

1994

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Recommended Citation

Aoyagi, Hiroshi and Ishii, Toru (1994) "On Agreement-inducing vs. Non-agreement-inducing NPIs," *North East Linguistics Society*. Vol. 24 : Iss. 1 , Article 2.

Available at: <https://scholarworks.umass.edu/nels/vol24/iss1/2>

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On Agreement-inducing vs. Non-agreement-inducing NPIs

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0. Introduction

This paper concerns about the so-called negative polarity items (NPIs) in Japanese. Among the NPIs in the language, two different types must be recognized. One type, *XP-sika*, which means 'anyone/anything but XP', is an agreement-inducing element, only licensed by Spec-head agreement with Neg at LF. The other type, an indeterminate pronoun suffixed with *-mo*, is not an agreement-inducing element in the same sense that *XP-sika* is. However, since it is "identified" with a phonetically null operator, base-generated in Spec of NegP, it must adjoin to that operator at LF. The locality requirement that the NPIs must satisfy in relation to Neg can be derived from the above characterizations of each type of NPIs and the general theory of movement.

In what follows, just for an expository reason, we will refer to these two types of NPIs as SIKA-NPIs and MO-NPIs, respectively. The organization of this paper is as follows. In section 1, we will first present evidence in favor of the NPI-status of SIKA-NPIs and MO-NPIs, and then we will see that NPIs in Japanese are a class of floating quantifiers. In section 2, we will explicate how these two types of NPIs are licensed. We will also look at two independent arguments in favor of our analysis, that is, multiple occurrence of NPIs and weak crossover effects. Section 3 discusses the locality condition on NPI-licensing. We will claim that the "clausemate"

condition on NPIs and Neg can be subsumed under the theory of movement. Finally, we will touch upon crosslinguistic variations with locality on NPI-licensing among Japanese, English, and French.

1. Two types of NPIs

An NPI-creating suffix *-sika* attaches to virtually any maximal projection, and XP suffixed with *-sika* is interpreted as 'anyone/anything but XP' or 'only XP' in combination with Neg. The use of *sika*-NPI is exemplified in (1):

- (1) a. John-sika ringo-o tabe-na-katta (koto)
 -SIKA apple-ACC eat-Neg-PAST (C)
 'Only John ate apples.'
 b. John-ga ringo-sika tabe-na-katta (koto)
 -NOM apple-SIKA
 'John ate only apples.'

Japanese has another NPI-creating suffix, i.e., *-mo*. *-Mo* attaches to what Kuroda (1965) calls 'indeterminate pronouns' (INDs) like *dare* 'who' and *nani* 'what' and turns them into MO-NPIs. The use of MO-NPIs is exemplified in (2):¹

- (2) a. daRE-MO ringo-o tabe-na-katta (koto)
 anyone apples-ACC eat-Neg-eat (C)
 'No one ate apples.'
 b. John-ga naNI-MO tabe-na-katta (koto)
 -NOM anything
 'John did not eat anything.'

Evidence supporting the NPI status of SIKa-NPIs and MO-NPIs comes from the fact that they require the presence of a negative morpheme in the same clause. Thus, if SIKa-NPI or MO-NPI does not co-occur with a negative element, the result will simply be ungrammatical, as shown in (3) and (4):

- (3) a. *John-sika ringo-o tabe-ta (koto)
 -SIKA apples-ACC eat-PAST (C)
 b. *John-ga ringo-sika tabe-ta (koto)
 -NOM
 c. *John-sika [Mary-ga ringo-o tabe-na-katta to] omotte iru (koto)
 eat-Neg-PAST C think

¹Japanese is a pitch-accent language and an accent falls on the last syllable of a stretch of high-pitch tones (cf. McCawley 1968). Although INDs are inherently accented, e.g. *DA're* 'who' and *NA'ni* 'what', the NPI-creating *mo* deaccentuates the stem; hence, *daRE-MO* (no accent) 'anyone' and *naNI-MO* (no accent) 'anything'. (Here and in the relevant examples to follow, high-pitch tones are indicated by the upper case, and low-pitch tones, by the lower case.) Note that the universally-quantified particle *-mo*, though isomorphic, must be distinguished from this NPI-creating suffix in that the former maintains the accent of the stem; thus, *DA're-mo-ga* 'everyone-NOM' remains as accented as *DA're*.

