Pragmatic and Semantic Factors in the Distribution of Polarity Items

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Abstract

In this article, it is argued that the fact that polarity items may serve as negative answers to questions cannot be accounted for without considering pragmatic factors, that in accounting for the distribution of polarity items, it is necessary to distinguish between syntactic negation and pragmatic negation, and that not all conditionals can be treated the same way, since in accounting for the distribution of polarity items in the protasis of a certain type of conditional, it is necessary to allude to the desirability / undesirability of the protasis and apodosis.

1. Polarity Items

In language, there are expressions whose distribution can only be described in terms of polarity, that is, in terms of whether some other element is positive or negative. Those expressions which occur in a negative environment are called negative polarity items (NPIs), and those which occur in a positive environment are called positive polarity items (PPIs). The examples below illustrate the behavior of the representative English NPIs (1) and PPIs (2), and the representative Japanese NPIs (3) and PPIs(4). The NPIs and PPIs are italicized.

1(a) I didn't see *anything*.
(a') *I saw *anything*.[1]
(b) I didn't see *anybody*.
(b') *I saw *anybody*.
(c) I didn't go *anywhere*.
(c') *I went *anywhere*.
(d) They haven't arrived *yet*.
(d') *They've arrived *yet*.
2(a) I saw *something*.
(a') I didn't see *something*.

(b)　I saw *somebody.*

(b')　I didn't see *somebody*.

(c)　I went *somewhere*.

(c')　I didn't go *somewhere*.

(d)　They've *already* arrived.

(d')　They haven't *already* arrived.

3(a)　Watasi-wa *nanimo* minakatta. [2]

I-Top　see-not-Past

I didn't see anything.

(a')　*Watasi-wa *nanimo* mita.

I-Top　see-Past

*I saw anything.

(b)　Watasi-wa *daremo* minakatta.

I-Top　see-not-Past

I didn't see anybody.

(b')　*Watasi-wa *daremo* mita.

I-Top　see-Past

*I saw anybody.

(c)　Watasi-wa *dokomo* ikanakatta.

I-Top　go-not-Past

I didn't go anywhere.

(c')　*Watasi-wa *dokomo* itta.

I-Top　go-Past

*I went anywhere.

(d)　Kare-wa *mada* kiteinai.

he-Top　come-Perf-not

He hasn't arrived yet.

(d')　*Kare-wa mada kiteiru.[3]

he-Top　come-Perf

*He has arrived yet.

4(a)　Watasi-wa *nanika* mita.[4]

I-Top　see-Past

I saw something.

(a')　*Watasi-wa nanika minakatta.

I-Top　see-not-Past

*I saw anything.

(b) Watasi-wa dareka mita.
I-Top see-Past
I saw somebody.

(b') Watasi-wa dareka minakatta.
I-Top see-not-Past
*I saw anybody.

(c) Watasi-wa dokoka itta.
I-Top go-Past
I went somewhere.

(c') Watasi-wa dokoka ikanakatta.
I-Top go-not-Past
*I didn't go somewhere.

(d) Kare-wa moo kiteiru.
he-Top come-Perf-not
He has arrived already.

(d') *Kare-wa moo kiteinai.[5]
he-Top come-Perf
*He hasn't arrived already.

As shown in (1a'-d') for English and (3a'-d') for Japanese, the NPIs do not occur in positive environments. (1a) and (1b) are semantically the negations of (2a) and (2b) respectively. Similarly (3a) and (3b) are semantically the negations of (4a) and (4b) respectively. English (2a') and (2b') are acceptable, but not as negations of (2a) and (2b): they are acceptable as echo denials (that is, when someone utters "You saw someone, didn't you?", one can answer with "No, I didn't see someone" = "It is not the case that I saw someone")[6]. (2a') is also acceptable when *someone* is a specific indefinite, that is, it refers to a specific individual. The difference between (1a) and (2a') can be expressed as difference in scope: in (1a) the negative is in the scope of the existential quantifier ($\exists$>neg) while in (2a') the existential quantifier is in the scope of the negative (neg>$\exists$). Japanese (4a'-d') are not acceptable as echo denials, nor under the interpretation that the indefinites are specific. To express indefinite specific, postpositions are required.

