On Two Varieties of Negative Polar Interrogatives in Japanese*

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1 Introduction

It has been observed in the literature (Ladd 1981, Romero and Han 2004, among others) that negative polar interrogatives often convey an epistemic bias toward a specific answer, and that the bias could be either toward a positive or negative answer.

- (1) Isn't Ken home?
 - a. 'I expect Ken to be home am I correct?' (positive bias)
 - b. 'I infer that Ken is not home am I correct?' (negative bias)

This work demonstrates that Japanese has two varieties of the negative polar interrogative that are differentiated *information-structurally* as well as *tonally*, and discusses semantic properties of each type.

Japanese/Korean Linguistics 23.
Edited by Michael Kenstowicz, Ted Levin and Ryo Masuda.
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^{*}Thanks to John Whitman, Christopher Tancredi, Makoto Kanazawa, Mats Rooth, Dorit Abusch, Christopher Davis, Hyun Kyung Huang, and the audience of JK23 for valuable comments. All remaining errors are our own.

2 Three Interpretations of Negative Polar Interrogatives

The seminal work by Ladd (1981) demonstrates that there are two varieties of negative polar interrogatives. With one version (which he calls the "outside NEG" question), "the speaker believes a proposition \mathbf{P} and wants confirmation" and "what is being questioned is the speaker's belief \mathbf{P} ". With the other (the "inside NEG" question), "the speaker has just inferred a proposition $\neg \mathbf{P}$ " and "what is being questioned is the inference $\neg \mathbf{P}$ ". He also points out that the "outside NEG" type is compatible with positive polarity items (PPIs) such as *too* but not with negative polarity items (NPIs) such as *either*, and the opposite pattern holds for the "inside NEG" type. The following examples, adapted from Romero and Han (2004), illustrate this point.

- (2) A: Ok, now that Stephen has come, we are all here. Let's go!
 - B: Isn't Jane coming too?

("outside NEG")

- (3) A: Pat is not coming. So we don't have any phonologists in the program.
 - B: Isn't Jane coming either?

("inside NEG")

Romero and Han (2004) point out that some negative polar interrogatives do not carry an epistemic bias. In languages such as English and Spanish, while negative polar interrogatives with preposed negation (e.g., *Won't he come?*) always convey a positive or negative epistemic bias, ones with non-preposed negation (e.g., *Will he not come?*) allow a "neutral" interpretation.

- (4) (**Situation**: B is organizing a party and is in charge of supplying all the non-alcoholic beverages for teetotalers. She is going through a list of people that are invited. She has no previous belief or expectation about their drinking habits.)
 - A: Jane and Mary do not drink.
 - B: OK. What about John? {Does he not/#Doesn't he} drink (either)?

(Romero and Han 2004: 610)

Unbiased negative polar interrogatives are compatible with an NPI, as shown in (4B), but not with a PPI (ibid.: 621–622). Romero and Han do not elaborate on the discourse conditions under which unbiased negative polar interrogatives are felicitous; we suggest that they are appropriate only when the meaning of the negated predicate — in the case of (4), 'not drink', or $\lambda w[\lambda x[\neg drink(x,w)]]$ — is contextually prominent. Table 1 summarizes the points discussed so far.

In the following, we will tentatively adopt the rather simple definitions of the two kinds of epistemic biases presented in (5). We will look into more

kind of epistemic bias	positive	negative	no bias
Ladd's label	outside NEG	inside NEG	(inside NEG)
NPI licensing	no	yes	yes
PPI licensing	yes	no	no
preposed negation	OK	OK	*
non-preposed negation	OK	OK	OK

TABLE 1 Three interpretations of negative polar interrogatives

subtle aspects of meanings conveyed by negative polar interrogatives in Sections 7 and 8.

- a. Positive epistemic bias: Speaker considers P to be likely, where P is the proposition denoted by the radical of the negative polar interrogative minus the negation.
 (e.g., for the negative polar interrogative with a positive bias: *Isn't Ken home (already)?*, P will roughly be: λw[home(ken, w)])
 - b. Negative epistemic bias: Speaker considers P to be likely, where P is the proposition denoted by the radical of the negative polar interrogative.
 (e.g., for the negative polar interrogative with a negative bias:

Isn't Ken home (yet)?, **P** will roughly be: $\lambda w[\neg \mathbf{home}(\mathbf{ken}, w)])$

We will use the term "core proposition" in the sense of $\bf P$ in (5a), and the term "proposition denoted by the radical" in the sense of $\bf P$ in (5b).