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- (4) a. *daRE-MO ringo-o tabe-ta (koto)
anyone
b. *John-ga naNI-MO tabe-ta (koto)
anything
c. *daRE-MO [Mary-ga ringo-o tabe-na-katta to] omotte iru (koto)

Next, let us mention the adverbial nature of the NPIs in Japanese. As indicated in (5) and (6), both SIKA-NPI and MO-NPI may co-occur with a referential noun phrase with a Case-particle.

- (5) a. John-ga ringo-sika kudamono-o tabe-na-katta (koto)
-NOM apples-SIKA fruits-ACC eat-Neg-PAST (C)
'Among fruits, John ate only apples.'
b. John-ga kudamono-o ringo-sika tabe-na-katta (koto)
c. ?ringo-sika John-ga kudamono-o tabe-na-katta (koto)
(6) a. John-ga naNI-MO kudamono-o tabe-na-katta (koto)
-NOM anything fruits-ACC eat-Neg-PAST.(C)
'John did not eat any fruits.'
b. John-ga kudamono-o naNI-MO tabe-na-katta (koto)
c. naNI-MO John-ga kudamono-o tabe-na-katta (koto)

However, the examples in (7) show that neither type of NPIs may be Case-marked. Compare (7) with (1b) and (2b):

- (7) a. *John-ga ringo-o-sika/ringo-sika-o tabe-na-katta
-ACC-SIKA/ -SIKA-ACC
'John ate only apples.'
b. *John-ga naNI-O-MO/naNI-MO-O tabe-na-katta
-ACC-MO/ -MO-ACC
'John did not eat anything.'

The relatively free distribution of NPIs and their lack of Case particles can be attributed to their adverbial nature.

Furthermore, as noted by Fujita (1991), the distribution of NPIs is similar to that of floating numeral quantifiers (FQs) like *3-bon* '3-classifier', as exhibited in (8):

- (8) a. John-ga 3-bon banana-o tabe-ta
-NOM -CL -ACC eat-PAST
'John ate 3 bananas.'
b. John-ga banana-o 3-bon tabe-ta
c. 3-bon John-ga banana-o tabe-ta

Following Fujita, we will assume that NPIs are a class of FQs and that they do not form a constituent with the referential NPs that they modify.²

²For an argument for constituency of some types of FQs, see Kitahara (1993).

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Throughout this paper, we will assume the clausal structure represented in (9) for Japanese:

- (9) [CP [TP [NegP [VP SUBJ NPI [v' OBJ NPI V]]]]]

We will adopt the VP-internal subject hypothesis, advocated by authors like Fukui (1986), Koopman & Sportiche (1991), and Kuroda (1988) among others. Following Laka (1990), Ouhalla (1990), Pollock (1989), and Zanuttini (1991), we assume that Neg heads its own maximal projection, NegP, which is generated below T', but higher than VP.

According to Miyagawa (1989), FQs are base-generated in sister relation to their host (referential) NPs. We will extend his analysis of FQs to NPIs; NPIs are base-generated as sisters to the referential NPs that they are predicated of, as indicated in (9).³

2. Licensing conditions on NPIs

In this section, we will propose licensing conditions for SIKA-NPIs and MO-NPIs. We will then look at two independent arguments in favor of our licensing conditions in the subsequent two subsections.⁴

2.1. Licensing condition on SIKA-NPIs

We propose that SIKA-NPI is an agreement-inducing element, and subject to the licensing condition in (10):

- (10) SIKA-NPI is an agreement-inducing element licensed by Spec-head agreement with Neg at LF. (cf. Takahashi 1990)

Let us consider (1a), repeated here as (11), as an example. Its derivation proceeds as in (12):

- (11) John-sika ringo-o tabe-na-katta (koto)
 -SIKA apple-ACC eat-Neg-PAST (C)
 'Only John ate apples'
- (12) a. S-structure:
 [TP [NegP [VP John-sika ringo-o tabe-na-katta]]]
 b. LF:
 [TP [NegP John-sika_i [VP t_i ringo-o tabe-na-katta]]]

³In what follows, however, it will be pretended as if NPIs were generated in subject and object positions when they in fact modify empty pronominals (i.e. pro's) in those argument positions, unless any confusion arises.