5(a) Watasi-wa nanika-o minakatta.
I-Top -Acc see-not-Past
I didn't see (a specific) something.

(b)　Watasi-wa dareka-o　minakatta.
　　I-Top　-Acc see-not-Past
　　I didn't see (a specific) somebody.
(c')　Watasi-wa dokoka-e　ikanakatta.
　　I-Top　to　go-not-Past
　　I didn't go to (a specific) someplace.

If we exclude the echo denials in English and the specific interpretations in English and Japanese, then, the picture is that in both languages the NPIs occur in a negative environment, and PPIs occur in a positive environment, which predicts complementary distribution. In echo denials, the negation does not belong within the proposition: what is negated is what has been previously uttered (metalinguistic negation in the sense of Horn 1989), so we may characterize this as pragmatic negation as opposed to syntactic negation. (6) and (7) capture the general picture regarding this type of PIs.

6　An NPI must be in the immediate scope of a negative sentence-type, and a non-specific PPI must be in the immediate scope of a positive sentence-type.
7　A sentence is a negative sentence-type only if it is syntactically negative.

But in natural language we readily find exceptions to this. In section 2, we discuss Japanese NPIs appearing by themselves (that is, without negation) as answers to questions. In section 3, we discuss English and Japanese PPIs occurring in negative questions. In section 4, we discuss English and Japanese PIs occurring in the unexpected sentence type in the protasis of a certain type of conditional.

2. Japanese NPIs as negative answers to questions

In the literature on polarity, the possibility of items by themselves to serve as negative answers to questions has been regarded as a diagnostic for distinguishing between NPIs, which need to appear with a negative, and inherently negative elements. For example, Catalan *cap* 'anybody / nobody' and Spanish *ninguno* 'anybody / nobody'seems comparable to English *any* in (8), but (9) shows that these can appear by themselves as negative answers to questions, which English *any* cannot, which shows that they are inherently negative, but English *any* is an NPI. (the examples are from Vallduví 1994) This means that (8a) and (8b) each contain two negative elements, but semantically there is only one negative. In such cases, the negative elements are said to show negative concord.

8(a) Catalan: No en vaig veure *cap*.
no prtve 1s-past-see none
'I didn't see *any*.'

(b) Spanish: No vi *ninguno*.
no 1s-past-see none
'I didn't see *any*.'

9(a) Catalan: Quants en vas veure? Cap.

(b) Spanish: ¿Cuantos viste? Ninguno.

(c) English: How many did you see? *Any./None.

When we apply this diagnostic, Japanese seems to be a negative concord language as are Catalan and Spanish, since the Japanese items can by themselves serve as negative answers.

10(a) "Nanika katta?" "Nanimo. / Nanimo kawanakatta."
something buy-Past buy-not-Past
"Did (you) buy something/anything?" "No./*Nothing./*Anything."

(b) "Dareka kita?" "Daremo. / Daremo konakatta."
somebody come-Past come-not-Past
"Did somebody come?" "No./*Nobody./*Anybody."

(c) "Kinoo dokoka itta?" "Dokomo. / Dokomo ikanakatta."
yesterday somewhere go-Past go-not-Past
"Did (you) go somewhere yesterday?" "No./*Nowhere./*Anywhere."

(d) "Ohiru moo tabeta?" "Mada / Mada tabeteinai."[7]
lunch already eat-Past eat-Perf-not
"Have you already eaten lunch?" "No, not yet./*Yet."

It is crucial to note, though, that such sentence-fragment answers are possible as answers to specific kinds of questions. In Japanese, *nanimo, daremo, dokomo,* and *mada* can serve as answers to questions, but only as answers to yes-no questions containing the corresponding PPI: *nanika, dareka, dokoka*, and *moo*, respectively, as shown in (10), and cannot by themselves serve as answers to wh-questions, as in (11)[8].

11(a) "Anata-wa nani -o katta?" "??Nanimo./ok Nanimo kawanakatta."
you -Top what-Acc buy-Past buy-not-Past
"What did you buy?" "Nothing./*No./(I) didn't buy anything./?(I) bought nothing."

(b) "Kare-wa dare-o turete kita?" "??Daremo./ Daremo turete konakatta."
he -Top who -Acc bring-come-Past bring-come-not-Past
"Who did he bring?" "Nobody./*No./He didn't bring anybody./?He brought nobody."

