

Negative Polarity Quantifiers in Japanese: Universal or Existential?\*

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0. Introduction: The Any-Thesis

A debate has been going on for quite a long time over the somewhat controversial English determiner *any*, or more specifically, over the proposition that it should be treated as an instance of an existential quantifier. The issue that the participating linguists have addressed centers around which of the truth-conditionally equivalent representations, (2a) and (2b), is appropriate for the logical meaning of sentence (1):

- (1) John didn't see any man yesterday.
- (2) a. NOT ( $[\exists x:x=a \text{ man}]$  (John saw x yesterday))  
b.  $[\forall x:x=a \text{ man}]$  (NOT (John saw x yesterday))

The existence of the so-called 'free-choice' *any*, as exemplified in (3), has sometimes favored the negative side's claim that *any* should be regarded as an instance of a universal quantifier:<sup>1</sup>

- (3) a. John can do anything.  
b.  $[\forall x:x=a \text{ thing}]$  (John can do x)

Despite this, however, some linguists on the affirmative side have made convincing arguments for treating *any* in certain polarity contexts as an existential quantifier (Carlson (1979), Linebarger (1980, 1981), Taglicht (1984)). Moreover, meeting the challenge posed by (3), Homma (1990) has made an analysis which ascribes the universal flavor of *any* in such sentences as (3) to the universal quantifier external to the *any*-phrase itself, maintaining the existential analysis of *any* and deriving some empirical consequences.<sup>2</sup>

Thus, the state of affairs at this stage, I believe, seems to

favor the affirmative side of the debate on *any*. In this paper, I focus on the approximate Japanese counterparts of *any-N'*, namely such negative polarity quantifiers (NPQs) as *daremo* ("anyone"), *nanimo* ("anything"), and *dono-N'* ("any-N'"), and claim that they, as well as English *any*, should be analyzed as instances of existential quantifiers, given the 'universal vs existential' bifurcation.

### 1. Problems

NPQs such as *daremo* and *nanimo* are known to occur only in negative sentences. If they occur in an affirmative sentence, the sentence will be ungrammatical:

- (4) a. Taroo-wa *daremo* seme -na -katta  
           TOP anyone blame NOT PAST  
           "Taro did not blame anyone."  
       b. \*Taroo-wa *daremo* seme -ta  
           TOP anyone blame PAST  
           "\*Taro blamed anyone."
- (5) a. Hanako-wa *nanimo* kaw-ana-katta  
           TOP anything buy NOT PAST  
           "Hanako did not buy anything."  
       b. \*Hanako-wa *nanimo* katta  
           TOP anything buy PAST  
           "\*Hanako bought anything."

Sentence (4a), for example, could be represented in either of the two ways given in (6), as with the English counterpart (1):

- (6) a. NOT ( $[\exists x: x = \text{a person}]$  (John blamed x))  
       b.  $[\forall x: x = \text{a person}]$  (NOT (John blamed x))

The NPQ *daremo* is treated as an existential quantifier in (6a) and as a universal quantifier in (6b).<sup>3</sup> The truth-conditional equivalence of (6a) and (6b) challenges us to decide which of the two suits the

meaning of (4a).

The following two facts might lead us to take sides with the 'universal' analysis of *daremo* and *nanimō*; namely, (6b) might be the appropriate representation of (4a). The first fact has to do with the morphological similarity of the universal quantifiers and the NPs. Take *daremo* and *doremo* and their apparent counterparts *daremo*-Case and *doremo*-Case for example:

- (7) a. Taroo-ga *daremo* -o seme -ta  
 NOM everyone-ACC blame PAST  
 "Taro blamed everyone."  
 b. Taroo-ga *doremo* -o migai -ta  
 NOM everything-ACC polish PAST  
 "Taro polished everything (all of them)."

As the English translations indicate, these QPs are understood as having the quantificational force of a universal quantifier. The QPs consist of an indeterminate expression (*dare* or *dore*) and the particle *mo*. Likewise, the NPs we considered above have the same morphological combination (*dare*, *dore*, *nani* + *mo*), except that they do not bear Case particles.

The second fact has to do with the relative scope of the negative and the subject QP. Homma (1989) observes that in a declarative simplex sentence, the subject QP has to take wide scope over the negative *nai*:

- (8) *daremo* -ga Taroo-o seme -na -katta (koto)  
 everyone-NOM ACC blame-NOT-PAST  
 "Everyone did not blame Taro."

