

Embedded Negative Polar Questions with Positive Epistemic Bias

Junko Shimoyama (McGill University) and Daniel Goodhue (University of Maryland)

1. Introduction: Conditions under which root phenomena are found in subordinate clauses have been discussed extensively. This paper focuses on the question of embeddability of syntactic objects that may be characterized as a question speech act. We observe that negative polar questions with positive bias in Japanese occur seemingly embedded, while such embedding is rarer in English, if it exists at all. We show that the source of the contrast has to do with the existence of unselected questions in Japanese, which is a subcase of so-called ‘bare quotatives’ (Kim 2018). One welcome consequence of this study is that so-called subordinate expletive negation can be reduced to the negation in embedded biased negative polar questions. We only give Japanese examples here for reasons of space, but parallel facts are found in Korean as well.

2. High negation in polar questions: (1a) is an example of a so-called positively biased negative polar question in Japanese (Romero & Han 2004, Sudo 2013, Hara *et al.* 2014, Ito & Oshima 2016 (I&O), Hirayama 2018). It can be felicitously uttered in context (1b), adapted from I&O, in which speaker B has prior epistemic bias that the orange that A is eating is sweet. (1a) in this context is roughly translatable by using a polar question with preposed negation in English, as shown below.

- (1) a. Amak-u **nai_{tc}**? ↑ (*↓) ‘Isn’t (it) sweet?’
 sweet-INF **NEG_{tc}** ~> The speaker believes that it’s sweet. (positive epistemic bias)
- b. Context: A is eating an orange. B has already eaten one from the same bag and it was exceptionally sweet. B says to A: ✓(1a)

The negation *nai* in (1a) is ‘tonally compressed (*tc*)’, in contrast to regular negation *na’i* (I&O). (1a) must have rising intonation as indicated by ‘↑’, forcing it to be a question. (1a) is infelicitous in contexts in which the speaker has no prior epistemic bias, a property parallel to ‘Isn’t it sweet?’ in English. (2) below shows that when the question particle *ka* is added, falling intonation becomes possible.

- (2) Aki-wa ima Tokyo-ni sun-de(ru) n ja nai_{tc} ka ↑ / ↓
 Aki-TOP now Tokyo-in live-ASP NO DE.WA NEG_{tc} Q
 ‘Isn’t it that Aki now lives in Tokyo?/Doesn’t Aki now live in Tokyo?’

Following Shimoyama *et al.* (to appear), we assume that NEG_{tc} is generated high, outside the propositional core of the question (Ladd 1981), and refer to examples such as (1a)/(2) as High Negation Questions (HNQs). The structure for (1a) is given in (3), which is Krifka’s (2017) structure for HNQs applied to Japanese (see Goodhue 2018 for a derivation of positive bias from such structures).

- (3) [ForceP [HighNegP [ForceP [TP *pro amak-u*] ASSERT] nai_{tc}] REQUEST]

3. Embedded HNQs and signs of embedded root phenomena: (4) shows that example (2) can be embedded. This may be surprising, given the literal translation in English (it can be shown that this is not a case of direct speech/thought, using data from indexicals and *wh*-extraction, for example).

- (4) Yoko-wa [Aki-ga ima Tokyo-ni sun-de(ru) n ja nai_{tc}-ka-to] omot-teru.
 Yoko-TOP Aki-NOM now Tokyo-in live-ASP NO DE.WA NEG_{tc}-Q-QUOT think-ASP
 ‘(Lit.) Yoko thinks [isn’t it that Aki now lives in Tokyo?]
 ‘Yoko thinks that Aki might live in Tokyo now./Yoko suspects that Aki lives in Tokyo now.’

It is expected from (3) that, if embedding of HNQs is possible at all, it should show signs of embedded root phenomena. This is indeed what we find in Japanese. Negating the matrix verb in (5) sounds odd, a phenomenon also found in embedding of V2 clauses in German.

- (5) Yoko-wa [Sota-o yob-e-wa shi-nai_{tc}-ka-to] omoitsui-ta/#omoitsuk-anakat-ta.
 Yoko-TOP Sota-ACC invite-can-WA do-NEG_{tc}-Q-QUOT occur.to-PAST/occur.to-NEG-PAST
 ‘(Lit.) It {occurred/#didn’t occur} to Yoko [wouldn’t (she) be able to invite Sota?]
 ‘It {occurred/#didn’t occur} to Yoko that (she) might be able to invite Sota.’