⁴Our analysis is furthermore supported by co-occurrence facts among NPIs and other operators like wh-phrases and quantifier phrases. For detailed arguments for this, see Aoyagi and Ishii (to appear).

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As indicated in (12a), *John-sika* 'only John' stays within VP at S-structure; however, it moves to Spec of NegP in order to be licensed as an NPI through Spec-head agreement with Neg, as indicated by (12b).

2.2. Licensing condition on MO-NPIs

As we will see, MO-NPI is not an agreement-inducing element in the same sense that SIKa-NPI is. Extending Ouhalla's (1990) analysis of NegP in English, we will propose that Spec of NegP in Japanese can accommodate a null operator as a licenser for MO-NPI, and that MO-NPI is subject to the following licensing condition:

- (13) At LF, MO-NPI must be identified with a phonetically null operator which is base-generated in Spec of NegP.

Following Watanabe's (1992) idea on "identification" of a wh-phrase with a null operator, we will assume that MO-NPI must adjoin to the null operator in Spec of NegP at LF.

With this in mind, let us consider (2a), repeated here as (14), and its derivation in (15):

- (14) daRE-MO ringo-o tabe-na-katta (koto)
 anyone apples-ACC eat-Neg-PAST (C)
 'No one ate apples'
- (15) a. S-structure:
 [TP [NegP OP [VP daRE-MO ringo-o tabe-na-katta]]]
 b. LF:
 [TP [NegP [daRE-MO_i [OP]_i] [VP t_i ringo-o tabe-na-katta]]]

OP designates a phonetically null operator. In (15a), *OP* is accommodated in Spec of NegP to license MO-NPIs. In (15b), the MO-NPI is adjoined to *OP* at LF; thus, the licensing condition in (13) is satisfied.⁵

2.3. Multiple occurrence of NPIs

There are several arguments in favor of our licensing conditions. First of all, as noted by Kato (1985), although multiple occurrence of MO-NPIs is permissible, that of SIKa-NPIs is not, as indicated in (16):

- (16) a. daRE-MO naNI-MO tabe-na-katta (koto)
 anyone anything eat-Neg-PAST (C)
 'No one ate anything'

⁵As long as Spec of NegP is in the c-command domain of Neg at LF (after V together with Neg raises to T), our analysis conforms to the recent proposal by Fujita (1991) and Homma (1991) that MO-NPI is an existential quantifier taking narrow scope under Neg, rather than a wide-scope universal quantifier. However, we differ from those authors in that licensing of MO-NPI is completed by movement, i.e., MO-NPI is not licensed in situ. Although this contention seems to render a lot of consequences, the space limitation does not allow us to discuss them all.

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- b. *John-sika ringo-sika tabe-na-katta (koto)
 -SIKA apple-SIKA eat-Neg-PAST
 'Only John ate only apples'

Since a SPEC-head relation is basically a one-on-one relation, multiple occurrence of SIKA-NPIs with respect to one Neg should be prohibited. A MO-NPI, on the other hand, is not an agreement-inducing element itself, but is licensed by an empty operator, which may accommodate more than one MO-NPIs at LF.⁶

Furthermore, our analysis can correctly predict that co-occurrence of SIKA-NPI and MO-NPI is never permitted, as shown below:

- (17) a. *John-sika naNI-MO tabe-na-katta
 -SIKA anything eat-NEG-PAST
 'Only John ate nothing/everything.'
 b. ?*daRE-MO ringo-sika tabe-na-katta
 anyone apples-SIKA
 'No one/Everyone ate only apples.'