- (9) a. [ $\forall x$ :x=a person] (NOT (Taro blamed x))  
 b. \*NOT ([ $\forall x$ :x=a person] (Taro blamed x))

While (8) has the 'total negation reading' (9a), it does not allow the 'partial negation reading' (9b).<sup>4</sup> If we replace the universal QP

with the NPQ *daremo* in (8), the resulting sentence will be a near paraphrase of (8):

- (10) *daremo* Taroo-o seme -na -katta  
 anyone ACC blame-NOT-PAST  
 " \*Anyone did not blame Taro. "

The NPQ plays the role of the subject in (10). If we are to take the existential analysis, the meaning of (10) will be represented as the following:

- (11) NOT ( $\exists x$ :x=a person) (x blamed Taro))

But then we will have to stipulate that the subject NPQ takes scope narrower than the negative, despite the generalization drawn from (8) that the scope of the subject QP cannot be narrower than the negative. An account of (10) in terms of the 'universal' analysis, on the other hand, does not face this problem, since, as in the following logical form, the scope order of the subject NPQ and the negative keeps to the relevant generalization:

- (12) [ $\forall x$ :x=a person] (NOT (x blamed Taro))

The facts of morphological similarity and of relative scope that we observed above might favor the 'universal quantifier' analysis of the NPQs. However, we argue below that an adequate account must treat them as existential quantifiers, rather than as universal quantifiers. We will then turn to a discussion of the apparent difficulties that we described above.

## 2. Evidence for the 'Existential' Analysis

### 2.1. NPQs in Complements of 'Bridge Expressions'

It is generally observed that NPQs may occur in simplex negative sentences, but not in a tensed complement clause when the negative lies in the matrix (Muraki (1978), Kato (1985), Homma (1988)):

- (13) a. \*Taroo-wa [ *daremo* paatii-ni kita to ] shinji -na  
 Taro TOP anyone party to come PAST COMP believe NOT  
 katta  
 PAST  
 "Taro did not believe that anyone had come to the  
 party."
- b. \*Hanako-wa [ *kodomo-ga nanimo* tabeta to ] iwa-na  
 TOP child NOM anything eat Past COMP say NOT  
 katta  
 PAST  
 "Hanako did not say that her child had eaten anything."

However, NPs do occur in complement clauses of what Kato (1985) calls 'bridge expressions'. The following examples involve *S to omow* ('think of doing something') and *S yoo-ni iw* ('tell someone to do something'), which are among the variety of such expressions:

- (14) a. Taroo-wa [pro paatii-ni *daremo* sasook to (wa)]  
 TOP party to anyone invite COMP (CONT)  
 omottei-nai  
 think NOT  
 "Taro is not thinking of inviting anyone to the party."
- b. sono-hahaoya-wa kodomo-ni [pro *nanimo* taberu yoo-ni]  
 the mother TOP child DAT anything eat  
 iw -ana-katta  
 say NOT PAST  
 "The mother did not tell her child to eat anything."

What is interesting here is that when a universal QP is contained in these complement clauses, it must take narrower scope than the matrix negative. Consider:

- (15) a. Taroo-wa [ pro paatii-ni { daremo -o  
   { senseitachi-o zen'in }  
                   TOP          party to { everyone-ACC  
   { teacher -ACC all-CL }  
 sasooow to (wa)] omottei-nai  
 invite COMP (CONT) think NOT  
 "Taro is not thinking of inviting everyone to  
   all the teachers  
   the party."  
 b. sono-hahaoya-wa kodomo-ni [pro { subeteno ryoori-o  
   { sorerano ryoori-o subete }  
                   the mother TOP child DAT { all of dish ACC  
   { these dishes ACC all }  
 taberu yoo-ni] iw -ana-nakatta  
 eat say NOT PAST  
 "The mother did not tell her child to eat every dish."

(15a), for instance, can be interpreted in either of the two ways given in (16a,b), but not as (16c), where the QP takes wide scope over the negative.<sup>5</sup>

- (16) a. NOT (Taro thinks of ([ $\forall x: x = \text{a person}$ ] (pro inviting x)))  
       b. NOT ([ $\forall x: x = \text{a person}$ ] (Taro thinks of (pro inviting x)))  
       c. \* [ $\forall x: x = \text{a person}$ ] (NOT (Taro thinks of (pro inviting x)))

Thus the relevant generalization that may hold is:

- (17) In [ s .. [s ...QP... ] ..nai... ],  
       the QP cannot take wide scope over nai.

