanese permits the logical subject-predicate relation. As for the grammatical subject-predicate relation, the existence of sentences with nominative subjects expressing the speaker’s description without any presupposition, which is called ‘neutral description’ by Kuno (1973), supports my claim that Japanese allows the grammatical subject-predicate relation as well. These sentences exclude topic or focus phrases. Some typical examples are given below.

(54) a. Kinoo Kantoo-tiku-ni zisin- ga at- ta
   yesterday Kanto area in earthquake NOM happen-PAST
   ‘Yesterday there was an earthquake in the Kanto area.’

b. Mukoo-no sora-ga aoku sunde-i-ru
   over there sky NOM blue clear-PRES
   ‘Over there the sky is blue and clear.’
When nominative subjects appear with stative predicates, they are interpreted as focus phrases, yielding the interpretation ‘exhaustive listing’. This means that the nominative NPs and PPs of ‘tough’ sentences are the focus phrases occupying the CP specifier position21.

All the examples of Type I have the topic marker *wa* attached to *ni*. This is because ‘tough’ sentences are adjectival, and express properties of the subject, the topic, or the focus. ‘Tough’ morphemes express more or less permanent properties, so sentences starting with topic phrases sound natural.

### 4.4. Delimiter phrases in Japanese

Japanese has a group of particles called “toritate-shi” (particularizing particle), or “fuku-joshi” (adjectical particle) according to Japanese traditional grammars, comprising such particles as *sura* (even), *sae* (even), *sika* (only) *dake* (only) as well as *wa* (topic) and *mo* (also). These particles, except *wa* and *mo*, are called delimiters in this paper. They delete *ga* before and after them, except *dake* retaining *ga* following it, as shown in (55b).

(55) a. Sekinin-sya (*ga*)22 sura (*ga*) koozi genba-kara kaet-te simat-ta
   ‘Even the person in charge left the construction site.’

   b. Sekinin-sya (*ga*) dake (ga) koozi genba-kara kaet-te simat-ta

The delimiters function as focus markers, so the sentences in (51), without nominative subjects, are well formed as the sentences with the focus-presupposition relation.

### 4.5. A proposed analysis of Type I

To account for the characteristics of Type I, the following underlying structure is proposed. First of all, Type I is assumed not to project an external argument, and to select a *nitotte* phrase as a matrix adjunct. The underlying structure of Type I is given as (56).

---

21 I assume multiple specifier positions in CP, which TopP and FP occupy.
22 The symbol (*ga*) means that *ga* must not be selected, or must be deleted. The parentheses ( ) indicate the element enclosed by them is optionally chosen.
The ‘tough’ morpheme *yasu-* selects the *nitotte* phrase as its adjunct and *vP* as its complement. The complement subject *PRO* is coreferential with the *NP* in the *nitotte*-phrase. The verb *tukai-* is first raised to the position dominated by *v* and then raised and incorporated with the adjective *yasu-*, deriving the complex adjective *tukai-yasu*-. Since an adjective, either simple or complex, is a stative predicate, it assigns *ga* to its object. The object marked with *ga* is raised to the focus position and gets a stress\(^{23}\) and focus interpretation. If the object is not focused, the *nitotte*-phrase is raised to the topic position and marked with *wa*. The topicalization and focalization result in (57a) and (57b) respectively.

\(^{23}\) Elements marked with *ga* by focalization get a strong stress. Sentences holding the subject-predicate relation like those in (54) are stressed when focalized.
(57) a. Gakusei-nitotte-wa kono zisyo-ga tukai-yasu-i
   b. Kono zisyo-ga gakusei-nitotte tukai-yasu-i

Zisyo-ga in (57a) is ambiguous as to its status as a focus or an object in situ. In the former case, an focused element appears to the right of a topic, which is indicated by positing TopP in a higher position than FP in (56).

Since an adjunct is an optional element, a ‘tough’ morpheme may not select a nitotte-phrase, which results in sentences like those in (58). (58b) is a counterpart to the Type III sentence (26a).

(58) a. Kono zisyo-wa (ga) tukai-yasu-i
      ‘This dictionary is easy to use.’
   b. Momenmono-wa kawakasi-yasu-i
      ‘Cotton textiles are easy to dry.’

In this case the complement subject PRO is interpreted as an arbitrary PRO, an interpretation given to the complement subject PRO without a co-indexed NP.