(c) "Anata-wa kinoo doko -e itta?" "??Dokomo./ Dokomo ikanakatta."
you -Top yesterday where-to go-Past go-not-Past
"Where did you go yesterday?" "Nowhere./*No./I didn't go anywhere./?I went nowhere."

So Japanese *nanimo, daremo, dokomo*, and *mada* by themselves can serve as negative answers to yes-no questions, but English *nothing, nobody*, and *nowhere* by themselves cannot serve as negative answers to yes-no questions, as can be seen in the English gloss in (12). On the other hand, these Japanese NPIs by themselves are not wholly acceptable as answers to a wh-question, but these English items, which are inherently negative, can serve by themselves as answers to wh-questions. In the latter case, *No* is not an acceptable answer, which of course is to be expected since the question is a wh-question. Then, what sort of answer are the English negative items given in the English glosses in (11)? The wh-question presupposes that there exists an entity or entities that are members of a certain set (in the case of 11a the set of "things that the hearer bought"), and *nothing* expresses that the presupposition is false. It might thus be called negation of presupposition. This, too, is an answer which answers the question in a meaningful way. When we look back on the Catalan and Spanish examples in (9), the relevant items do not answer yes-no questions, but negate the presupposition of the question (it seems reasonable to assume that when one asks how many x there are, one presupposes that x is not an empty set). Since these Japanese NPIs by are equivalent to negative answers to yes-no questions with their corresponding PPIs, these are, in effect, purely sentential negation. On the other hand, both in the negative-concord languages Catalan and Spanish, and the non-negative-concord language Standard English[9], the items in question point out to the questioner that the presupposition of their question is wrong, clearly a more pragmatic kind of negation. In all cases, the relevant items by themselves are appropriate as answers to specific types of questions only, and thus cannot be analyzed without reference to pragmatic factors. We have two choices: syntactically generate the items in isolation in all cases, and exclude part of the cases pragmatically, or mark the items in isolation in all cases as syntactically unacceptable but leave a way in which part of these get rescued pragmatically. In the negative concord languages, the n-words appear without accompanying a negative when they are subjects, but in Japanese, *nanimo, daremo* and *dokomo* basically always accompany sentential negation, so it seems better to consider this the rule rather than the exception, and choose the latter view. We could also posit a theory where the items are generated always with the accompanying negative predicate,

but the predicate gets deleted, as is proposed in Giannakidou (2008). Such a theory must also take pragmatics into consideration, since predicate deletion in Japanese is possible in (10) but not in (11). At this point, I have no better idea than to assume that these Japanese NPIs have lexicalized into expressions that are negative answers to questions.

3. Questions

In this section, I will discuss NPIs and PPIs in questions, which are the best-known Affect(ive) environment, that is, non-negative environment in which NPIs appear (Klima 1964), and attempt to account for the unexpected cases.

We begin with PIs in Japanese. *Nanimo* is unacceptable in a positive question, as in (12a). Both *nanimo* and *nanika* are acceptable in a negative question, as in (12b) and (12c).

12(a) Kare-wa *nanika*/**nanimo* tabeta?
he-Top eat-Past
"Did he eat something?"

(b) Kare-wa *nanika* tabenakatta?
he-Top eat-not-Past
"Isn't it the case that he ate something?"

(c) Kare-wa *nanika*-o tabenakatta no?
he-Top -Acc eat-not-Past Q
"Is it the case that he didn't eat (a specific) something?"

(12a) and (12c) are accounted for by (6) and (7), since in (12c), *nanika* gets a specific interpretation. But in (12b), *nanika* is interpreted existentially but it occurs in a negative context, which it shouldn't. However, as can be seen from the English gloss, this question is not a question about a negative proposition but about a positive proposition ("he ate something"). Thus we can conclude that the negative in (12b) is a pragmatic negative – it doesn't belong within the proposition in question but in the way the question is posed –, and does not participate in the syntactic constraints on polarity. In other words, the negation in (12b) is not syntactic but pragmatic, so the existential PPI is not in the immediate scope of a negative sentence-type, and the PPI is allowed.