Note that this constraint should not be ascribed to any inherent property of the QP itself. In a simplex sentence, the object QP c-commanded by *nai* can take wide scope over the negative. Consider:

- (18) Taroo-wa *daremo* -o sasow -*ana*-katta  
 TOP everyone ACC invite NOT PAST  
 "Taro did not invite everyone."

The sentence is ambiguous between the  $\forall > \text{NOT}$  and the  $\text{NOT} > \forall$  reading.<sup>6</sup>

With the constraint (17) in mind, let us go back to (14a,b), which involve NPQs. If the NPQ *daremo* in (14a), for example, were a universal QP, the sentence would have to be represented as follows:

- (19) [ $\forall x: x = \text{a person}$ ] (NOT (Taro thinks of (pro inviting x)))

Here the NPQ takes wide scope over the negative. However, we have seen that a constraint holds which has it that the scope of a QP in an embedded clause cannot be broader than that of the matrix negative. If we were to maintain the 'universal' analysis of NPQs, we would have to posit an unwanted stipulation that NPQs are somehow exempted from the constraint (17). The 'existential' analysis, on the other hand, will be able to avoid this undesirable state of affairs, since it can represent the meaning of (14a) in either (20a) or (20b) without violating the relevant constraint.<sup>7</sup>

- (20) a. NOT (Taro thinks of ( $[\exists x: x = \text{a person}]$  (pro inviting x)))  
 b. NOT ( $[\exists x: x = \text{a person}]$  (Taro thinks of (pro inviting x)))

Thus the above discussion strongly suggests that the 'existential' analysis of NPQs is much more adequate than the 'universal' one.

## 2.2. Opacity

In the previous section, we suggested two potential semantic representations for (14a) without discussing whether both of them are appropriate, or if not, which of the two is appropriate. Consider (14a) again, repeated here as (21) with a slight modification and the two potential readings given in (22):

- (21) Taroo-wa [ pro paatii-ni *gakusei-o daremo* sasoo to  
 TOP party to student-ACC anyone invite COMP  
 (wa)] omottei-nai  
 (CONT) think NOT  
 "Taro is not thinking of inviting any students to the party."

- (22) a. NOT (Taro thinks of ( $[\exists x:x=a \text{ student}]$  (pro inviting x)))  
 b. NOT ( $[\exists x:x=a \text{ student}]$  (Taro thinks of (pro inviting x)))

The reading in (22a), where *gakusei-o daremo* takes narrow scope with respect to the matrix predicate *omow* ('think'), is the one traditionally called the 'opaque' reading, while the one in (22b) is the 'transparent' reading.<sup>8</sup> It is not very clear whether (21) has the transparent reading. What we are concerned here is the presence of the opaque reading. To attest this, let us consider the following situation. Suppose Taro is going to invite Jiro to the party, but does not know that he is a student. In this situation, sentence (21) will be false on the transparent reading (if it is ever possible) since there actually exists a student that Taro is going to invite. However, (21) can be true on the opaque interpretation (22a). It does not rule out the possibility of there actually being a student that Taro is going to invite, while it describes the nonexistence of any student invitees in Taro's mental world.

The availability of the opaque reading of (21) constitutes rather strong empirical support for the 'existential' analysis of NPOs. It can give an adequate account of the opaque interpretation. Under the universal analysis, however, (23) would be the only available representation, so that only the transparent reading would be predicted:

- (23)  $[\forall x:x=a \text{ student}]$  (NOT (Taro thinks of (pro inviting x)))

If the 'universal' analysis were to express the opaque reading, the representation would have to be something like:



(24) NOT (Taro thinks of ( $[\forall x:x=a \text{ student}]$  (pro inviting x)))

However, this reading corresponds to that of a sentence involving a universal QP:

(25) Taroo-wa [ pro paatii-ni *subete-no gakusei-o* sasoo-wa-to  
 TOP party to all of student-ACC invite COMP  
 (wa)] omottei-nai  
 (CONT) think NOT  
 "Taro is not thinking of inviting every student to the party."