3 Two Varieties of Japanese Negative Polar Interrogatives

The central claim of the current work is that Japanese has two tonally differentiated varieties of the negative polar interrogative, and this tonal contrast has an information-structural basis.²

To illustrate the two varieties with an example, (6) will have different tonal properties in contexts (7) and (8).³ Actual tokens are presented in Figure 1.⁴

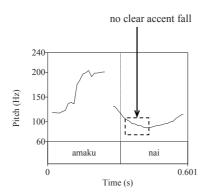
¹ See Lassiter (2011) for discussion of the semantics of 'likely'.

 $^{^2}$ The existence of two semantic varieties of Japanese polar interrogatives was first pointed out by Kuno (1973: 273–281), who discusses (i) negative questions that are "semantically neutral" and (ii) ones that "contain the questioner's expectation of a positive answer".

³ The abbreviations in the glosses are: Acc = accusative, Aux = auxiliary, Ben = benefactive, Cop = copula, Dat = dative, DP = discourse particle, Ger = gerund, Inf = infinitive, Ipfv = imperfective, Neg = negation, Nom = nominative, Plt = polite, Prs = present, Pst = past, Top = topic.

 $^{^4}$ The adjective form amaku has multiple accepted accent patterns (see fn.8); the tokens of amaku here happen to be accented on /ma/.

- (6) Amaku nai? sweet.Inf NegAux.Prs 'Isn't it sweet?'
- (7) A is eating an orange. B has heard that oranges this year are exceptionally sweet (although he has not eaten one so far). B utters (6).
- (8) A eats a piece of orange and makes a grimace. B utters (6).



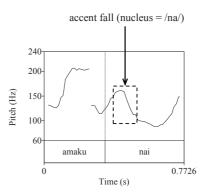


FIGURE 1 "Amaku nai?" uttered in situations (7) (left) and (8) (right)

The key contrast here is the absence/presence of the steep pitch fall within the string /nai/ that is attributable to the accent nucleus on the mora /na/. In more general terms, the two varieties of Japanese negative polar interrogative contrast in the size of pitch movements within the phrase containing the negation that are caused by a phrase tone⁵ and/or a lexical accent (but not by an utterance-final intonation, namely a question rise). In one of them, the movements are often compressed (Section 5 discusses cases where the compression does not take place); in the other, they are retained.⁶

The former often (but not always; Section 8) conveys a positive epistemic bias, as in (6) uttered in context (7); we will refer to it as the P-type (positive type). The latter often conveys a negative epistemic bias, as in (6) uttered in context (8), but is compatible with the neutral interpretation, as shown in (9); we will refer to this type as the NN-type (negative/neutral type).

(9) (**Situation**: A and B are organizing a Japanese sake party. Having been asked to bring some bottles of sweet sake to the party venue, B

 $^{^{5}}$ A phrase tone is the rise that takes place after the first mora within an accent phrase except when the first mora carries an accent nucleus (Venditti 2005, Vance 2008).

 $^{^6}$ The term "(tonal) compression" will be understood to subsume total disappearance, as well as mere subdual/weakening, of pitch movements.

comes to the liquor storage room. She does not know which bottles are sweet and which are not, so asks A for help.)

- A: Kore-to kore-wa amaku nai. this-and this-Top sweet.Inf Neg.Prs 'This one and this one are not sweet.'
- B: Kore-wa? Amaku nai? this-Top sweet.Inf Neg.Prs 'How about this one? Is it not sweet?'
- (10) and (11) are additional examples of the P-type and the NN-type, respectively; *warito* 'quite' in (10) is a PPI, or at least has a strong tendency to occur in positive contexts, and *amari* 'particularly' in (11) is an NPI.
- (10) Ano hito, warito tetsudatte kurenai? that person quite help.Ger BenAux.Neg.Prs 'Isn't he pretty helpful?'
- (11) Ano hito, amari tetsudatte kurenai? that person particularly help.Ger BenAux.Neg.Prs 'Is he not so helpful?'

