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A QUESTION-ANSWERING SYSTEM IN NEGATIVE QUESTIONS OF ENGLISH, FRENCH AND JAPANESE

1 INTRODUCTION

Negative interrogative constructions occur in most languages in the world, typically characterized as “questions with negation.” The method of responding to negative questions (NQs) varies among languages. There are three main types of responses: (i) [Yes], (Positive sentence), (ii) [No], (Positive sentence), and (iii) [Other expression], (Positive sentence).¹ The current thesis deals with three languages, namely English, French, and Japanese, that represent these three types of responses, respectively. The canonical responses in each language are described in following section.

(1) **English: Yes, POS / No, NEG.**

A: Can't you speak English?

B: Yes, I can. / No, I can't.

(2) **Japanese: <<Negative-biased>> Hai, NEG. / Iie, POS.**

<<Positive-biased>> Hai, POS. / Iie, NEG.

Negative-biased

A: Anata-wa mattaku eigo-o hanas-e-nai no desu ka?
 You-TOP at all English-ACC speak-can-not Q
 “Can't you speak English at all?”

B: Hai, hanas-e-masen. / Iie, hanas-e masu.

Yes speak-can-not No speak-can
 “Yes, I can't. / No, I can.”

¹ Kobayashi (1998) compare major Asian and European languages in terms of responses to affirmative and negative interrogatives. He listed English, Italian, and Spanish as type (i), Japanese, Korean, Chinese, Mongolian, Indonesian, and Turkish as type (ii), and French, German, and Russian as type (iii).

Positive-biased

A: Sukoshi onaka ga suki masen ka?
 A little stomach-TOP empty not Q

“Aren’t you hungry?”

B: Hai, suki-mashita. / Iie, suitei-masenn.

Yes hungry-Past No hungry-not

“Yes, I am. / No, I’m not.”

(3) **French: Si, POS.² / Non, NEG.**

A: Vous ne pouvez pas parler anglais?

You not can speak English

“Can’t you speak English?”

B: Si, je peux. / Non, je ne peux pas.

[Si] I can No I not can

“[Si], I can. / No, I can’t.”

The typical answer to the English NQ “Can’t you speak English?” is “Yes” if one can speak English and “No” if one cannot. Thus, in English, a *yes/no* answer to a negative question is based on the polarity of the answer, just as a *yes/no* answer related to an affirmative question (*yes* to answer in a positive sentence and, *no* to answer in a negative sentence). Meanwhile, in Japanese, a response to NQs is dependent on whether one agrees or disagrees with the questioner’s assumption. When the questioner assumes a negative proposition, such as in (2a), the answer will be *hai* (yes) if one agrees and *iie* (no) if one disagrees. French has a different particle to represent *yes/no* to answer negative questions in an affirmative way. French uses the word *si* to answer negative questions if the answer is positive.

Given this variety of response types, previous analyses have concluded that each language group has a distinct question-answering system. However, my current research reveals that there are some exceptions as shown below.

(4) Didn’t you lift a finger to help him?

-Yes, I didn’t. / No, I did. <Yes, NEG. / No, POS.>

Nine out of fifteen native speakers of English accepted [No], (Positive sentence) as an answer to the question in (4).

Previous analyses on negative questions have ignored this type of answer as an exception to the typical response. However, I acknowledge these answers as a secondary response form to NQs, calling them *Non-Canonical Responses* (henceforth, NCRs). The current study attempts to (1) reveal when NCRs are

² The word *Si* contradicts a prior negative element so as to convey a positive polarity. (e.g. “Ce n’est pas grave, *si*? —Oh, *si!*” (Asakura (2002): 497), translated as “It is not grave, is it?—Oh, it is.”)

accepted and (2) propose a new question-answering system that accounts for the occurrence of NCR.

I begin by reviewing previous analyses on question-answering systems for negative questions in Chapter 2. In Chapter 3, I address the *positive-biased/negative-biased* distinction, which is commonly mentioned in connection with negative interrogative construction. Chapter 4 explores when NCRs are accepted in the three languages. I examine survey results about the acceptability of NCRs. In Chapter 5, I hypothesize that there is a common question-answering system in the three languages. In addition, I demonstrate the case of English declarative negative questions as supporting evidence for my hypothesis. Finally, in Chapter 6, I conclude my research with a brief summary and suggest issues raised by my analysis.

2 PREVIOUS ANALYSES

2.1 Cross-linguistic Analyses on Responses to Negative Questions

Linguists who examine the variety of response types to NQs typically classify languages into several types and argue that each language group has a different question-answering system.