Sentence (21) clearly does not have the reading (24). Thus the 'universal' analysis will lose the game since it cannot achieve the empirical adequacy that the existential analysis does.<sup>9</sup>

### 2.3. Scope Interaction with QP

Finally, a consideration of scope interaction between a NPQ and a QP provides another piece of evidence for the 'existential' analysis of NPQs. Consider first the following example:

(26) Taroo-ga *daremo -o seme -na -katta* (koto)  
 NOM everyone-ACC blame NOT PAST  
 "Taro did not blame everyone."

The sentence is ambiguous between the  $\forall > \text{NOT}$  and  $\text{NOT} > \forall$  reading. When the subject is a NPQ, the interpretive possibility is restricted:

(27) *daremo daremo -o seme -na -katta*  
 anyone everyone-ACC blame NOT PAST  
 "No one blamed everyone."

It can only be interpreted with the negative taking wide scope over

the universal QP *daremo-o*. Under the 'existential' analysis, this restricted interpretive possibility can be explained as follows. Out of the six possible combinations of the logical operators that (27) involves, the following three will be relevant to our consideration, since the other three, where  $\exists x$  takes wide scope over NOT, are automatically excluded under the analysis.

- (28) a.  $*[\forall y:y=a \text{ person}] (\text{NOT } ([\exists x:x=a \text{ person}] (x \text{ blamed } y)))$   
 b.  $*\text{NOT } ([\forall y:y=a \text{ person}] ([\exists x:x=a \text{ person}] (x \text{ blamed } y)))$   
 c.  $\text{NOT } ([\exists x:x=a \text{ person}] ([\forall y:y=a \text{ person}] (x \text{ blamed } y)))$

(28a) and (28b) are ruled out since they violate the constraint on the relative scope that holds between subject QP and object QP, which has it that subject QP must take wide scope over object QP (Hoji (1985)), as we see in the following examples:

- (29) a. *dareka -ga daremo -o seme -ta*  
 someone-NOM everyone ACC blame PAST  
 (SOME>EVERY, \*EVERY>SOME)  
 "Someone blamed everyone."  
 b. *gakusei -ga zen'in Taroo-dake-o hihan -shita*  
 student NOM all only ACC criticize PAST  
 (ALL>ONLY, \*ONLY>ALL)  
 "The students all criticized only Taro."

The impossible readings (28a) and (28b) violate this constraint since the object QP represented as  $[\forall y:y=a \text{ person}]$  takes scope broader than the subject NPQ represented as  $[\exists x:x=a \text{ person}]$ . The restricted interpretive possibility of (27) can thus be accounted for under the 'existential' analysis coupled with the scope constraint.<sup>10</sup>

The 'universal' analysis, however, cannot properly account for this. Under this analysis, the following three are relevant to the discussion. The other three possible combinations, where the scope of the NPQ is narrower than the negative, are automatically ruled out:

- (30) a. \* $[\forall y:y=a \text{ person}] ([\forall x:x=a \text{ person}] (\text{NOT } (x \text{ blamed } y)))$   
 b. \* $[\forall x:x=a \text{ person}] ([\forall y:y=a \text{ person}] (\text{NOT } (x \text{ blamed } y)))$   
 c.  $[\forall x:x=a \text{ person}] (\text{NOT } ([\forall y:y=a \text{ person}] (x \text{ blamed } y)))$

(30c) corresponds to the possible reading (28c). (30a) violates the relevant scope constraint since the object QP takes scope over the subject QP. A difficulty arises with respect to the representation (30b), which corresponds to the impossible reading (28a). The 'universal' analysis does not have any appropriate grammatical device that it can appeal to in order to rule out (30b). The scope constraint is not relevant here, since  $\forall x$  and  $\forall y$  observe the canonical scope order Subject QP > Object QP.

Thus the 'existential' analysis again wins the game.

### 3. On the Morphological Similarity

In Section 1, we saw the morphological similarity between universal QPs and NPQs, which might be regarded as a piece of evidence for the universal analysis of the NPQs that we are considering. For example, a QP *daremo*-Case and a NPQ *daremo* are identical in their morphological forms except for the presence of a Case particle on the former:

- (31) a. Taroo-wa *daremo* -o seme -ta  
           TOP everyone-ACC blame PAST  
           "Taro blamed everyone."  
 b. Taroo-wa *daremo* seme -na -katta  
           TOP anyone blame NOT PAST  
           "Taro did not blame anyone."