Observe that in (10) not only the lexical accent but also the phrase tone (the potential rise after /ku/) within /kurenai/ is suppressed (Figure 2).

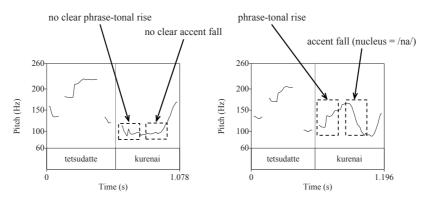


FIGURE 2 The string "tetsudatte kurenai" in (10) (left) and (11) (right)

It is worth mentioning that the P-type and NN-type are answered differently. When the core proposition of the P-type holds, the answer is "yes", as in the case of English negative interrogatives. When the core proposition of the NN-type holds, the answer is "no" (cf. Kuno 1973: 280).

(12) (in reply to (6) uttered in context (7))

- a. Un, amai.yes sweet.Prs'Yes, it is sweet.'
- b. Iya, amaku nai.no sweet.Inf NegAux.Prs'No, it is not sweet.'
- (13) (in reply to (6) uttered in context (8))
 - a. Un, amaku nai. b. yes sweet.Inf NegAux.Prs
 'Yes, it is not sweet.'
- b. Iya, amai. no sweet.Prs 'No, it is sweet.'

In the next section, we review certain facts about the relation between prosody and information structure in Japanese, which are relevant to a better understanding of the P/NN-distinction.

4 Tonal Compression and Focus/Ground Configuration

The tonal contrast between the P- and NN-types can be attributed to the independently attested phenomenon known as *post-focus reduction* (Kori 1997, Sugahara 2003), whereby phrase-tonal rises and lexical accent falls within the phrases following the information-structural focus are obligatorily compressed. The term "phrase" here refers to a syntactic word potentially followed by one or more particles (e.g., case particle).

To exemplify, when sentence (14) is uttered in reply to "When did you go to Rome last year?", the two phrases following the focus phrase (*haru*) must be tonally compressed, as in (15) (square brackets indicate phrase boundaries; apostrophes indicate lexical accent nuclei; boldface indicates focushood, which implies retention of pitch movements; italicization indicates obligatory tonal compression).

- (14) Kyonen-wa haru Rooma-ni ikimashita. last.year-Top spring Rome-Dat go.Pst.Plt 'Last year, I went to Rome in the spring.' (Kori 1997: 173)
- (15) Q: "When did you go to Rome last year?"
 A: [kyo'nenwa] [ha'ru] [ro'omani] [ikima'shita]

"Phrases" syntactically defined here typically correspond to accent phrases (APs) in the sense of Venditti (2005) and Vance (2008). It is commonly acknowledged that under certain conditions multiple syntactic phrases may be merged into a single accent phrase; this process is called *dephrasing*. Thus, at least in theory, it is possible for *Rooma-ni* and *ikimashita* in (14) to form,

⁷ Non-focus (ground) phrases *preceding* the focus may undergo tonal compression, but only optionally (Kori 1997).

or belong to, a single AP. For the purpose of the current paper, the issue of AP-phrasing can be safely put aside; we remain neutral about the question of how tonal compression is related to dephrasing.

We propose (i) that in the P-type, the phrase containing the negation is *part* of ground (i.e., not part of the focus), so that it is tonally compressed, and (ii) that in the NN-type, the phrase containing the negation is *part of the focus*, so that it is not tonally compressed.⁸

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(16) The P-type
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a. (6) in context (7): \{[\mathbf{amaku}]/[\mathbf{a'maku}]/[\mathbf{ama'ku}]\} [na'i]
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b. (10): ... [tetsuda'tte] [kurena^{(*)}i]
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(17) The NN-type

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a. (6) in context (8): {[amaku]/[a'maku]/[ama'ku]} [na'i]
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b. (11): . . . [tetsuda'tte] [kurena<sup>(')</sup>i]
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At the present time, we are not certain how exactly groundhood and focushood of negation lead to the positive and negative biases, respectively. It can be said, however, that the focushood of the negation in the NN-type is resonant with the fact that the NN-type is compatible with an NPI but not with a PPI. As pointed out by Kori (1997: 182), a negated predicate — in the case of a complex predicate where the auxiliary carries negation, both main and auxiliary predicates — tends to be part of the focus and not tonally compressed.⁹

(18) (in reply to: "Why don't you ask John for help?")

```
Ano hito-wa kitto tetsudatte kurenai-yo. that person-Top probably help.Ger BenAux.Neg.Prs-DP
```

'He probably won't give me a hand.'

```
... [tetsuda'tte] {[kurena'iyo]/[kurenai'yo]}
```

A positive auxiliary, in contrast, tends to be part of ground and thus tonally compressed.

