In the current Government and Binding framework, every sentence must have a subject. When the matrix subject position is non-thematic, it is filled by an expletive. Japanese, however, lacks an overt expletive. This raises the question of whether the language has an expletive which is null, or raises an embedded subject to the matrix subject position. It is argued that Japanese does indeed have a null-expletive in the course of discussing how a negative polarity item behaves in a so-called 'raising' construction. (Contains 12 references.) (Author/JL)
Abstract: In the current Government and Binding framework, every sentence must have a subject. When the matrix subject position is non-thematic, it is filled by an expletive. Japanese, however, lacks an overt expletive. This raises the question of whether the language has an expletive which is null, or raises an embedded subject to the matrix subject position. I will argue that Japanese does indeed have a null-expletive by discussing how a negative polarity item behaves in a so-called 'raising' construction.

0. Introduction

According to Chomsky’s Extended Projection Principle, every sentence must have a subject. Japanese, however, lacks an overt expletive to fill the subject position when the position is a non-theta position. It is controversial whether or not Japanese has a null-expletive and not many arguments have been presented. I will argue that Japanese does have a null-expletive. To show that, I will discuss the behavior of a negative polarity item sika-negative in so-called 'raising' constructions. Raising constructions are discussed in Nakau (1973) and Kuno (1976) among others. Sika-Negative construction is studied in detail by Muraki (1978). Negation is discussed in McGloin (1976).

The argument goes as follows. Assuming that the matrix subject position must be filled, which will be argued later, if there is no expletive to fill the matrix subject position, raising of an embedded subject to that position must be forced. If there is an expletive, the embedded subject can stay in its original position.

1. Government Restriction on Sika--Negative

XP-sika necessarily occurs with a negative and means 'only'. Sika can attach to any argument in a
In the examples above, sika and the negative predicate are in the same clause where negative governs XP-sika. When they are not in the same clause and government fails, the examples are ungrammatical, as shown below.

ACC burn NEG past reason ACC know PROG

'Takashi knows the reason why only Hanako burned the top secret document.'

ACC burn past reason ACC know NEG

'Takashi knows the reason why only Hanako burned the top secret document.'
However, it is known that there are grammatical sentences which have non-clausemate sika and NEG as shown below. *(See Kitagawa (1986) and Sells (1991).)*

(3) **Takashi-ga [hahaoya-ni-sika nak-are- na- katta.**
Takashi NOM mother DAT only cry PASS NEG

'Takashi had only his mother cry.'

(4) **Takashi-ga [Hanako-ni ika- sika tabe] sase-na- katta.**
Takashi NOM Hanako DAT squid only eat CAUS NEG past

'Takashi let/made Hanako eat only squid.'

Let us call these examples of sika--Negative (SN) long-distance SN.

Now consider the causative examples below.

(5) **Watasi-wa [Hanako-ni benkyoos-ase] nak-katta.**
I TOP DAT study CAUS NEG past

'I did not let/make Hanako study.'

(6) **Watasi-wa [Hanako-ni benkyoos-na] sase-ta.**
I TOP DAT study NEG CAUS past

'I let/made Hanako not to study.'

The negative cannot be in the lower clause as shown in (6). The negative in (5), however, has both matrix scope as in (7a) and the lower scope as in (7b).

(7a) a. I did not let/make Hanako study.
   b. I let/made Hanako not to study.

The fact that the negative in the matrix clause has a lower scope suggests that there is a derivation in which the negative starts out in the lower clause and undergoes raising to a higher Infl. In a sentence which has sika, then, we could say that a negative is underlyingly a clausemate of sika where the negative governs sika, and undergoes raising.
Let us consider the structure of a long-distance SN example (4). It is shown below.

The negative downstairs raises to the higher Inf. The trace of the negative must be properly governed due to the ECP.

Following Baker, I assume that the embedded verb take undergoes incorporation to the causative morpheme sase in order to affix to it. Due to this process, there is no barrier between the raised negative and its trace, due to the Government Transparency Corollary, given in (12). (See Baker (1988) for details of incorporation.) The definition of government and barrier that I assume is from Baker (1988). (See Chomsky (1986) for slightly different definitions.)