Remember that SIKA-NPI is licensed by Spec-head agreement with Neg and MO-NPI, by a null operator in Spec of NegP. Let us assume that a specifier position can only accommodate only one element when it induces agreement with head. Then, in (17), since the SIKA-NPI in Spec of NegP induces agreement with Neg, Spec of NegP cannot accommodate a licenser for the MO-NPI; thus, the deviance of the examples in (17) straightforwardly follows.

2.4. Weak crossover

Secondly, both SIKA-NPI and MO-NPI induce the weak crossover effect, as shown in (18) and (19) (cf. Hoji 1985, Takahashi 1990):

- (18) a. (20-nen mae, Amerika-ni sinsyutusiteita Nihon kigyoo-no
 (20 years ago -LOC advanced Japan company-GEN
 uti) Sonyj-sika [soko_i-no.raibaru-gaisya]-o obiyakasitei-
 among -SIKA its rivaling-company-ACC threaten-
 na-katta
 NEG-PAST
 '(20 years ago, among those Japanese companies who had
 advanced to the U.S.,) Sony was the only x such that x
 threatened x's rivaling companies'
 b. ?*[Soko_i-no raibaru-gaisya]-ga Sonyj-sika obiyakasitei-na-katta
 'Sony was the only x such that x's rivaling companies threatened x'

⁶This function of the null negative operator can be paralleled with that of the [+wh] null operator in the sense of Watanabe (1992). He argues that in the case of multiple wh-questions, only one null [+wh] operator needs to move to Spec of CP at S-structure, and that all wh-phrases must adjoin to that operator for identification at LF.

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- (19) a. (John, Bill, Tom -no uti) daRE-MO_i [soitu_i-no nyooboo]-o
 among anyone his wife-ACC
 home-na-katta
 praise-Neg-PAST
 '(Among John, Bill and Tom,) there was no one x such that x
 praised x's wife'
- b. ?*[Soitu_i-no nyooboo]-ga daRE-MO_i home-na-katta
 his wife-NOM anyone praise-Neg-PAST
 There was no one x such that x's wife praised x'

As indicated, in the a-sentences in (18) and (19), the pronouns *soko* 'it' and *soitu* 'that guy or he' can be interpreted as variables bound by *Sony-sika* and daRE-MO, respectively. However, if the subject and the object are permuted as in each b-sentence, the pronoun contained in the subject cannot be construed as a variable bound by the phrase in the object position. We may conclude that the failure of bound variable interpretation in (18b) and (19b) exhibits a typical weak crossover effect. Our analysis can correctly predict that SIKA-NPI and MO-NPI induce the weak crossover effect. Under our analysis, the LF-representations of the b-sentences in (18) and (19) would be (20a) and (20b), respectively:

- (20) a. [TP [NegP Sony-sika_i [VP [soko_i-no raibaru-gaisya]-ga t_i
 obiyakasitei-na-katta]]]
- b. [TP [NegP [daRE-MO_i [OP]] [VP [soitu_i-no nyooboo]-ga t_i
 home-na-katta]]]

In the LF-representations (20a-b), the variable *t_i* does not c-command the pronoun *soko* or *soitu*, and thus cannot be the antecedent of the pronoun, due to the condition in (21):

- (21) A variable cannot be the antecedent of a pronoun or an anaphor that it does not c-command. (Cf. Reinhart (1976), Saito & Hoji (1983))

Under our theory, since both the SIKA-NPI in (18b) and the MO-NPI in (19b) cross over the subject at LF due to the requirement that they move to Spec of NegP for licensing, they induce the WCO effect.

3. Locality of NPI Licensing

3.1. "Long-distance" NPI licensing

In this section, we will touch upon the locality of NPI licensing. In Japanese, "long-distance" NPI-licensing is generally prohibited, as exemplified in (22):⁷

⁷"Long-distance" NPI licensing seems to be less restricted if we use *omow* 'think' as the matrix verb, as shown below:

(i) a. ??John-ga [Mary-ga ringo-sika tabe-ru to] omow-ana-katta (koto)
 -NOM -NOM apples-SIKA eat-NPST C think-NEG-PAST (C)
 'John did not think that Mary would eat anything but apples.'