(19) (in reply to: "Were you able to finish your work by yourself?")

```
Iya, Hiroshi-ga tetsudatte kureta-yo.
no H.-Nom help.Ger BenAux.Pst-DP
```

⁸ Some predicate forms, including *amaku* and *kurenai*, have multiple accepted accent patterns (Vance 2008: 162–180). An apostrophe put between parentheses (e.g., [ama^(*)i]) indicates that the versions with and without a lexical accent are both acceptable.

⁹ It is possible for a negative predicate to be part of ground, as in *Hiroshi-ga konai*. 'Hiroshi will not come.' uttered in reply to *Dare-ga konai-no?* 'Who will not come?'

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'No, Hiroshi gave me a hand.' ... [tetsuda'tte] [kureta'yo]
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Thus, the negation in the NN-type patterns the same as the negation in a declarative in two respects: (i) it has the ability to license an NPI while it is not compatible with a PPI, and (ii) it is part of the focus. The negation in the P-type, on the other hand, lacks both properties. The tonal contrast and the occurrence patterns of PPIs/NPIs concurrently suggest that, in the pretheoretical sense, the negation in the NN-type is a "genuine" or "true" negation, while that in the P-type is "fake".

5 Tonal Neutralization

In the examples of the P- and NN-types presented so far, the negation occurs on an auxiliary predicate. In (6), the negative auxiliary *nai* follows the infinitive form (also called the adverbial form) of an adjective. In (10), the derivational negation affix /(a)na/ occurs within the auxiliary *kureru*, which follows the gerund form (also called the *te*-form) of the main verb.

The exactly same tonal contrast can be observed with other constructions where negation is expressed on the auxiliary; i.e., the copular construction where the copula *da* follows a noun or a nominal adjective (e.g., *Shinsetsu-ja nai*? 'Isn't he kind?'), and complex verbs with an auxiliary (that selects for a gerund form) other than *kureru*, e.g., V-(*i*)te iru 'be V-ing, have V-ed', V-(*i*)te miru 'try V-ing', V-(*i*)te shimau 'end up V-ing'.

Things are more complicated with constructions with "simple" verbs, whose negative forms, as well as positive forms, do not involve an auxiliary. For these constructions, the retention of pitch movements within the phrase containing the negation does not guarantee the NN-interpretation (while the tonal compression does guarantee the P-interpretation). To illustrate with an example, utterance (20) is felicitous not only in context (21), where the NN-type is expected, but also in context (22), where the P-type is expected. In other words, in this case the tonal contrast between the two types is neutralized.

- (20) Iwashi tabenakatta?sardine eat.Neg.Pst'Didn't she eat the sardine?'... [tabe'nakatta]
- (21) Mrs. Abe gave sardine to her cat. 15 minutes later, Mr. Abe notices that the sardine is still in her food bowl. He asks his wife (20).

verb stem	negation	tonal compression	example
in focus	in focus (= NN-interpretation)	no	(20) in (21)
in focus	in ground (= P-interpretation)	no	(20) in (22)
in ground	in ground (= P-interpretation)	yes	(23)

TABLE 2 Focus/ground configurations within simple verbs in their negative forms

(22) In the morning, Mrs. Abe tells her husband that she will give sardine to their new cat, who has been fussy about her food. Later in the day, Mr. Abe comes across the previous owner of the cat and learns that she loves sardine and never refuses to eat it. He comes home in the evening and asks his wife (20).

The neutralization happens because tonal compression takes place only when all semantic components of the phrase are ground. The negative form of a simple verb has, as its sematic components, the meaning of the verb stem and the negation, among others; tonal compression happens only when both components are ground (Table 2).