1. A governs B iff A c-commands B and there is no category C such that C is a barrier between A and B.

2. Let D be the smallest maximal projection containing A. Then C is a barrier between A and B if and only if C is a maximal projection that contains B and excludes A, and either:
   (i) C is not selected, or
   (ii) the head of C is distinct from the head of D and selects some WP equal to or containing B.

3. A selects B if and only if:
   (i) A assigns a theta role to B, or
   (ii) A is of category C and B is its IP, or
   (iii) A is of category I and B is its VP.

4. Government Transparency Corollary
A lexical category which has an item incorporated into it governs everything which the incorporated item governed in its original structural position.

The movement in (8) takes place as shown below.

\(\text{(13)}\)

\[
\begin{array}{c}
\text{IP} \\
\text{NP} \quad \text{I'} \\
\text{Takashi} \quad \text{VP}^1 \quad \text{I} \\
\text{IP}^* \quad \text{V} \quad \text{V} \quad \text{V} \quad \text{I}_1 \\
\text{NP} \quad \text{I'} \quad \text{t}_1 \quad \text{V}_1 \quad \text{V} \quad \text{nai} \\
\text{Hanako} \quad \text{VP}^2 \quad \text{I} \\
\text{NP-sika} \quad \text{V} \quad \text{t}_2 \\
\text{ika} \quad \text{t}_2
\end{array}
\]

In (13), NP-sika is governed by the trace of negative at S-structure, and also the structure is allowed with regards to the ECP. Due to the incorporation, none of IP*, VP^1 or VP^2 is a barrier. Thus (13) (=8) is OK.

Now consider the example below, which is ungrammatical.

\(\text{(14)}\) *Takashi-wa hamati-sika taberu koto-ni si-
Takashi TOP y.tail only eat fact DAT do
na-i.
NEG

'Takashi decides on the fact that he eats only yellow tail. =Takashi decides on eating only yellow tail.'
In (14), the raised negative does not properly govern its trace because PP* is a barrier. Therefore (14) is ruled out by the ECP.

To sum up so far, I have argued that only in the constructions where the raised negative can properly govern its trace, the long-distance SN is allowed.

If my analysis is correct, we would predict that long-distance SN is allowed in any structure which involves incorporation. This is because incorporation 'erases' barriers, due to the Government Transparency Corollary, given above. This prediction is correct. Long-distance SN is possible in sentences which have grammatical combinations of affixes. (See Sugioka (1984) and Terada (1990) for interactions among complex predicates.) The working of the sentence similar to the ones below is shown in the tree in (13). The intermediate IPs and VPs cease to be barriers due to the incorporation no matter how deep the most deeply embedded verb is.

(16) Hanako-wa ,[Takashi-ni ,][i ka- sika tabe]
Hanako TOP Takashi DAT squid only eat

'sase] rare-na- katta.'
CAUS PASS NEG past

'Hanako was made by Takashi to eat only squid.'
The director thought at the beginning that he would give as much tragedy as possible to Akiko in the movie, but later he rewrote the script and, 'he made Akiko to have extracted only her tongue by the queen.'

Thus we have seen that in order for long-distance SN to be allowed, the raised negative must properly govern its trace.

2. So-called 'Raising' Verbs and Long-distance SN

Let us turn to the behavior of SN in the so-called 'raising' constructions. (See Nakau (1973) for detailed discussion of the raising construction.) I will argue that not all the so-called 'raising' constructions involve raising. The ones which do not involve raising of the embedded subject require a null-expletive subject in the matrix clause.

In order to see the behavior of SN in these constructions, we exclude the predicates which do not allow the negation in the first place. Some examples of these are soo-da 'hear', mono-da 'used to', rasi-i 'appear', yoo-da 'seem', mitai-da 'seem', tokoro-da 'at the moment of'.

There are, however, 'raising' predicates which allow negation but not long-distance SN. Some examples are no 'it is the case', hazu 'expectation', and -ka mo sire-nai 'might'.