There is another kind of pragmatic negative in Japanese questions, which expresses an invitation to perform an act denoted by the positive proposition. So (13) has two interpretations, one in which the negative is a pragmatic negative expressing an invitation, and one in which the negative is a syntactic negative part of the negative proposition "you don't eat this".

13(a)　Anata kore taberu?
　　you this eat
　　"Will you eat this?"
(b)　Anata kore tabenai?
　　you this eat-not
　　"Won't you eat this?" OR "Is it the case that you don't eat this?"

Both *nanika* or *nanimo* are acceptable in a negative question, as in (14), but the questions have only one interpretation each. Specifically, (14a), with *nanika*, there is only the invitation reading (the negation is pragmatic), and (14b), with *nanimo*, it can only be the questioning of a negative proposition (the negation is syntactic). We see that here, too, a pragmatic negative does not influence the licensing of the PPI.

14(a)　Anata nanika tabenai?
　　you　　eat-not
　　"Won't you eat something?"
(b)　Anata nanimo tabenai-no?
　　you　　eat-not-Q
　　"Is it the case that you eat nothing?"

The same phenomenon can be observed in English as well. In English, the PPIs and NPIs can be used in positive and negative questions, as in (15-16). But (16a) can be paraphrased as "Isn't it the case that you ordered something?", that is, the negation is pragmatic, while (16b) can be paraphrased as "Is it the case that you didn't order anything?" So here, too, the PPI is allowed in (16a) because there is no syntactic negation. Where the negation is syntactic, as in (16b), only the NPI is allowed. In (17), we see that the combination of *why* and negation has come to express a suggestion of an act. (17a) has two interpretations, a suggestion to order something, or a question inquiring the reason for not placing an order, but (17b) has only the latter interpretation. In other words, when negation has lexicalized in this way, it is no longer a syntactic negative and thus cannot license *anything*.

15(a)　Did you order something?
(b)　Did you order anything?
16(a)　Didn't you order something?
(b)　Didn't you order anything?
17(a)　Why don't you order something?

(b) Why don't you order anything?

We saw in this section that in Japanese questions, positive sentences allow only PPIs, syntactically negative sentences allow only NPIs, and pragmatic negation does not count in the licensing / prohibition of PIs, and in English questions, positive sentences allow both NPIs and PPIs, syntactically negative sentences allow only NPIs, and pragmatic negation does not count in the licensing / prohibition of PIs.

4. Conditionals

The protasis of conditionals is also well-known as an Affect(ive) environment for English NPIs, but Japanese NPIs, which do not occur in positive questions, do not occur in this environment either, as seen in (19b).

18(a) If you find something, call me.
(b) If you find anything, call me.
19(a) Nanika mituketara yonde.
find-if call
If (you) find something, call.
(b) *Nanimo mituketara yonde.
find-if call
If (you) find anything, call.

Conditionals, however, come in several types. Akatsuka-McCawley(1998) points out that they are often used in contexts where the speaker tries to get the hearer to act in a certain way in exchange for a certain act of the speaker. There are two formulae: the protasis is an act by the hearer desirable to the speaker and the apodosis is an act by the speaker desirable to the hearer; or the protasis is an act by the hearer undesirable to the speaker and the apodosis is an act by the speaker undesirable to the hearer. The former is either coaxing or concession (if the issue at hand is getting the hearer to do the act in the protasis, it is coaxing, and if the issue at hand is the speaker doing the act in the apodosis at least disadvantage, it is concession) and the latter is threatening. Thus, because in our knowledge of the world we expect that children don't like to eat spinach but they like to eat dessert, (20a) and (20b) sound good. (20a) is a suggestion for an exchange of acts desirable to each other, and (20b) of acts undesirable to each other. (20c) and (20d) sound strange under the usual assumptions, but they are good in two worlds: one in which the hearer eating the spinach is undesirable to the speaker, and the hearer likes to be given dessert (in this case c is a threat and d is coaxing), and one in which the hearer eating the

spinach is desirable to the speaker and the hearer doesn't like to be given dessert (20c is coaxing and 20d is a threat). (# indicates that the sentence is acceptable with an unusual interpretation.)

20(a) If you eat that spinach, I'll give you dessert.
(b) If you don't eat that spinach, I'll eat dessert all by myself.
(c) #If you eat that spinach, I'll eat dessert all by myself.
(d) #If you don't eat that spinach, I'll give you dessert.