Pope (1973) addresses the question-answering system for affirmative and negative questions. She compares the three types of languages that I described in the introduction: (i) [Yes], (Positive sentence), (ii) [No], (Positive sentence), and (iii) [Other expression], (Positive sentence). She examines English, Japanese, and German, respectively, for each type. Her description is as follows. First, the language group (i), such as English, has “a positive-negative answering system (An answer is negative if it contains a sentential negation in its highest clause, and positive if it doesn’t.)” (Pope 1973: 482). Meanwhile, the language group (ii), such as Japanese, has “an agreement-disagreement system (An answer is agreeing if it matches the question with respect to negativity, and disagreeing if it doesn’t)” (ibid.). Finally, the language group (iii), such as German, has positive disagreement, i.e., disagreement to indicate a positive proposition. German *doch*, which is equivalent to French *si*, displays a disagreement with the previous negation so as to convey a positive assertion. Note that she divides yes/no answers into four categories. Yes/No answers to affirmative questions are regarded as positive agreement and negative disagreement, respectively. Yes/No answers to negative questions are called positive disagreement and negative agreement, respectively. She explains that positive disagreement is often expressed by a special word is because it is the most semantically difficult or marked among the four categories. Ultimately, the point is that she concludes that each language group has an exclusive system: “Languages

with both sentential and NP negation³ cannot have agreement-disagreement question-answering system.” (Pope 1973: 491)

Kobayashi (1998) deals with NQ phenomena especially in terms of the Japanese ESL learner’s errors involving negative interrogatives. Japanese learners often fail to reply in English [Yes], (Positive sentence) format.

On a hot summer day in Otaru, Yoshiko Hayashi, a Japanese university student, met her American English professor, Dr. Bill Kirkwold, on campus. The professor reminded her to turn in her late assignment immediately. Yoshiko reacted rather reluctantly, which made the professor a little upset. The professor said in a rather low and rough voice, “Aren’t you serious about your assignment?” Yoshiko was frozen by the tough blow, but, in a panic, she managed to answer, “No, I’ll write it tonight!”
(Kobayashi 1998: 36)

He provides a semantic and functional explanation for the opposite answer forms in English and Japanese, which causes learners’ errors. He mentions that the Japanese *hai* is not semantically identical to English yes/no. He defines *hai* as ‘true’ and *ie* as ‘false’, considering the fact “the Japanese *hai* is, among many functional and semantic representations, a marker to express agreement with the interlocutor’s question” (Kobayashi 1998: 38).

Nakau (1984) likewise compares English with Japanese in terms of their responses to NQs. He accounts for their difference by using the terms *positive proposition* and *whole proposition*. An English speaker answers if the positive proposition is true or false, whether the question is affirmative or negative (e.g., “Did you buy something? – Yes, I did.” “Didn’t you buy anything? – Yes, I did.”). He argues that these responses are related to the positive proposition of NQs. On the other hand, Japanese have two types of responses, as in (2), because their answers are related to the whole proposition, which can be either positive or negative. He cites the following instances where the whole propositions of NQs are positive (5) and negative (6).

(5) **Whole proposition = Positive**

A: Nanika kai-masen deshita ka?
Something buy-not Past Q
“Didn’t you buy something?”

B: Hai, (hon-o issatsu) kaimashi-ta. / Iie, nanimo kaima-sen
Yes book-ACC one buy-Past No anything buy-not
deshita.
Past
“Yes, I bought a book. / No, I didn’t buy anything.”

(Translated from Nakau 1984: 15)

³ Japanese have no NP negation (e.g., English *no+NP* or *nothing*) but only sentential negation e.g., *nai*, which is the counterpart of English *not*.

(6) **Whole proposition = Negative**

A: Nanimo kaima-sen deshita ka?

Anything buy-not Past Q

“Didn’t you buy anything?”

B: Hai, nanimo kaima-sen deshita./Iie, (hon-o issatsu)

Yes anything buy-not Past No book-ACC one

kaimashi-ta.

buy-Past

“Yes, I didn’t buy anything. / No, I bought a book.”

(Translated from Nakau 1984: 15)

He divides each question into two parts. The questions in (5) and (6) are split into two parts, as in (7a) and (7b), respectively. He designates the first bracket as the whole proposition, and the second bracket as the modality that is external to the proposition. Question (5) has a positive whole proposition and question (6) has a negative whole proposition.

(7) a. [Anata-ga nanika-o ka-tta] [no dewa nai-ka] (=5)

You-TOP something-ACC buy-Past not-Q

“Didn’t you buy something?”

b. [Anata-ga nanimo kawa-naka-tta] [ka] (=6)

You-TOP anything buy-not-Past Q

“Didn’t you buy anything?”