'It is the case that Takashi ate only raw meat.'
(19) *Takashi-wa namaniku-sika tabeta hazy
   Takashi TOP raw meat only ate expectation
dewa-na-i.'
   NEG
   'It is expected that Takashi ate only raw meat.'

Note that it is not that the predicates in (18-19) are incompatible with SN per se. Local SN is fine with these predicates, as shown below.

(20) Takashi-wa namaniku-sika tabe-na-katta no da.
   NEG case COP
   'It is the case that Takashi ate only raw meat.'

(21) Takashi-wa namaniku-sika tabe-na-katta hazy da.
   NEG expectation COP
   'It is expected that Takashi ate only raw meat.'

Thus the ungrammaticality of (18-19) suggests that there are barriers between the raised negative and its trace. The structure is shown below.

(22) *

```
   IP
     / \ 
    NP I'
     / \ 
    --- VP I
     / \ 
    NP* V NEG
     / \ 
    IP N da
     / \ 
    no/hazy
     / \ 
    NP I'
     / \ 
Takashi VP I
     / \ 
NP-sika V t
     / \ 
namaniku tabe
```
In (18), NP* is a barrier, thus the trace is not properly governed, so it is ungrammatical.

On the other hand, there are so-called 'raising' predicates which allow long-distance SN. These include soo-da 'seem' and (koto-ga) aru 'fact exists =has an experience of'. An examples of these is given below.

(23) Takashi-ga hamati-sika tabe-soo-dewa-na-i.
Takashi NOM y. tail only eat seem NEG
'Takashi seems to eat only yellow tail.'

The structure of (23) is shown below.

```
(24)  IP /
     / \ /
    NP  I'
      / \ --- VP I
        / \ IP V NEG
        / \ NP I' soo-da
         / \ Takashi VP I
          / \ NP-sika V t_i
            \ hamati tabe
```

The embedded V undergoes incorporation, since the matrix verb is a bound morpheme. Thus there is no barrier between the NEG and its trace. Therefore (23) is grammatical.

We have seen the grammatical long-distance SN and ungrammatical ones. When the raised negative properly governs its trace, long-distance SN is allowed.

3. Null Matrix Subject

We saw above that long-distance SN is barred in some 'raising' constructions due to the presence of barriers between the NEG and its trace. It then immediately follows that the raising of a subject out of an embedded clause to the matrix sentence is also impossible in those sentences. The same barriers which block long-distance SN would act as barriers between the matrix subject and the embedded subject. Therefore, the structures of those 'raising'
constructions must have a null-expletive in their matrix subject position. On the other hand, the ‘raising’ constructions which allow long-distance SN has no barriers between the NEG and its trace, therefore there are also no barriers which would block the raising of an embedded subject to the matrix subject position.

This makes predictions. One is that if long-distance SN is blocked where sika is attached to the object, it should also be blocked where sika is attached to the subject. This is because the embedded subject stays in the original position and therefore is susceptible to the same barrier as the embedded object. This prediction is correct. Consider the examples below. They are ungrammatical.

(25) *Takashi-sika namaniku-o tabeta no dewa-na-i.
    Takashi only raw meat ACC ate case NEG

'It is the case that only Takashi ate raw meat.'

(26) *Takashi-sika namaniku-o taberu hazu
dewa-na-i.
    Takashi only raw meat ACC eat expectation NEG

'It is expected that only Takashi eats raw meat.'

The analysis also predicts that in a construction which allows long-distance SN, the subject can bear sika too. The reason is as follows. If the embedded subject stays in the original position, the trace of negative is properly governed. If the embedded subject undergoes raising to the matrix subject position, XP-sika becomes the clausemate of the raised negative, and thus it is also grammatical. This prediction is also correct. Constructions which allow object-SN also allow subject-SN.
1. "Only Takashi seems to eat raw meat."

2. "Only Takashi has eaten raw meat."

In short, there are no raising predicates which allow object-SN but not subject-SN, or vice versa.

To sum up the discussion so far, we have argued that the restriction on long-distance SN restricts the possibility of raising an embedded subject. Then, with predicates which do not allow long-distance SN, and thus there is no raising of an embedded subject to the matrix subject position, as shown in (20) and (21), it must be a null-expletive that fills the matrix subject position."