Consider this type of conditional with polarity items:

21(a) If you buy him something, I'll give you dessert.
(b) #If you buy him anything, I'll give you dessert.
(c) #If you don't buy him something, I'll give you dessert.
(d) If you don't buy him anything, I'll give you dessert.
22(a) If you buy him something, I'll eat dessert all by myself.
(b) If you buy him anything, I'll eat dessert all by myself.
(c) If you don't buy him something, I'll eat dessert all by myself.
(d) If you don't buy him anything, I'll eat dessert all by myself.

"Buying him something" is different from "eating spinach" in that in our knowledge of the world, it can be conceived of as desirable (he gets something he wants) or undesirable (it might spoil him). So (21a) sounds good, and we understand that in this case "buying him something" is desirable; (21d) sounds good too, and we understand that in this case "buying him something" is undesirable. (21b) and (21c) do not sound good under the usual expectation that "to be given dessert" is desirable, but are good if it is considered undesirable (both are threats). (22a-d) are all good under the understanding that the speaker eating all of the dessert is undesirable to the hearer. Now consider the cases where the lexical meaning of the apodosis expresses desirability or undesirability seen from the viewpoint of the speaker.

23(a) I'd appreciate it if you buy him something.
(b) *I'd appreciate it if you buy him anything.
(c) I'll hate you if you buy him something.
(d) I'll hate you if you buy him anything.
24(a) *I'd appreciate it if you don't buy him something.
(b) I'd appreciate it if you don't buy him anything.
(c) I'll hate you if you don't buy him something.

(d) I'll hate you if you don't buy him anything.

Since the desirability/undesirability of the protasis and the apodosis match, these sentences have a "modal" flavor in that the speaker is in effect stating that the proposition within the protasis to be desirable or undesirable. Looking at (21)-(24), we see that when the apodosis is undesirable, any combination of the sentence-type of the protasis (positive or negative) and nature of the polarity item (positive or negative) is acceptable, but when the apodosis is desirable, two of the combinations are unacceptable (apodosis sentence type positive + NPI, apodosis sentence type negative + PPI). That is, when the apodosis is desirable, the sentence-type of the apodosis and the PI in the apodosis must match. I propose the following:

25 If the sentence-type of the protasis and the PI match, the PI is licensed. If there is no match, the unlicensed negative feature of the protasis is carried over to the apodosis, and if the apodosis is undesirable, the negative is licensed.

Let us now consider Japanese data. Japanese has four lexical items which mark the protasis of conditionals, *tara*, which was exemplified in (19), *nara, reba*, and *to* (Masuoka 1993). Below are given examples using *to*.

26(a) Imooto-ni nanika kau-to otooto-ga yorokobu daroo.
sister-to buy-if brother-Nom be-pleased will
If (I) buy (my) sister something, (my) brother will be pleased.

(b) *Imooto-ni nanimo kau-to otooto-ga yorokobu daroo.
sister-to buy-if brother-Nom be-pleased will
If (I) buy (my) sister anything, (my) brother will be pleased.

(c) *Imooto-ni nanika kawanai-to otooto-ga yorokobu daroo.
sister-to buy-not-if brother-Nom be-pleased will
If (I) don't buy (my) sister something, (my) brother will be pleased."

(d) *Imooto-ni nanimo kawanai-to otooto-ga yorokobu daroo.
sister-to buy-not-if brother-Nom be-pleased will
If (I) don't buy (my) sister anything, (my) brother will be pleased.

27(a) Imooto-ni nanika kau-to otooto-ga okoru daroo.
sister-to buy-if brother-Nom be-angry will
If (I) buy (my) sister something, (my) brother will be angry.

(b)　*Imooto-ni nanimo kau-to　otooto-ga　okoru　daroo.
　　sister-to　buy-if　brother-Nom be-angry will
　　If (I) buy (my) sister anything, (my) brother will be angry.
(c)　Imooto-ni nanika kawanai-to otooto-ga　okoru daroo.
　　sister-to　buy-not-if　brother-Nom be-angry will
　　If (I) don't buy (my) sister something, (my) brother will be angry.
(d)　Imooto-ni nanimo kawanai-to otooto-ga　okoru daroo.
　　sister-to　buy-not-if　brother-Nom be-angry will
　　If (I) don't buy (my) sister anything, (my) brother will be angry.