We have, however, rejected the 'universal' analysis of NPQs and argued for the alternative, 'existential' analysis. Thus we need to say something on the morphological similarity.

Despite the similarity, it does not seem unreasonable to suggest that the universal QP and the NPQ are distinct items in light of their

accent patterns. Kato (1985) observes that the relevant QPs and the NPQs assume distinct accent patterns. For instance, the first mora of the QP in (31a) bears a high pitch while the NPQ in (31b) a low pitch:

- (32) a. daremo-o                      b. daremo  
           H L L L                              L H H

Another pair of a QP *doremo-o* and a NPQ *doremo* patterns the same way that the pair in (32) does:

- (33) a. Taroo-ga *doremo*    -o    shinji -ta  
           H L L                      L  
           NOM everything-ACC believe PAST  
           "Taro believed all of them."  
       b. Taroo-ga *doremo*    shinji -na-katta  
           L H H  
           NOM anything believe NOT PAST  
           "Taro did not believe any of them."

We may go one step further and try to distinguish the 'universal' use and the 'negative polarity' use of *dono-N'* (indeterminate expression + N'). As is generally observed, *dono-N'* can be used either in an affirmative sentence or in a negative sentence:

- (34) a. Taroo-ga *dono-gakusei-mo* seme -ta  
           NOM IND student        blame PAST  
           "Taro blamed every student."  
       b. Taroo-ga *dono-gakusei-mo* seme -na -katta  
           NOM IND student        blame NOT PAST  
           "Taro did not blame any of the students."

The two uses of *dono-N'* show different accent patterns. The universal use in (34a) and the negative polarity use in (34b) yields the following patterns (35a) and (35b), respectively:<sup>11</sup>

- (35) a. *dono-gakusei-mo*      b. *dono-gakusei-mo*  
           H L L L L L                    L H H H H H

Indeed, if we read *dono-gakusei-mo* with the pattern (35b) in an affirmative environment, the sentence sounds somewhat awkward:

- (36) ??*Taroo-ga dono-gakusei-mo seme-ta*  
           L H H H H H

In line with the previous argument for the existential analysis of NPQs, we claim that the *dono-N'* with the LHH pattern is an existential quantifier. Indeed this claim is justified since it may occur in such an environment as (37):

- (37) *Taroo-wa* [pro *paatii-ni dono-gakusei-mo sasoo* to  
   L H H H H  
           TOP      party to IND student      invite COMP  
           (wa)] *omottei-nai*  
           (CONT) think NOT  
           "*Taro is not thinking of inviting any of the students*  
           *to the party.*"

If we read *dono-gakusei-mo* with the HLL pattern, the NOT>∀ reading obtains:<sup>12</sup>

- (38) *Taroo-wa* [pro *paatii-ni dono-gakusei-mo sasoo* to  
   H L L L L  
           (wa)] *omottei-nai*

#### 4. Syntax of NPQs

The other obstacle that we have encountered in arguing for the 'existential' analysis of NPQs is that although the subject QP cannot take narrow scope with respect to the negative in a simple declarative sentence, a subject NPQ can occur.

- (39) a. *daremo -ga* Taroo-o seme -*na* -katta  
 everyone-NOM ACC blame-NOT-PAST  
 "Everyone did not blame Taro."  
 ( $\forall > \text{NOT}$ ,  $*\text{NOT} > \forall$ )
- b. *daremo* Taroo-o seme -*na* -katta  
 anyone ACC blame-NOT-PAST  
 "\*Anyone did not blame Taro."

We can solve this problem by assuming that NPQs are in fact classified as 'floated quantifiers', on a par with such quantifiers as *san-nin* ('three-CL') and *zen'in* ('all').<sup>13</sup> Indeed the NPQs lack the Case-markers that their 'universal counterparts' have, and may cooccur with a Case-marked full NP, which serve semantically as their restrictive term. (Actually, this is what we have already seen in the example (21).)

- (40) *gakusei-ga daremo* Taroo-o seme -*na* -katta (koto)  
 student NOM anyone ACC blame-NOT-PAST  
 "No student blamed Taro."

Sentence (39b), which lacks a full NP, may then be taken as involving an empty NP *pro* in the subject position (cf. Hoji (forthcoming)).