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- (22) a. ?*John-ga [Mary-ga ringo-sika tabe-ru to] iw-ana-katta (koto)
 -NOM -NOM apple-SIKA eat-NPST C say-Neg-PAST (C)
 'John did not say that Mary would eat anything but apples'
- b. ?*John-ga [Mary-ga naNI-MO tabe-ru to] iw-ana-katta (koto)
 -NOM -NOM anything eat-NPST C say-Neg-PAST
 'John did not say that Mary would eat anything'
- c. John-ga Bill-ni-sika/daRE-NI-MO [Mary-ga ringo-o tabe-ru to]
 -NI-SIKA/to anyone
 iw-ana-katta (koto)
 'John did not say to anyone but Bill/anyone that Mary
 would eat apples'

As indicated in (22a-b), NPIs in the embedded object positions cannot be licensed by the matrix negative element.

3.2. The "clausemate" condition

In order to prohibit "long-distance" NPI-licensing, the "clausemate" condition like (23) has been stipulated:

- (23) NPIs and Neg must be clausemates.
 (Cf. McGloin (1976), Muraki (1978))

We will claim, however, that a condition like (23) can be obviated.

Let us first consider the case of SIKa-NPI in (22a). In order for *ringo-sika* to be properly licensed, it must move from the embedded object position to Spec of Neg in the matrix clause. Notice that this movement must be mediated by Spec of CP; otherwise, the resultant chain-link would violate the minimal chain-link condition proposed by Chomsky and Lasnik (1991). Let us assume that every position within a maximal projection of a [+L-related] category is identified as [+L-related] (cf. Chomsky 1992, Mahajan 1990). Since V raises through Neg to T, Spec of NegP is [+L-related].⁸ Spec of CP, however, remains [-L-related] at LF. Hence, if *only apples* moves from the embedded object position to Spec of the embedded CP, and then to Spec of the matrix NegP, the resultant chain is not uniform with respect to L-relatedness, as depicted in (24):

- (24) [TP [NegP only apples; [VP [CP t_i [TP [VP [V' t_i V]]]]]]]
 [+L] [-L] [+L]

-
- b. ??John-ga [Mary-ga naNI-MO tabe-ru to] omow-ana-katta (koto)
 anything

'John did not think that Mary would eat anything.'

It is still true, however, that there is a contrast in acceptability between sentences like (ia-b) and sentences like (22c). It is this contrast that we will aim to account for in this section.

⁸The choice between S-structure and LF for the level of V-raising is irrelevant here.

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The chain (*only apples*, t' , t) in (24) violates the chain uniformity condition in (25), proposed by Chomsky and Lasnik (1991) and Fukui (1992):⁹

(25) Chains must be uniform with respect to L-relatedness.

Turning now to MO-NPI, the ill-formedness of (22b) can be accounted for in a similar fashion. In order for *naNI-MO* 'anything' to be properly licensed, it must adjoin to the empty operator in Spec of the matrix NegP. If this movement were not mediated by Spec of the embedded CP, it would violate the minimal chain-link condition. Hence, *anything* must first move to Spec of the embedded CP, and then adjoin to the empty operator in Spec of the matrix NegP. The resultant chain, however, violates the chain uniformity condition, as depicted below:

(26) [TP [NegP [anything_i [OP]] [VP [CP t'_i [TP [VP [V' t_i V]]]]]]]
 [+L] [-L] [+L]

The chain (*anything*, t' , t) in (26) is not uniform with respect to L-relatedness. Hence, the "clausemate" condition on NPI licensing can be subsumed under the theory of movement incorporating the chain uniformity condition in (25).¹⁰