The Japanese canonical answer to the question (5) and the question (6) is different. Japanese speakers employ the [Yes], (positive sentence) form for the question “Nanika kaimasen deshita ka? (Didn’t you buy something?).” while they reply using the [Yes], (negative sentence) form for the question “Nanimo kaimasen deshita ka? (Didn’t you buy anything?).” This is because for question (5), speakers respond to the positive whole proposition, whereas they respond to the negative whole proposition for question (6).

2.2 Problems

Previous analyses explain that English speakers answer according to whether the positive proposition is true or false, while Japanese speakers agree/disagree with the interlocutor’s assumption. These analyses account for the canonical responses in these cases. At the same time, their accounts are problematic in that they exclude NCRs by supposing an exclusive system for each language group. They treat NCRs as merely exceptions or speaker’s errors; however, NCRs emerge in all of the three languages addressed here. They display certain regularity in their occurrence, and therefore they should not be assumed to be exceptions.

This paper aims to modify the traditional question-answering system to account for NCRs. First, before we observe the survey result about NCRs, we begin with a discussion about the idea of “bias,” namely a speaker’s cognitive state about his or her beliefs and intentions.

3 BIAS IN NEGATIVE QUESTIONS

3.1 *Positive-bias and Negative-bias in NQs*

In asking negative questions, speakers invariably convey a prior expectation, or belief, that a specific answer to the question is the true one. According to Huddleston and Pullum (2002), “they typically allow a range of interpretations, and epistemic bias can be towards either the negative or the positive answer.” (p 883) For instance, the question “Wasn’t I right?” can be paraphrased as either (8i) or (8ii).

- (8) Wan’t I right
 (i) “It appears that I wasn’t right — is that so?”
 (ii) “It is now evident I was right — admit it.”

(Huddleston and Pullum 2002: 883)

One possible context for this question is where it has become apparent that probably ‘I’ was not right. Here, the bias is towards the negative answer (i.e., I was not right). Meanwhile, we could equally use this question in a context where we are sure that we are right and we are asking someone to admit it. In this case, the bias is towards the positive answer (i.e., I was right). Huddleston and Pullum (2002) illustrate two usages: “the negative epistemic bias commonly contrasts with a positive deontic bias [.....] when such a contrast reflects adversely on you, the question will be an indirect reproach or rebuke,” whereas “where the epistemic bias is positive, there is commonly an implicit contrast between my belief in some proposition and previous unwillingness on the part of you or others to accept it” (Huddleston and Pullum 2002: 883-884).

Semanticists such as Ladd (1989), Reese (2007), and Romeo and Han (2004) call positive-biased reading “p reading” and negative biased reading “¬p reading.” I examine their semantic approaches for a better understanding of bias in negative questions in the next section.

3.2 *Prior Epistemic Bias and Speech Time Bias*

More detailed observation of the concept of “bias” is required for analyzing the NCR phenomena, since I classify negative questions in terms of the polarity of their biases in my analysis. We need to make clear how we judge whether the certain question is positive-biased or negative-biased. Most previous analyses of NQs have defined positive bias and negative bias as the speaker’s expectation toward positive or negative answer, respectively. However, this definition is so broad that one sometimes finds it difficult to distinguish between positive-biased or negative-biased questions. Reese (2007) provides an approach to this problem. He attempts to formulate the semantic definition of $p/\neg p$ reading NQs, i.e., positive-biased and negative-biased NQs.

First, Reese (2007) argues that both p and $\neg p$ reading NQs have positive epistemic bias. Epistemic biases include speaker’s deontic bias (e.g., “it ought to be the case”), bouletic bias (e.g., “I want it to be the case”), or simply epistemic bias (e.g., “it may be the case / It is probably the case”). Even in $\neg p$ reading NQs, speakers have positive epistemic bias, i.e. a belief or feeling that positive answer should be the case. It is evident from the fact that $\neg p$ reading NQs convey surprise or complaint. The meanings of surprise or complaint arise as a consequence of conflict between a speaker’s prior positive epistemic belief and the negative truth. For instance, in using a $\neg p$ reading NQ (8i), a speaker has prior positive epistemic bias “I thought I was right” in the same way that a p reading NQ (8ii) expresses the speaker’s positive deontic bias “I should be right.”