- (41) *pro daremo* Taroo-o seme-*na*-katta

This analysis will enable us to solve the problem that we have been facing. We have seen that sentence (39a) cannot have the partial negation reading. However, if we put a similar sentence (42a) into the floated quantifier construction (42b), we can obtain the reading. Consider:

- (42) a.  $\left\{ \begin{array}{l} \textit{zembu-no} \\ \textit{subete-no} \end{array} \right\}$  *gakusei -ga* Taroo-o seme - *na* -katta  
 all of student NOM ACC blame NOT PAST

"All of the students did not blame Taro."

- b. *gakusei-tachi -ga*  $\left\{ \begin{array}{l} \textit{zembu} \\ \textit{subete} \\ \textit{zen'in} \end{array} \right\}$  Taro-o seme -na-katta

student PL          NOM all                  ACC blame NOT PAST

"The students did not all blame Taro."

While (42a) has only one reading, (42b) is ambiguous between the  $\forall > \text{NOT}$  and  $\text{NOT} > \forall$  readings.

Thus we can maintain the existential analysis of NPQs since they, as floated quantifiers, can take scope narrower than the negative. (Actually they must, since sentence (41) does not have the  $\exists > \text{NOT}$  reading.)

The 'floated quantifier' analysis of NPQs can be further confirmed by the following observation. As we see in the examples below, a numeral floated quantifier generally cannot take as its host NP the object NP of such postpositions as *ni* ('to') and *kara* ('from') (Miyagawa (1989)):

- (43) a. \*Taro wa [<sub>PP</sub>gakusei-ni] sannin tegami-o dashita  
           TOP student to three letter ACC sent  
           (cf. Taro-wa sannin-no-gakusei-ni tegami-o dashita)  
           "Taro sent a letter to three students."  
       b. \*Taro-wa [<sub>PP</sub>gakusei-kara] sannin tegami-o moratta  
           TOP student from three letter ACC received  
           (cf. Taro-wa sannin-no-gakusei-kara tegami-o moratta)  
           "Taro received a letter from three students."

NPQs pattern in a fashion parallel to numerals in this regard:

- (44) a. \*Taro-wa [<sub>PP</sub>gakusei-ni] daremo tegami-o das-ana-katta  
           TOP student to anyone letter ACC sent NOT PAST  
           (cf. Taro-wa dono-gakusei-ni-mo tegami-o das-ana-katta)  
           "Taro did not send a letter to any students."

- b. \*Taroo-wa [dono-gakusei-kara] *daremo* tegami-o moraw -ana  
 TOP student from anyone letter ACC receive NOT  
 katta  
 PAST  
 (cf. Taroo-wa dono-gakusei-kara-mo tegami-o moraw-ana  
 -katta)  
 "Taro did not receive a letter from any students."

## 5. Conclusion

In this paper, we have argued that such NPQs as *daremo*, *nanimo*, *doremo*, and *dono-N'-mo* with the LHH accent must be analyzed as instances of existential quantifier, solving the problem posed by the pieces of apparent evidence that might support the universal analysis of NPQs. Thus the somewhat controversial NPQs have the same inherent scope relation to the negative as other obviously existential NPQs such as *hitotsu-mo...nai* ("not a single thing") and *hitorimo...nai* ("not a single person").

Our discussion on Japanese NPQs, coupled with the arguments for the existential analysis of English *any*, has thus confirmed the implicit belief that negative polarity items are those expressions which can only occur in the scope of negation (or some other appropriate licensing expression). The next task will be to examine whether this inherent scope relation between negative polarity items and the negative is a universal about the semantics of negative polarity in general, since it is logically possible to conceive negative polarity items that occur 'outside' the scope of negation. We will leave this matter to further investigation.

## NOTES

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<sup>1</sup> See Quine (1960), Lasnik (1972), Kroch (1974), Aoun, Hornstein, and Sportiche (1981), Hornstein (1984), Aoun and Hornstein (1986) etc.

<sup>2</sup> See Homma (1990) for details. See also Davison (1980) for another unified analysis of the 'polarity' and the 'universal' *any* in terms of conversational implicature.

<sup>3</sup> As far as I know, Ohno (1983) is the only one who takes the latter position (the universal analysis), although his work is accessible to me only through Hasegawa (1986). Hasegawa shows that certain scope facts can be accounted for more adequately under the existential analysis of NPs than under the universal analysis.