3.3. Apparent counterevidence

There seems to be an apparent exception to the "clausemate" condition on NPI-licensing. Although several factors like the choice of predicates intervene, NPIs in the complement object position may hardly be licensed by the matrix Neg, as indicated in (27a).¹¹ If NPIs appear at the beginning of the complement clause, however, they can be licensed, as shown by the grammaticality of (27b):

- (27) a. ??John-wa [Mary-ga ringo-sika/naNI-MO tabe-ru to]
 -TOP -NOM apple-SIKA/anything eat-NONPAST C
 omow-ana-katta (koto)
 think-Neg-PAST (C)
 'John did not think that Mary would eat anything but apples/anything.'
- b. John-wa [Mary-sika/daRE-MO ringo-o tabe-ru to]
 -SIKA/anyone -ACC
 omow-ana-katta (koto)
 'John did not think that anyone but Mary/anyone would eat apples'

⁹Since we would not want to permit deletion of the intermediate trace in Spec of the embedded CP to satisfy (25), which is allowed in Chomsky and Lasnik (1991), but not by Fukui (1992), the latter should be preferred over the former in the present discussion.

¹⁰Note that our analysis also obviates the binding requirement, proposed, for instance, by Progovac (1988; forthcoming), that NPIs are subject to Condition A of the binding theory.

¹¹As noted in footnote 7, (27a) is more acceptable than (22a-b) for many speakers. This is presumably because the matrix predicate in (27a) is more "transparent" with respect to negation than that in (22a-b); i.e. *omow* 'think' is more readily identified as a Neg-Raising predicate than *iw* 'say' is.

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The contrast between (27a) and (27b) might suggest the lack of the "clausemate" condition effect with respect to NPIs in the complement subject.

However, there is an alternative account for the contrast between (27a) and (27b). Ishii (1990) and Hoji (1991) independently argue that verbs like *omow* 'think' can be associated with a "major object", as indicated by the underlined parts in (28a) and (28b):

- (28) a. John-wa Maryi-o [kanozyoi-ga/pro; baka da to] omot-ta
 -TOP -ACC she-NOM fool be C think-P
 'John thought of Mary that she was a fool'
- b. John-wa Maryi-o [Bill-ga ?kanozyoi-o/pro; gokaisiteiru to] omot-ta
 misunderstand
 'John thought of Mary that Bill misunderstood her'

If this analysis is correct, the NPI in (27b) is in the "major object" position, hence, a "clausemate" with Neg.

If the "major object" position is occupied by some other element, we would expect that the NPI in the complement subject position may not be licensed. Indeed, this prediction is borne out, as exhibited in (29):

- (29) ?*John-wa Maryi-o [Bill-sika/daRE-MO kanozyoi-o/pro;
 -TOP -ACC -SIKA/anyone
 gokaisiteiru to] omow-ana-katta
 misunderstand C think-Neg-PAST
 'John did not think of Mary that anyone but Bill/anyone misunderstood her.'

Hence, as long as the "major object" analysis is available in cases like (27b), our analysis is not jeopardized.

4. Crosslinguistic variations with NPI-licensing

In this section, we will be concerned with crosslinguistic variations with respect to NPI-licensing. We will especially look at differences between Japanese and English, and show that our analysis can straightforwardly account for them. Our concern here is not to give a full account of NPIs in English, but to show how our analysis of NPIs in Japanese can be extended to deal with NPIs in the other languages. Hence, we will ignore cases where NPIs are licensed under other environments than negation, like conditional and interrogative.

4.1. Differences between Japanese NPIs and English NPIs

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First, while there is no subject/object asymmetry in occurrence of NPIs in Japanese, as shown in (1) and (2), NPIs may appear in object position but not in subject position in English, as indicated below:¹²

- (30) a. John did not eat anything.
b. *Anyone did not eat apples.

Second, while "long-distance" licensing of NPIs is prohibited in Japanese, as indicated by the deviance of (22)(a-b), it is permissible in English, as shown below:

- (31) a. Mary did not say that she had seen anyone.
b. Mary did not say that Peter claimed that she had seen anyone.
(Progovac, to appear: 55)

4.2. Argumenthood of NPIs and L-relatedness

Let us look at how our analysis of NPIs in Japanese can be extended to account for the differences between Japanese and English with NPI-licensing mentioned above.