It is harder to find HNQ-embedding in English. For one thing, standard English does not allow preposed negation in embedded clauses. (6) shows a possibly comparable phenomenon, where a HNQ-like reading is found under *wonder* (Sailor 2013).

(6) This is why I wonder if we haven't been contacted by aliens already.

If this is a case of HNQ-embedding at all, such embedding in English seems to require a matrix predicate that is compatible with selecting for question denoting clauses. In Japanese, on the other hand, non-question-selecting matrix predicates are also fine, as we saw in (4) and (5).

4. Unselected embedded clauses: We show that the source of the variation lies in the existence of unselected embedded clauses in Japanese, in particular, interrogative 'bare quotatives' as in (7).

(7) [Kozukai-ga tarite-iru-ka-to] obaachan-ga okane-o watashi-ni kure-ta.
allowance-NOM suffice-be-Q-QUOT grandma-NOM money-ACC 1sg-DAT give-PAST
'(Lit.) Grandma gave me money, [whether (your) allowance is enough].'
'Grandma gave me money, saying/wondering if my allowance is enough.' (Kim 2018: 22)

Crucially, a HNQ can also occur as a bare quotative as in (8).

(8) Yoko-wa [densha-ni okureru n ja nai_{tc}-ka-to] zenryoku-de hashit-ta.
Yoko-TOP train-DAT be.late NO DE.WA NEG_{tc}-Q-QUOT full.power-with run-PAST
'(Lit.) Yoko ran at full speed [wouldn't she miss the train].'
'Yoko ran at full speed [wondering if/thinking that she might miss the train].'

The existence of such unselected interrogative clauses in Japanese explains why one finds embedded HNQs in a wider environment in Japanese than in English (see also Oshima 2015, Tomioka & Kim 2016).

Building on Kim (2018) and Özyıldız (2018), we propose the structure in (9) for the embedded clause in (8). Quotative marker *to* (Saito 2012) combines with a speech act phrase (SAP), which introduces the speaker or attitude holder of the HNQ anchored to the matrix subject. QuotP is an adjunct, where *to* functions as glue between the speech/thought act event and the matrix event, requiring that these two events overlap. For cases where QuotP is not 'bare', that is, when we have a seemingly canonical case of clause selection by a matrix attitude verb as in (4), (5) or (10), we compare two analyses, one in which the bias of the HNQ provides the content for the complement of the attitude verb, and another in which the matrix verb provides restrictions on what possible worlds we quantify over.

(9) [QuotP [SAP PRO_A.holder [ForceP *Wouldn't she miss the train-ka*Q] SA] *to*Quot] (HNQ-bare quotative)

(10) Yoko-wa [densha-ni mada maniau n ja nai_{tc}-ka-to] kitaishi-te iru.
Yoko-TOP train-DAT still be.in.time NO DE.WA NEG_{tc}-Q-QUOT hope-ASP
'(Lit.) Yoko hopes [wouldn't she still catch the train].'
'Yoko hopes that she'd still catch the train.'

5. Reducing subordinate expletive negation to NEG_{tc} in HNQs: One consequence of the observation that HNQs in Japanese can be embedded is that it is now possible to reduce another instance of special negation to NEG_{tc} in HNQs, *i.e.*, so-called subordinate expletive negation (Choi & Lee 2017). Examples like (10) have been treated as exemplifying subordinate expletive negation (Yoon 2013). Our analysis has two advantages over treating such examples as on a par with subordinate expletive negation in, *e.g.*, French: (i) Why does expletive *nai* 'NEG' occur under *kitaisuru* 'hope' in (10), which does not belong to the group of typical negative or adversative predicates known to license expletive negation in other languages? (ii) Why do we not find subordinate expletive negation in typical negative or adversative environments such as *prohibit, prevent, avoid, deny, refuse* in Japanese? These puzzles disappear in our reduction analysis. The embedded HNQ in (10) comes with a positive epistemic bias held by Yoko, that she might still catch the train. The 'selection of' the matrix predicate, then, is expected to be sensitive to the presence of an attitude/(epistemic) bias expressed by the HNQ. Predicates that can embed HNQs must be limited to those that are compatible with such epistemic properties of HNQs (the idea of 'natural' selection by Moulton 2009).

Selected References Choi and Lee 2017 Expletive negation and polarity alternatives. Goodhue 2018 On asking and answering biased polar questions. Ito & Oshima 2014 On two varieties of negative polar interrogatives in Japanese. Kim, J. 2018 Embedding without a license?. Özyıldız 2018 Unselected questions, WAFL 14 handout. Sailor 2013 Questionable negation, LSA handout.