4.6. A proposed analysis of Type III
Recall that the complements of Type III are sentences either with an unaccusative verb or a passivized one. The underlying structure of Type III is assumed as (59).
The differences between Type I and Type III are: (i) the former has a complement with an external argument (vP) and the latter without one (VP), and (ii) the former selects the nitotte phrase and the latter does not. The underlying structure of a Type III sentence like (60a) with the passive complement sentence is assumed to be that in (60b). (This time only the structure below AP is given.)

(60) a. Roozin- wa sagisi- ni damas- are- yasu-i
old people- TOP swindler- by deceive-PASS-easy-PRES
‘Old people are easily deceived by swindlers.’
The passive morpheme *rare* does not project an external argument. It selects as an adjunct *ni*- or *niyotte*- (by) phrase. The complement external argument (subject) is deprived of its theta role "Agent", and gets deleted because it loses its status as an argument. The remaining internal argument (object) is assigned *ga* and gets its status as subject. In this way the Type III 'tough' sentences with an unaccusative or passive complement verbs have their internal arguments (objects) assigned *ga*, which gives the subject status to the underlying objects. In the same way the internal arguments of Type I gets *ga*, but it is assigned by the stative complex adjective.

4.7. A proposed analysis of Type IV
The crucial characteristics of Type IV are: (i) incompatibility with *ni* or *nitotte* phrases; (ii) selection of a non-self-controllable verb for its complement sentence. (iii) non-applicability of Object-*ga* marking. The characteristic (i) implies that there is no restriction on the theta role of the subject, which makes the characteristic (ii) one of its necessary
consequences, that is, the complement verb can carry the feature [-self-controllable]. The characteristic (iii) leads to an assumption that the Type IV ‘tough’ morphemes do not raise their complement verbs in syntax. They are raised and incorporated with ‘tough’ morphemes in morphology to satisfy a phonological requirement to form a complex predicate. The non-self-controllability of the complement verb brings about the interpretation of ‘tendency’.

On the basis of these considerations, the underlying structure for Type IV like (61a) is assumed to be a sentential subject construction, given in (61b).

(61) a. awatemono-wa ziko-o okosi-yasu-i
    ‘Hasty people tend to cause accidents.’

(61) b.  
    CP
    \  / 
   TopP    C’
    / 
   FP     C’
   / 
  TP      C
    | 
   AP     T’
    | 
   \  / 
   vP     A’
   /  
  NP     T
    |  
   \  /  
   awatemono   v’
   /  
  VP    A
    |  i
   \  /  
   yasu-
    NP   V
    |  
   Ziko  okosi-

The difference between Type IV and the subclass of Type I, as exemplified by the sentences in (58), repeated below as (62), is the requirement of the lexical complement subject for Type IV, and the use of the arbitrary PRO by the Type I subclass.
(62) a. Kono zisyo-wa (ga) tukai-yasu-i
   ‘This dictionary is easy to use.’
   b. Momenmono-wa (ga) kawakasi-yasu-i
   ‘Cotton textiles are easy to dry.’

4.8. *Ni and nitotte*

Using the compatibility with *gatte-i-ru* (showing the sign of), it was argued that Type I, III, and IV express the speaker’s judgment. However, this is not the end of the story. There is a subtle semantic difference between *ni* and *nitotte*. *Nitotte* expresses the speaker’s judgment based on the perception of the sentient being denoted by the NP marked with *nitotte*. Let us assume that the NP marked with *nitotte* is assigned the theta role Experencer. *Ni*, on the other hand, sometimes implies unawareness on the part of the animate NP marked with *ni*. The sentences in (63) show this difference.

(63) a. ?*Gakusei-nitotte-wa kono mondai- ga toki-yasu-ino da ga,
   students for TOP this problem-NOM solve-easy-PRES-but
   karera-wa soo wa omot-te i- na- i
   they TOP so CONTRAST think-PRES-NEG-PRES
   *‘I assert that this problem is easy for the students to solve, but
they do not think so.’
   b. Gakusei-ni-wa kono mondai-ga toki-yasu-i no-da-ga,
   karera-wa soo wa omot-te I-na-i
   ‘I assert that this problem is easy for the students to solve, but
they do not think so.’