We assume essentially the same clausal structure for English as the one for Japanese except that only the former contains projections of AGR, which is irrelevant to the discussion below:

- (32) [CP [TP [NegP [AGRP [VP SUBJ [V OBJ]]]]]]

The subject phrase moves to Spec of TP at S-structure, and the object phrase to Spec of AGRP at LF for their Case-feature checking (Chomsky 1992). Following Chomsky (1991), Laka (1990), and Pollock (1989), we assume that negation in English is a head, and base-generated under Neg. We furthermore assume that in negative sentences, a verb does not move through Neg to T, but only moves up to AGR. Instead, the expletive verb *do* is inserted to T or modals like *will*, *can* and *may*, which are base-generated in Modal, move to T if there is any. Hence, LF-representation of a negative sentence in English is like the following:

- (33) [CP [TP SUBJ_i [T' do/AUX [NegP [Neg' not [AGRP OBJ_j [AGR' V_v [VP t_i [t_v]]]]]]]]]]

What is noteworthy is that Spec of NegP remains [-L-related] in English, since no lexical category moves into Neg throughout a derivation, which is in contrast to the fact that Spec of NegP is [+L-related] in Japanese because of V-raising through Neg to T.

¹²Since our analysis assumes that NPIs in Japanese are adverbial, it would be more precise to say that NPIs in Japanese are allowed to appear as sisters to either subjects or objects.

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NPIs in English, unlike those in Japanese, cannot cooccur with referential NPs, as indicated below:

- (34) a. *John did not eat apples anything.
 b. *John did not eat anything apples.

Hence, we claim that while NPIs in Japanese are adverbial, those in English are arguments. We also claim that NPIs in English should be dealt with on a par with MO-NPIs in Japanese, since multiple occurrence of NPIs is permissible in English, as shown in (35):

- (35) John did not give anything to anyone.

NPIs in English are thus subject to licensing condition (36):

- (36) At LF, NPIs in English must be identified with a phonetically null operator which is base-generated in Spec of NegP.

With these assumptions in mind, let us look at how our analysis can predict the subject/object asymmetry with NPI-licensing in English. Under our analysis, (30)(a-b) are assigned LF-representations (37)(a-b), respectively:

- (37) a. [TP John_i [T did [NegP [anything_j [OP]] [Neg' not [AGR_P t'_j [AGR' eat_v [VP t_i [t_v t_j]]]]]]]]]
 b. [TP t'_i [T did [NegP [anyone_j [OP]] [Neg' not [AGR_P apples_j [AGR' eat_v [VP t_i [t_v t_j]]]]]]]]]

Since NPIs in English are arguments, object NPIs like *anything* in (37a) move to Spec of AGRP for their Case-checking at LF. Subject NPIs like *anyone* in (37b) move to Spec of TP for their Case-feature checking at S-structure. In (37a), the NPI *anything* moves from Spec of AGRP to the OP-adjoined position in Spec of NegP at LF to satisfy licensing condition (36), and the resultant LF-representation is well-formed. In (37b), on the other hand, the NPI *anyone* lowers to the OP-adjoined position in Spec of NegP at LF to satisfy (36). Such a lowering operation, however, is prohibited by the proper binding condition (Lasnik and Saito 1992, May 1985). Hence, the resultant LF-representation is deviant. In Japanese, on the contrary, since we are assuming that NPIs in Japanese are adverbials, they are exempted from Case-feature checking. Especially, the NPIs associated with subjects, like *John-sika* in (11) and *daRE-MO* in (14), do not move to Spec of TP. Hence, unlike in (37b), there is no proper binding condition violation in (12b) and (15b).