(26b) and (27b) are unacceptable because an NPI is in the immediate scope of a positive sentence-type. (26c-d) are unacceptable, but the reason for the unacceptability does not concern polarity items, since (28) is unacceptable too. That is, the combination of a negative protasis and *to* require that the apodosis be undesirable.

28　*Imooto-ni hon-o kawanai-to otooto-ga yorokobu daroo.
　　If (I) don't buy (my) sister a book, (my) brother will be pleased.

What needs to be accounted for here is the acceptability of (27c), and I propose the following for Japanese:

29　If the sentence-type of the protasis and the PI match, the PI is licensed. If there is no match, and the negative feature is with the PI, the sentence is ungrammatical. If the negative feature is with the sentence-type, it carries over to the apodosis. If the apodosis is undesirable, the negative is licensed. If not, the sentence is ungrammatical.

The difference with English is that in English, the negative feature could be carried over to the apodosis either when it was with the PI or with the sentence-type.

Next we consider examples where the lexical meaning of the apodosis expresses desirability / undesirability.

30(a)　Kare-ga imooto-ni nanika kau-to uresii.
　　he-Nom sister　-to　buy-if be-happy
　　I'd appreciate it if he would buy (my/his) sister something.

(b) *Kare-ga imooto-ni nanimo kau-to uresii.
he-Nom sister -to buy-if be-happy
I'd appreciate it if he would buy (my/his) sister anything.

(c) *Kare-ga imooto-ni nanika kawanai-to uresii.
he-Nom sister -to buy-not-if be-happy
I'd appreciate it if he would not buy (my/his) sister something.

(d) *Kare-ga imooto-ni nanimo kawanai-to uresii.
he-Nom sister -to buy-not-if be-happy
I'd appreciate it if he would not buy (my/his) sister anything.

31(a) Kare-ga imooto-ni nanika kau-to komaru.
he-Nom sister -to buy-if be-in-a-fix
If he buys (my/his) sister something, we're in a fix.

(b) *Kare-ga imooto-ni nanimo kau-to komaru.
he-Nom sister -to buy-if be-in-a-fix
If he buys (my/his) sister anything, we're in a fix.

(c) Kare-ga imooto-ni nanika kawanai-to komaru.
he-Nom sister -to buy-not-if be-in-a-fix
If he doesn't buy (my/his) sister something, we're in a fix.

(d) Kare-ga imooto-ni nanimo kawanai-to komaru.
he-Nom sister -to buy-not-if be-in-a-fix
If he doesn't buy (my/his) sister anything, we're in a fix.

The pattern is exactly the same as (28)-(29), and can be accounted for similarly.

In Japanese, some evaluative predicates have lexicalized so that they require a certain sentence-type in the protosis. *Ikenai* "bad" is such a predicate, and requires a syntactically negative protasis. Examples are given with the protasis markers *to* (32) and *reba* (33).

32(a) *Kyookasyo-o kau-to ikenai.
textbook-Acc buy-if bad
It's bad if (I) buy textbooks.

(b) Kyookasyo-o kawanai-to ikenai.
textbook-Acc buy-not-if bad
(Lit.) It's bad if (I) don't buy textbooks. = (I) have to buy textbooks.

33(a) *Kyookasyo-o kaeba ikenai.
textbook-Acc buy-if bad
It's bad if (I) buy textbooks.

(b)　Kyookasyo-o kawanakereba ikenai.
　　textbook-Acc buy-not-if　bad
　　(Lit.) It's bad if (I) don't buy textbooks. = (I) have to buy textbooks.

It was pointed out above that when the lexical meaning of the protasis is desirable or undesirable, the conditional has a "modal" flavor. In Modern Japanese, deontic modality is mostly expressed by such expressions derived from the combination of protasis-marker and evaluative predicate. This can only be possible because the negative in the protasis and the undesirable nature of the apodosis has come to be interpreted as a unit. And this, in turn, is possible only because a mismatch in the protasis can turn out to be grammatical only when the protasis is syntactically negative. The lexicalization has proceeded to the point that the apodosis in (32b) and (33b) may be deleted(Sawada 2006):

34(a)　Kyookasyo-o kawanai-to.
　　textbook-Acc buy-not-if
　　(Lit.) If (I) don't buy textbooks. = (I) have to buy textbooks.
(b)　Kyookasyo-o kawanakereba.
　　textbook-Acc buy-not-if
　　(Lit.) If (I) don't buy textbooks. = (I) have to buy textbooks.