Next, he claims that $\neg p$ reading NQs have negative bias, which is “non-epistemic.” He states that the negative bias in $\neg p$ reading is not epistemic, i.e., related to the speaker’s beliefs, but rather reflects characteristics of the discourse context. Thus, in $\neg p$ reading (8i), the speaker does not assume or desire the negative proposition “I was not right” but simply affected by the negative circumstance of “It appears that I wasn’t right” in the given context. On the contrary, in p reading (8ii), the speaker arguably has a positive assumption “I was right.” Reese (2007) distinguishes the negative bias in (8i) from the positive epistemic bias in (8ii), calling it “contextual bias.” His distinction between p and $\neg p$ reading NQs is illustrated in the table below.

Table 1 Positive epistemic bias and Negative contextual bias in Reese (2007)

	Positive bias	Negative bias
p (Positive-biased)	Epistemic (Assertion)	—
$\neg p$ (Negative-biased)	Epistemic (Presupposition)	Contextual

His indication that either p or $\neg p$ reading NQs have positive epistemic biases contributes to a more accurate picture of bias in negative questions. The conventional approach that characterizes bias as an “expectation” is apt to make us consider only epistemic bias. Hence, it is sometimes confusing to determine which bias the question has, especially when the $\neg p$ reading NQ has a strong positive

epistemic bias. Once we differentiate contextual bias from epistemic bias, we can describe the contrast properly between questions in (9) and (10).

He also notes the difference in the prior context that p and $\neg p$ reading questions follow. According to Reese (2007), the context is defined by the presence or absence of “compelling contextual evidence.”

- (9) Biasd Contexts: A discourse context σ is biased toward a proposition ϕ iff there is compelling contextual evidence for ϕ ; σ is biased against ϕ iff there is compelling contextual evidence for $\neg\phi$. (Reese 2007: 88)

Evidence for p is compelling if, considered in isolation, it would allow the participants to assume p (i.e., the evidence could reasonably be considered to justify the inference that p (Büring and Gunlogson 2000: 7)).

It is worth noting that whether context is positive or negative is an entirely different matter than whether the speaker’s bias is positive or negative. While speaker’s bias reflects a speaker’s assumptions, the context shows what the circumstances imply or what a collocutor (not the speaker) claims. Using the term “context,” Reese (2007) illustrates the distinction between p and $\neg p$ questions. Specifically, $\neg p$ questions follow only negative contexts, while p readings can follow negative and neutral contexts.

First, negative questions cannot occur in positive contexts regardless of whether they are p or $\neg p$ readings.

- (10) [A is sitting in a windowless office. B enters wearing a wet raincoat.]
 a. A: Is it raining?
 b. A: #Isn’t it raining? (Reese 2007: 89)

The example above illustrates positive context where it appears that positive proposition “It is raining” is true as inferred from the evidence “the wet raincoat.” Whether it is p reading or $\neg p$ reading, the NQ in (10b) is infelicitous in contexts biased toward the positive proposition, while the positive polar question in (10a) is not.

In contrast, the NQ in (11b) is felicitous in the context biased toward the negative proposition “It is not raining” given the evidence provided by the Hawaiian shirt and sunglasses.

- (11) [A is sitting in a windowless office. B enters wearing a Hawaiian shirt and sunglasses.]
 a. A: #Is it raining outside?
 b. A: Isn’t it raining outside? (Reese 2007: 89)

Moreover, negative questions cannot follow neutral contexts unless they are interpreted in a p reading. The context in (12) is neutral with respect to the

proposition “Some of the MIT syntacticians are coming.” The discourse context set up by (12a), a neutral information question, is immune to these objections. The p reading NQ in (12b) is infelicitous in this context, whereas the \neg p reading question in (12c) is not. Note that Reese (2007) distinguish between p and \neg p readings with use of polarity items (see section 3.3.1). The question with the positive polarity item (PPI) some in (11b) is limited to a p reading. In contrast, one can interpret the question in (11c), with the negative polarity item (NPI) any, only as a \neg p reading NQ.

- (12) a. A: Who is coming to the workshop?
 b. B: Aren't some of the MIT syntacticians coming?
 c. B: #Aren't any of the MIT syntacticians coming?
 (Reese 2007: 88)

I present his analysis on p/ \neg p readings in the table below with the terms “bias at speech time” and “speaker's prior epistemic bias.”

Table 2 Speaker's prior epistemic bias and Bias at speech time

	Speaker's prior epistemic bias	Context (circumstance)	Bias at speech time
p (Positive-biased)	POS (epistemic)	NEG or NEUTRAL	POS (assertion)
\neg p (Negative-biased)	POS (epistemic)	NEG	NEG (contextual)

Reese (2007) states that p reading NQs by convention assert a positive proposition, while \neg p reading NQs only implicate it as requests for additional evidence for other speaker's negative claim (cf. Reese 2007: 92, 112). In other words, speakers maintain their positive assertions in p reading NQs, challenging the negative context, whereas \neg p reading NQs indicate speakers' recognition of negative propositions because they convey speakers' surprise or uncertainty about the negative proposition that the context imply is true. Thus, the bias at speech time, which causes speakers to utter negative questions, is entirely different.