Turning now to "long-distance" NPI-licensing in English, let us consider (31a) as an example. In order for *anyone* to be licensed, it must move from the embedded object position to Spec of NegP in the matrix clause. This movement must be mediated by Spec of CP, otherwise it would violate the minimal chain-link condition. Hence, its LF-representation is as follows:

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- (38) [TP [NegP [anyone_i [OP]] [AGRP [VP [CP t_i [TP [AGRP [VP [V' V t_i]]]]]]]]]]]]]
 [-L] [-L] [+L]

On the assumption that the tail of a chain falls outside the scope of the uniformity status of the chain as advocated in Fukui (1992), the chain (*anyone*, *t'*, *t*) is uniform with respect to L-relatedness. This is because *anyone* and the intermediate trace *t'* are both in [-L-related] positions. Hence, LF-representation (38) is well-formed.

Our account of the difference between Japanese and English with "long-distance" NPI-licensing crucially relies on the claim that while Spec of NegP is [+L-related] in Japanese, it is [-L-related] in English. If our analysis is correct, we should expect that "long-distance" NPI-licensing is prohibited in French. This is because in French, a main verb moves through Neg to T as suggested in Chomsky (1991) and Pollock (1989), and thus Spec of NegP is [+L-related]. This prediction is borne out:

- (39) ?Je n'ai exige qu'ils arretent personne.
 I NEG-have required that-they arrest anyone
 'I have required that they arrest no one' (Kayne, 1983: 24)

Let us assume that *personne* can be dealt with in a parallel fashion with *anyone* in that *personne* is an argument, and licensed by moving into Spec of NegP at LF. If movement of *personne* were not mediated by Spec of the embedded CP, it would violate the minimal chain-link condition. Movement through Spec of the embedded CP to Spec of the matrix NegP, however, violates the chain uniformity condition in French, since while Spec of CP is [-L-related], Spec of NegP is [+L-related].

It is worth pointing out that (39) results in a milder violation than cases of "long-distance" NPI-licensing in Japanese like (22)(a) and (b). We can account for this contrast as follows. In both French and Japanese, movement of an NPI out of an embedded clause may not be mediated by Spec of CP due to the chain uniformity condition. Hence, an NPI must move from within the embedded clause to Spec of the matrix CP in one swoop. Since NPIs in Japanese are adverbials, such non-local movement of NPIs results in a severe ECP-type violation. In French, on the other hand, non-local movement of NPIs only results in a mild subjacency-type violation, since NPIs in French are arguments. Note also that in French, movement of an NPI from the embedded subject position to Spec of NegP in the matrix clause results in a severe ECP-type violation, as pointed out by Kayne (1983):

- (40) *Je n'ai exige que personne soit arrete.
 'I have required that no one is arrested' (Kayne, 1983: 24)

The more degraded status of (40) can be accounted for as follows. Due to the chain uniformity condition, movement of *personne* into Spec of the matrix NegP may not be mediated by Spec of the embedded CP. Hence, it must move from the embedded subject position into Spec of the matrix NegP in one swoop. Such a

movement, however, violates the minimal chain-link condition. It results in a severe ECP-type violation, since it is assumed that in French, the subject position, unlike the object position, is not lexically governed.

5. Conclusion

Japanese has two types of NPIs, SIKA-NPI and MO-NPI, and they are subject to different licensing conditions. While SIKA-NPI is licensed by Spec-head agreement with Neg at LF, MO-NPI is identified with a null operator in Spec of NegP by adjoining to it. Facts about multiple occurrence of NPIs, WCO effects, and locality of NPI-licensing have evidenced our analysis. We have also shown that our analysis can be extended to account for the differences with locality of NPI-licensing among Japanese, English, and French.

Acknowledgments

We have greatly benefited from discussions with Joseph Aoun, Lisa Cheng, Naoki Fukui, Hajime Ikawa, Audrey Li and Jean-Roger Vergnaud. Our special thanks are due to Hajime Hoji and Anoop Mahajan for carefully reading earlier versions of this paper and providing critical comments. We would also like to thank the participants at NELS 24, November 19-21, 1993, University of Massachusetts, Amherst, for criticisms. Remaining errors and omissions are, of course, the sole responsibility of the authors.

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