5. Conclusion

The subject of this article was those polarity items in English and Japanese which most clearly come in negative/positive pairs, and give the impression that they are in complementary distribution. I argued that some of the cases where they seem not to follow (6) should be explained by distinguishing between syntactic negation and pragmatic negation, and that in a certain type of conditional, desirability / undesirability to the speaker must be taken into account to explain the distribution of PIs, in other words, a pragmatic factor is at work here too. I pointed out further that when the desirability / undesirability of the apodosis is determined on lexical meaning, the conditional in effect expresses the desirability / undesirability of the protasis and thus acquires a modal character, and that in Japanese, the sentence-type of the protasis and the apodosis have lexicalized to express deontic modality, to the point that the apodosis may be omitted.

It is clear that PIs are not uniform in character, and in this article I limited the discussion to a certain type of PIs, on the assumption that this line of research will better clarify what principles govern the distribution of PIs. It seems reasonable to assume that languages will be more similar to each other in the pragmatic devices they make use of than in their syntactic rules,

and I hope to be able to account for polarity phenomena among languages as the result of the interaction of the pragmatic devices, which might be shared among languages, and the syntactic rules, which differ in known ways among languages.

Notes

1 Free choice items (FCIs), which are homophonous with NPIs in English, are acceptable in this environment, as in (i). FCIs will not be discussed here.

i. He'll buy anything.

2 *Nanimo* is lexically decomposable into *nani* "what" and *mo* "too/even", and postpositions other than *ga* (Nominative) and *o* (Accusative) are inserted between them, as in the following.

i. Kono isu-wa *nani*-to-*mo* awanai.
this chair-Top *nani*-with-*mo* fit-neg
This chair doesn't fit in with anything.

Similarly, *daremo* and *dokomo* are lexically decomposable into *dare* "who" and *mo*, *doko* "where" and *mo*

3 *Mada* as an NPI and *moo* as its corresponding PPI, which we discuss here, is restricted to non-stative predicates. When the predicate is stative, *mada* is translatable as "still", and *moo* as "no longer", as in (i). The Perfective aspect marker *teiru* is homophonous with the Progressive aspect marker, and under the progressive interpretation, (3d') and (4d') are acceptable with the interpretations "He is still visitng (us)", "He is no longer visiting (us)", respectively. We will not be discussing the "still" / "no longer" *mada/moo.*

i(a) Kare-wa mada Tookyoo-ni iru.
he-Top Tokyo-at is
He is still in Tokyo.

(b) Kare-wa moo Tookyoo-ni inai.
he-Top Tokyo-at is-not
He is no longer in Tokyo.

4 *Nanika* is lexically decomposable into *nani* "what" and *ka*, which is formally identical to the question marker and the disjunction marker. However, it differs from *nanimo* in that postpositions cannot intervene, but follow *nanika. Ga* (Nominative) and *o* (Accusative) follow *nanika* when *nanika* receives a specific interpretation.

i. Kono isu-wa *nanika*-to/**nani*-to-*ka* au-daroo.
this chair-Top *nani-ka*-with/*nani*-with-*ka* fit-will
This chair will fit in with something.

Dareka and *dokoka* are similar in that they lexically decomposable, but postpositions do not intervene.

5 See footnote 3.

6 (1a'-d') are not acceptable even as echo denials of negative propositions.

7 *Mada* which is translated as "still" cannot be used as an answer:

i. "Kare-wa moo Tookyoo-ni inai-no?" "*Mada."
he-Top Tokyo-at is-not-Q
"He's no longer in Tokyo?" "*Still."

8 Watanabe (2004), while noting that the NPIs as answers to wh-questions are less natural than as answers to yes-no questions, considers the former acceptable. Also, they improve in their emphasized forms, *naannimo, daaremo, dokkomo.*

9 There exist English dialects which show negative concord, for example African American Vernacular English.

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