- (23) illustrates a case where the meaning of the verb stem and the negation are both parts of ground; in such a case, the P-interpretation is singled out.
- (23) (in reply to: "The cat had mackerel for her dinner yesterday.")

E? Iwashi-o tabenakatta? huh sardine-Acc eat.Neg.Pst

'Huh? Didn't she eat sardine?' ... [iwashio] [tabe'nakatta]

6 Attachment of No/Noda

Negative polar interrogatives, like declaratives and other kinds of interrogatives, may be accompanied by the discourse particle no or the auxiliary noda, which have largely overlapping functions. (The semantic effect of addition of no/noda is a complicated matter and will not be discussed here.)

The NN- and P-types exhibit interesting differences in the ways in which they are combined with no/noda (cf. Kuno 1973: 278). When no or noda follows a negated predicate, as in (24), the NN-interpretation is singled out.¹⁰

 $^{^{10}}$ The construction where no/noda follows a negated copula exceptionally allows the P-interpretation, as well as the NN-interpretation.

⁽i) Kore, tamago-ja nai-no? this egg-Cop.Inf NegAux.Prs-no 'Isn't this an egg?'

```
(24) Amaku nai-{no/ndesu-ka}? sweet.Inf NegAux.Prs-{no/noda.Prs.Plt-DP} 'Isn't it sweet?' (the NN-interpretation only) {[amaku]/[a'maku]/[ama'ku]} {[na'ino]/[na'indesuka]}
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When *noda* is negated, in contrast, the P-interpretation is preferred.

```
(25) Amai-nja nai(-desu-ka)? sweet.Prs-noda.Inf NegAux.Prs-PltAux.Prs-DP 'Isn't it sweet?' (the P-interpretation preferred) {[ama'inja]/[amai'nja]} [na'i(desuka)] ??{[ama'inja]/[amai'nja]} [na'i(desuka)]
```

It is possible for a polar interrogative with negated *noda* to be further followed by *no* or (another instance of) *noda*; in such cases, prosody determines the interpretation.

```
(26) Amai-nja nai-{no/ndesu-ka}?
  sweet.Prs-noda.Inf NegAux.Prs-{no/noda.Prs.Plt-DP}
  'Isn't it sweet?'
  ... [na'ino]/[na'indesuka] ⇒ the NN interpretation
  ... [na'ino]/[na'indesuka] ⇒ the P interpretation
```

7 More on the Meaning of the NN-type Interrogative

In this section, we will take a closer look at the function of the NN-type on its "negative" (as opposed to "neutral") interpretation.

It has been claimed in the literature (Ladd 1981, Romero and Han 2004, among others) that the English inside-NEG interrogative (with a negative epistemic bias) is felicitous only if the negative bias is formed in the discourse situation, rather than had been present beforehand. This "inference on the spot" condition is relevant to the NN-type interrogative in Japanese too. (27), for example, is felicitous in context (28), but not in context (29) (note that the "inference on the spot" condition is met only in the former).

```
(27) Hottodoggu-ya-san, kite (i)nakatta?
hotdog-seller-Suffx come.Ger IpfvAux.Neg.Pst
'Wasn't the hotdog vendor there?'
... [ki'te] [(i)na'katta]

[kore] [tama'goja] [na'ino] ⇒ the NN-interpretation
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[kore] [tama'goja] [na'ino] \Rightarrow the P-interpretation

This fact is resonant with Noda's (1997: 83) observation that under certain discourse conditions, the use of *noda* is compulsory in verbal constructions but is optional in copular constructions. That is, (i) on the P-interpretation can be understood to be formed by "omitting" *noda* (*nja*) from "Kore tamago-na-nja nai-no?" (cf. (26)).

- (28) In most days, a hotdog wagon comes to the park near the office where A and B work. One afternoon, A says to B: "Let's have lunch. I'll go get us hotdogs". A few minutes later, A comes back with boxes of Chinese food, instead of hotdogs, in his hand. B utters (27).
- (29) A and B work in the same office. In most days, in the lunch break A goes to a hotdog wagon in the nearby park and eats there. B has heard the rumor that the hotdog vendor has been ill. When A comes back to the office after the lunch break, B utters (27).

Note that in context (29), the P-type interrogatives (30a,b), whose denotational meanings are roughly equivalent to that of the NN-type interrogative (27), will be felicitous.