<sup>4</sup> In interrogative and conditional clauses, the negative can take wide scope over the subject QP. See Homma (1989) for an account of this.

<sup>5</sup> I will not touch upon whether sentence (15a) has the two readings indicated as (16a) and (16b). If it does, the readings may correspond to the transparent and the opaque reading that we will turn to in the following section.

According to Kato (1985), (16a) and (16b) do not exhaust the readings that (15a) has. Under his theory of 'Focus Selection', the negative in (15a) can also choose other phrases as its focus, so that the sentence will also yield the following interpretation.

- (i) to the party  $\nexists \lambda x$  (Taro is going to invite everyone  $x$ )  
 (It is not to the party that Taro is going to invite everyone.)

On this reading, what is negated is the constituent *paatii-ni* ('to the party'). Notice that this does not mean that the scope of the QP *daremo-o* ('everyone') is outside that of the negative. (i) and the following rough representation are truth-conditionally different:

- (ii) For every  $x$ :  $x$ =a person, to the party  $\exists \lambda y$  (Taro is going

to invite x y)

<sup>6</sup> The availability of the NOT>V reading may be somewhat surprising. Indeed it requires some effort to get the reading. Yet we can see that it is a possible reading when we compare (18) with the following unambiguous sentence:

- (i) *daremo -ga Taroo-o seme -na-katta*  
 everyone NOM ACC blame NOT PAST  
 "Everyone did not blame Taro."  
 (V>NOT, \*NOT>V)

<sup>7</sup> We discuss the ambiguity in 2.2.

<sup>8</sup> Linebarger (1980) discusses the transparent/opaque ambiguity of English *any* in a *belief*-context, as a piece of evidence for the 'existential' analysis of *any*. The scenario that follows in the text is essentially a recast of hers.

<sup>9</sup> The 'universal' analysis might claim that (21) involves a so-called 'NEG-Raising' predicate *omow* ('think') so that the matrix negative is somehow allowed to be 'lowered' into the embedded clause at logical form. Then the logical form of (21) would in fact be something like (i). (This point has been brought to my attention by Yukio Hirose (p.c.))

- (i) Taro thinks of ([ $\forall x$ :x=a student] (NOT (pro inviting x)))

Indeed, sentence (21) may be understood as paraphrastic to (ii):

- (ii) *Taroo-wa [pro subete-no-gakusei-o sasou -mai to]*  
 TOP all of student-ACC invite NOT-WILL COMP  
*omotteiru*  
 think-PRES

There are some difficulties for this line of analysis, however. Firstly, it is rather unclear how we can permit such a 'powerful'

devise as Neg-Lowering across an S-boundary in mapping from syntax to semantics. We may alternatively suggest that the 'Neg-Lowered' reading that typically obtains in those sentences with a 'Neg-Raising' predicate may be due to some pragmatic reason (cf. Horn (1989) etc.). Secondly, even if the alleged Neg-Lowering should be permitted at all in mapping onto semantics, a universal quantifier in an embedded clause still cannot take wide scope over the 'lowered' matrix negative, as we saw in Section 2.1. Thus something stipulative would be necessary to permit the logical form (i) as a representation of (21).

<sup>10</sup> (28b) also violates Linebarger's (1980) Immediate Scope Condition, which says that negative polarity items must take scope 'immediately narrower' than the negative.

<sup>11</sup> There seems to be a dialectal variation with respect to the accent pattern of *dono-N'*. Some Tokyo dialect speakers have reported that *dono-N'* lacks the LHH pattern, while they do admit the accentual distinction between (32a) and (32b).

<sup>12</sup> The reading seems somewhat marginal, due to the unnegatability of *dono-N'-mo* in simplex sentences. (ia) does not seem to have the NOT>V reading, in contrast to (ib).

- (i) a. Taroo-ga *dono-gakusei-mo* seme -na-katta  
       NOM IND student blame NOT PAST  
       (V>NOT, \*NOT>V) (cf. Hasegawa (1986))
- b. Taroo-ga *daremo* -o seme -na-katta  
       NOM everyone ACC blame NOT PAST  
       (ambiguous)  
       "Taro did not blame every student."

<sup>13</sup> I have already suggested the analysis in this section in Homma (1989). See Hoji (forthcoming) for the same analysis.

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