In the case of (63a), the modal *no da* (expressing the speaker’s assertion) is not fully compatible with *nitotte*, which depends on the awareness of the experiencer argument. This implication of the awareness of the experiencer makes the meaning of the second clause contradictory to that of the first clause. (63b), on the contrary, is perfectly compatible with the assertive modal and the semantic content of the following clause.\(^{24}\)

---

\(^{24}\) Miki (2001) discusses a similar ambiguity involved in *for-phrases* of English ‘tough’ sentences. Okura called my attention to Miki’s work.
The *ni* phrase of this type must be taken to be without the implication of awareness of the experiencer. It is assumed to be generated as the subject of the complement sentence. The particle *ni* is assigned to the complement subjects of *Ni*-causatives, indirect passives, *ni-ga* potentials, and so on as well as the complement subject of Type I\(^{25}\).

There is another type of *ni*-phrase, which is sometimes called the dative subject phrase. The verbs like *kikoe*- (hear) and *mie*- (see), and *wakar*- in (17) require dative subjects; in other words, they are unaccusatives with two arguments marked with *ni* and *ga*. This type of the *ni*-phrase presupposes the awareness of the Experiencer argument. In Type III the dative subject of an unaccusative verb may be embedded, with the sense of awareness of the Experiencer argument. The *ni*-phrases in these sentences do not belong to the matrix of Type III ‘tough’ sentences.

4.9. A proposed analysis of Type II

When a ‘tough’ morpheme projects an external argument, the result is a Type II sentence, which expresses the judgment of the subject concerning easiness of the action denoted by the complement verb. It necessarily implies awareness of the subject. The complement subject must be coreferential with the matrix subject, so *nitotte-* , which also requires coreferential complement subject, is excluded from this context.

5. Answers to the questions raised in Section 3

The following is the list of questions raised in connection with Japanese ‘tough’ sentences:

(a) Whether the matrix subject is base-generated or not.
(b) Whether *nitotte* or *ni* in ‘tough’ sentences belong to the matrix or not.
(c) Whether or not movement is involved in the derivation of ‘tough’sentences.

The analyses proposed in this paper answer Question (a) positively concerning Type II, but negatively concerning the other types. The answer to Question (b) is given in Section 4.8, where *nitotte* is assumed

\(^{25}\) Kuroda's Subject-*ni* raising was the first proposal to give a general account for the appearance
to belong to the matrix sentence, but *ni* stays in the complement sentence. Question (c) is not discussed in this paper, and it is assumed tentatively that Japanese 'tough' sentences do not involve any movement. Takezawa's analysis with *pro*, given as (46b), is adopted. Quite a few people support the assumption that Japanese 'tough' morphemes project external argument, mainly on the basis of the semantic fact that 'tough' morphemes express the properties of their subjects. The claim made in this paper extends the function of subjects to topic and foci.

6. Conclusion

The analyses proposed in this paper give a principled account of four types of Japanese 'tough' sentences. The basic assumption of crucial syntactic mechanisms are: (i) the choice of *nitotte*, (ii) the choice of *vP*. The choice of both (i) and (ii) derives Type I. The choice of only (ii) leads to the sentences like (58a). Choosing neither (i) nor (ii) results in Type III. Type IV is derived without choosing (i), (ii), and Verb-raising. Type II is exceptional in choosing a matrix subject, which is coreferential with the complement subject.

It is further assumed that TopPs and FPs as well as grammatical subjects play the function of sentence building in Japanese. The particle *ga* marking a focus is treated as one of the delimiters. Both topic and focus phrases, marked with *wa* and *ga*, are raised to TopP and FP respectively. It is assumed that these phrases carry specific features attracted by the same features in TopP and FP.

References:


井上和子 1976.『変形文法と日本語・上一続語構造を中心に』大修館


井上和子 2002.「能動文、受動文、二重目的語構文と「から」格」


Kuroda, S.-Y. 1970. "Remarks on the Notion of Subject with Reference to Words Like also, even or only," Part II. Annual Bullein, Research Institute of Logopedics and Phoniatries, 127-152, University of Tokyo.

Rinehart and Winston, Inc.
三木 望 2001 「第８章 難易構文」影山太郎（編）『動詞の意味と構文』212-296. 大修館書店

Center for Language Sciences
Kanda University of International Studies
1-4-1 Wakaba, Mihama-ku, Chiba-shi
Chiba-ken, 261-0014
JAPAN

inoue@kanda.kuis.ac.jp

—111—