- (30) a. Hottodoggu-ya-san, yasumi-ja nakatta? hotdog-seller-Suffx day.off-Cop.Inf NegAux.Pst 'Wasn't the hotdog vendor on a day off?' ... [yasumi'ja] [na'katta]
 - b. Hottodoggu-ya-san, kite naku nakatta? hotdog-seller-Suffx come.Ger IpfvAux.Neg.Inf NegAux.Pst 'Wasn't the hotdog vendor not there?' ... [ki'te] [na'ku] [na'katta]

Unlike the English inside-NEG interrogative, however, the NN-type can also be used when (the "inference on the spot" condition is not met but) the speaker considers the proposition denoted by the radical *both likely and desirable*.

(31) (**Situation**: A and B have been working all day in a room without a window. They hope that it is not raining. They believe that it is unlikely to be raining on the basis of the morning weather forecast, but still are worried that it might. Around 2 p.m., A goes out to check the weather and comes back. B asks A:)

```
Doo? Futte nakatta?
how fall.Ger Ipfv.Neg.Pst
'How was it? Was it raining? (lit. Wasn't it raining?)'
... [fu'tte] [na'katta]
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It must be noted that the desirability alone is not a sufficient condition of the felicitous use of the NN-type. In the context of (31), speaker B would not use the NN-type if he had estimated the chance of rain to be, say, 80%.

8 More on the Meaning of the P-type Interrogative

The P-type interrogative has several other uses besides the "positive epistemic bias" use, so that it may occur in certain environments where the English "outside NEG" interrogative may not.

8.1 The P-type and Information Gaps

The P-type has a distinct use where it does not convey an epistemic bias but indicates that the speaker considers the core proposition possible based on some information that may not be available to the hearer.¹¹

(32) (**Situation**: The speaker is looking for her friend Yamada. She has been informed that Yamada is visiting one of the 10 residents on the second floor of the dormitory, but does not know in which room he actually is. She decides to check the rooms one by one. She first goes to room #201, and asks the resident:)

```
Nee, Yamada-kun kite nai?
hey Y.-Suffix come.Ger IpfvAux.Neg.Prs
'Hey, is Yamada here?' (lit. 'Hasn't Yamada come?)
... [ki'te] [na'i]
```

Note that in (32), the chance of the core proposition's holding is a mere 10%; the speaker will likely be surprised by her good luck if the answer is "yes". In the same situation an English negative polar interrogative ("Isn't Yamada here?") would be infelicitous.

The effect of using the P-type in such a situation is similar to adding a phrase like: "You may be surprised by my asking this, but (is **P** the case?)" or "I have a reason to suspect that **P** is the case. (Is it?)". It preemptively justifies the speaker's asking a question in a situation where the hearer might think it is unreasonable for her to even suspect that the core proposition holds. Indeed,

(1) (Situation: The speaker comes into her office, which she shares with her colleagues Yamada and Suzuki. Suzuki is sitting at his desk. Yamada is supposed to take a day off today, but she notices that Yamada's bag in on his chair. The bag is visible from Suzuki too. She asks Suzuki:)