4. Passive Facts

The discussion above assumes that the matrix subject position must be filled. There is evidence from the passive construction that this is the case in Japanese. That evidence further leads to the argument that the raising of an embedded subject is available only when necessary. Consider the example below.

(29) ?? [sono sinpu-ga] [sin’yoo-dekiru ningen da to] omow- are- te iru.

People DAT that priest NOM trust able man COP COMP think PASS PROG

'It is thought by people that that priest is a trust-worthy man.'

Assuming that a CP does not need Case, it should be able to stay in the object position. However, (29) is a very awkward sentence unless the ni-phrase is focused. The natural sentence is shown below.
The fact that (29) is very awkward suggests that the matrix subject position must be filled in Japanese. The awkwardness of (29) also raises a question of the availability of a null-expletive. Why can a null-expletive not fill the position and make the sentence perfect? I will suggest that a null-expletive is available only when necessary. In other words, raising of an embedded subject is obligatory when it is possible. I will argue that the embedded subject has raised out of the lower clause in (30), yielding the structure shown below.

(31) **Sono sinpu-ga hitobito-ni sin’yoo-dekiru ningen da to omow-aru-te iru.**

Let us consider now why the raising out of a CP in (31) is possible. In Japanese, omow, sinziru, iw can be ECM verbs. In other words, the CP of their complements can be deleted. Thus the 'subject' of the embedded clause can be Accusative Case-marked, as shown below. (For different analyses of this phenomenon, see Kuno (1976) and Sells (1990).)

(32)a. **Hitobito-ga sono sinpu-ga / g sin’yoo people NOM that priest NOM/ACC trust dekiru ningen da to omotte iru. able man COP COMP think PROG**

'People think that that priest is a trust-worthy man.'

b. **Sinsain-wa Akiko-ga/o utukusii to referee TOP Akiko NOM/ACC beautiful COMP omotta. thought**

'The referees thought that Akiko was beautiful.'
Notice that embedded clauses of ECM verbs in Japanese are finite clauses, unlike English. Because of this, predicates of embedded clauses must be unaccusative in order to allow ECM. In other words, only Caseless objects can be Exceptionally Case-marked, as shown in the tree below.

(33)

The Caseless object is NP*. Only NP* can be Exceptionally Case-marked, when CP* is deleted or ceases to be a barrier. If the predicate of the lower clause is unergative, ECM would be ruled out. This is because the embedded subject already has Nominative Case assigned by lower Tense, and thus ECM would doubly Case-mark it.

When CP deletion takes place, NP* can raise to the matrix subject position since there is no barrier, as shown below. The tree below is the structure of (31).
This analysis predicts that ECM sentences allow long-distance SN, since there are no barriers between the matrix Infl and the lower Infl. This prediction is correct. Consider the examples below.

(35)a. Hitobito-wa [sono sinpu- sika sin’yoo-dekiru people TOP that priest only trust able
ningen da to] omotte i- na-i. man COP COMP think PROG NEG

‘People think that only that priest is a trust-worthy man.’
b. *Takashi-wa [Hanako-ga gokuhisyorui-sika t.s.document only moyasita to] omow-ana-katta.
   'Takashi thought that Hanako burned only the top-secret document.'

To sum up, ECM is only allowed when the embedded predicate is unaccusative. Only in those cases, long-distance SN is allowed. So we have seen how the raising of an embedded subject out of a CP is possible.
thus the string of (29) is OK only when the ni-phrase is focused.

To sum up the discussion, I have argued that SN is allowed when the negative governs XP-sika. If negative undergoes raising, the raised negative must properly govern its trace due to the ECP. We then examined the behavior of long-distance SN in the so-called 'raising' constructions. Only the predicates which allow long-distance SN allowed the raising of the embedded subject to the matrix subject position. When the raising is not allowed, the matrix subject position must be filled with a null-expletive. Furthermore, the passive construction suggested that a null-expletive is available only when necessary.

NOTES

1 Sika can also attach to verbs, adjectives, and adverbs, but it is not relevant to our discussion and thus will be put aside.