```
Are, Yamada-kun kite nai?
oh Y.-Suffix come.Ger IpfvAux.Neg.Prs

'Oh, isn't Yamada here?'
... [ki'te] [na'i]
```

¹¹ Note that the P-type can be licensed either by the "information gap" condition (described here) alone or the "positive epistemic bias" condition alone. Example (i) is a case where only the latter is met.

in the context of (32), the corresponding positive polar interrogative would sound a little abrupt and less natural.

8.2 The P-type as a Means of Expressing One's Belief

The P-type interrogative has a use whereby the speaker expresses her belief, opinion, or judgment. Compared to regular statements in the form of declaratives, P-type interrogatives in this "expression of belief" use appear to convey the speaker's wish to avoid being overly self-assertive. 12

- (33) (**Situation**: A and B are eating cookies that their colleague brought to their office. A finds the cookies distasteful, and says:)
 - a. Kore, mazuku nai?
 this distasteful.Inf NegAux.Prs
 'Doesn't this taste bad?'
 {[mazuku]/[mazu'ku]/[ma'zuku]} [na'i]
 - b. Kore, oishiku naku nai?
 this tasty.Inf NegAux.Inf NegAux.Prs
 'Doesn't this not taste good?'
 [oishi(')ku] [na(')ku] [na'i]

One might be tempted to consider the illustrated use as a mere pragmatic effect (conversational implicature) of the P-type as a question. It can be shown, however, that there is a conventional aspect in it. If (33a,b) have the illocutionary force of question, they would be interchangeable with the NN-type interrogative given in (34), which has the antonymous propositional content. This prediction is not borne out; (34) would not be acceptable in the same situation.

(34) Kore, oishiku nai? this tasty.Inf NegAux.Prs 'Doesn't this taste good?' [oishi(')ku] [na'i]

Note that the speaker's inclination to the belief: "The cookies do not taste good (they taste bad)" is formed in the discourse situation, implying that the unacceptability of (34) in the described situation cannot be attributed to the "inference on the spot" condition discussed in Section 7.

¹² Based on experimental data, Hara and Kawahara (2012) propose that the unaccented pronunciation of the adjective (e.g., [amaku] rather than [a'maku] or [ama'ku]; see fn.8) in its infinitive form tends to be chosen when "public evidence" for the core proposition is available in the discourse situation. Their experimental findings seem compatible with the alternative interpretation that the unaccented pronunciation of the adjective is preferred when a P-type interrogative receives the "expression of belief" interpretation.

The P-type interrogative with *noda* (see Section 6) can likewise be used as a statement, but it conveys that the speaker merely infers, rather than believes, the core proposition. In the context of (35), the P-type interrogative with *noda* is appropriate while the one without it (*Chuushi-ni naranai?*) would be less natural.

(35) (**Situation**: A and B are talking about the outdoor concert scheduled tomorrow. A asks B: "What will happen if it rains tomorrow?" B does not know the answer, and says:)

Shiranai. Chuushi-ni naru-nja know.Neg.Prs cancellation-Cop.Inf become.Prs-*noda*.Inf nai?
NegAux.Prs

'I don't know. I guess it will be canceled.'

8.3 The P-type as a Means of Making a Suggestion or Polite Request

The P-type interrogative is commonly used to make a suggestion or polite request (Nihongo Kijutsu Bunpo Kenkyukai 2007: 296–298). Comparing (36a) and (36b), the latter would be a more natural choice in most situations where the speaker's intention is to suggest the hearer to go to the café, rather than seeking information about his current plan. (37a,b) are both naturally interpreted as requests, but the negative version sounds more polite.¹³

- (36) Kafe, yotte {a. iku/b. ikanai}? café stop.by.Ger go.Prs go.Neg.Prs a. 'Are you going to stop by the café?' b. 'How about stopping by the café?'
- (37) Ato-de tetsudatte {a. kureru/ b. kurenai}? later help.Ger BenAux.Prs BenAux.Neg.Prs '{a. Will/b. Would} you give me a hand later?'

It is worth noting that in English it is much less common to use negative polar interrogatives for the purpose of making a suggestion/request (cf. "Won't you come visit me?").

9 Summary

We have demonstrated that Japanese has two distinct varieties of negative polar interrogatives: the P-type and the NN-type. In the P-type, the negation is

¹³ For the "request" interpretation of (37a,b), the presence of the benefactive auxiliary *kureru* is essential. The potential form of another benefactive auxiliary verb *morau* could instead be used (Ato-de tetsudatte {moraeru/moraenai}?).

part of ground; this information-structural property is often reflected by tonal compression of the word containing the negation morpheme. The P-type is similar to the English outside-NEG interrogative, in that it often conveys a positive epistemic bias, and is compatible with a PPI. However, its distribution and functions are not exactly the same as those of the outside-NEG interrogative; it can, for example, be used to make a polite request.

In the NN-type, the negation is part of the focus, so that the tonal movements within the word containing the negation morpheme are always retained. The NN-type is similar to the English inside-NEG interrogative, in that it often conveys a negative epistemic bias, and may contain a NPI. Like the English negative polar interrogative with non-preposed negation, the NN-type allows the neutral interpretation when the meaning of the negated predicate is contextually prominent. On the negative-bias interpretation, it indicates either that the bias has been formed in the discourse situation, or that the speaker considers the proposition denoted by the radical desirable.

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