2 There is one verb which allows long-distance sika-NEG, even if the sentence does not seem to involve incorporation. The verb is aru. It's negative form is nai.

(i) [Takashi-ga hamati- sika tabeta koto]-

Takashi NOM yellow tail only ate fact
garna-i.
NOM NEG

'There is a fact that Takashi ate only yellow tail. =Takashi has eaten only yellow tail.'

Aru is an unaccusative verb but it is not the property of unaccusative verbs that allows long-distance sika-NEG. Long-distance sika-NEG sentences with other accusative verbs, as well as unergative verbs, are ungrammatical, as shown respectively below.

(ii) *Takashi-ga hamati-sika tabeta koto-ga bare- na

katta.

17
'It was revealed that Takashi ate only yellow tail.'

(iii) *Takashi-ga hamati-sika tabeta koto-o wasure-na-katta.

'Takashi forgot that he ate only yellow tail.'

As far as I know, aru is the only verb in Japanese that does not seem to involve incorporation and yet allows long-distance sika-NEG. All the examples that Muraki (1978) discusses but one are aru sentences. If it does not involve incorporation, the subject NP should be a barrier to Negative raising. One could say that there is indeed abstract incorporation involved. It would be the incorporation of the N koto into the verb aru. In order to claim that aru is the only verb that involves abstract Noun incorporation, however, further examination of the property of the verb is necessary. Therefore, I will put aside the aru sentences in this paper.

This type of sentences is difficult to parse because of the multiple affixes attached to one verb. However, I believe that these sentences are grammatical.

Although I gave the direct translation, NP-sika in sentences (16-17) have wide scope interpretation.

Nakau argues that all the predicates that I deal with in this paper involve raising of the embedded subject to the matrix subject position. He gives four arguments. Unfortunately, he uses topic constructions to show his points, which I think invalidates his arguments. The argument about the exclusive listing reading of ga, however, is a strong one and I do not have a counter-argument at this point. Further study of exclusive listing reading of ga is necessary.

Dewa-nai or zya-nai is the negative form of the copula da.

Some speakers do not allow negation of hazu. However, (i) is grammatical for anyone.

(i) Takashi-wa namaniku-o tabeta hazu-wa
Takashi TOP raw meat ACC ate expectation TOP nai.
NEG
'Takashi could not have eaten raw meat.'

This example behaves exactly like (21) in that it does not allow long-distance *sika--NEG.

(ii) *Takashi-wa namaniku-sika tabeta hazu-wa na-i.
'Takashi could not have eaten only raw meat.'

This is predicted by our analysis because the raised negative does not properly govern its trace due to the barrier NP*, as shown in (22).

John Whitman also argues that Japanese has a null-expletive. One of his arguments is that the reason why (i) below is ungrammatical is because the subject sensei is not raised to the matrix subject position. If it were in the matrix subject position, we would expect the predicate to be able to honorify it.

(i) ?*Sensei- ga o- mie- ni-naru hazu de-
   teacher NOM HON-come-HON expectation COP
   irassyaimasu.
   HON(ORIFIC)

   The teacher is expected to come.

I assume that the subject can remain in the D-structure position and receive Nominative Case, since there exist sentences with more than one Nominative-marked NPs with its object marked with Nominative as well as its subject.

(i) Takashi-ga Furansugo-ga wakaru.
   Takashi NOM French NOM understand

   'Takashi understands French.'

Thus NP movement to the subject position in order to receive Nominative Case is not obligatory in Japanese, as it is in English.

10 See the following footnote.
Sells (1990), who argues that q-marked NP is a scrambled NP, notes that the embedded predicates must be unaccusative. The explanation for this, however, is different from what is presented here. See Sells (1990) for details.

I assume here that Tense assigns Nominative Case, not just Infl. (See Hasegawa (1984/85).)

CP deletion does not necessarily have to involve the actual deletion of the CP. What is involved is the CP to stop being a barrier.

I am assuming that the embedded clauses in Japanese are IPS except when there is an overt complementizer. However, it does not affect the arguments in this paper if they are CPs.

REFERENCES