Some actual uses of negative questions from movie scripts are presented below.

- (13) p reading (in negative context)
 Barney: Where's your suit? We said suit up! I show up looking awesome and you show up in your pajamas? Fine. I'm Superman, you're Clark Kent.

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- Ted: Wait, doesn't Clark Kent always wear a suit? And doesn't Superman kinda wear pajamas?
- Barney: (IN A FEMALE VOICE) Ooh, Michelle, check out those two guys over at the bar arguing about Superman. God, that gets me hot! (AS HIMSELF) Come on, Ted. Pull yourself together.

(DS: How I Met Your Mother)

The question in (13) is an example of a p reading NQ in a negative context. Barney is blaming Ted for wearing pajamas instead of a suit. Barney, wearing a suit of course, refers to himself as Superman and Ted in his pajamas as Clark Kent. This reference is the compelling contextual evidence, inducing the negative proposition "Clark Kent doesn't wear a suit and Superman doesn't wear pajamas." Then, Ted responds with his positive assertion "Clark Kent always wears a suit and Superman kind of wears pajamas." Here, Ted refuses to admit the negative proposition as truth and insists on a positive assertion instead.

P reading NQs can be used to simply suggest a positive proposition in neutral contexts, such as in (14). The following context is related to neither p nor \neg p. Jacob's utterance "I don't get it" shows that he does not understand the situation, and then his mother explains what is happening. This utterance means he neither thinks "It is great" nor "It is not great" at that time. Here, Jim's question "Isn't that great" is used merely to assert a positive proposition, not for challenging the other speaker's negative claim.

(14) p reading (in neutral context)

[Jacob removes a colorful PAMPHLET from the envelope.]

Jim: Go ahead, read it.

Jacob: "Plastic Surgery. Isn't it about time?" (horrified) I don't get it.

Ashley: Your father and I are going to pay to have your birthmark removed.

Jim: Isn't that great?

Jacob: You got me surgery for my birthday?

Jim: Not just one. A series of them. (DS: 12 and Holding)

The context in (15) is related to a negative proposition "You don't miss him" or "You don't care him" as inferred from the previous sentence "You seem to have gone on with life pretty easily". The NQs in (14) have strong positive epistemic biases (deontic biases "You should miss him." and "You should care him."). Even so, speaker does not assume a positive proposition as an actual fact. As a result, the question cannot be paraphrased into "Now it is evident you miss him, admit it!" as well as p reading NQs can.

(15) \neg p reading

Jacob: You seem to have gone on with life pretty easily. Don't you miss

him? Don't you care?
 Malee: It's not that we don't care. It's just...
 Jacob: Life goes on.
 Malee: It does. (DS: 12 and Holding)

A question emerges here: why exactly do we need distinguish contextual bias from epistemic bias? As previously described, prior analyses have commonly refers to "speaker's bias" as epistemic bias. Yet, if we consider only epistemic bias when we judge whether NQs are positive-biased or negative-biased, all NQs in English turn out to be positive-biased (see Table 1). This result might lead to some misleading analyses about NQs.

For example, Terakado (2008) attributes the reason why response types in English and Japanese are opposed to the fact that the inherent biases in English and Japanese NQs are different. He insists that English NQs are "all based on the estimate that the positive answer should be the case (Translated from Terakado 2008)," and consequently, that responses in English take the form of "Yes, (Positive sentence)." However, this account cannot explain the occurrence of [No], (Positive sentence) to the question "Didn't you lift a finger to help him?" which has strong positive epistemic bias. Moreover, some Japanese NQs often have a positive epistemic bias. For example, by saying "Anata wa sukoshimo kare o tasukeyo to shinakatta no desu ka?" (translated into English as "Didn't you lift a finger to help him?"), the speaker expresses the belief about the proposition that 'you' are supposed to help 'him.' Nevertheless, the Japanese canonical answer is [No], (Positive sentence).

3.3 What Makes Questions Biased?

It has been commonly argued that biases in NQs are highly dependent on context. In particular, conversation analysts such as Koshik (2005) and Keisanen (2006) argue that it is solely the context in which the question used that produces bias. Alternatively, some linguists, such as Ladd (1989) and Reese (2007), propose that certain lexical items indicate the polarity of a speaker's bias in NQs. I adopt the latter approach. In this section, I introduce those 'disambiguator' I use in my survey to determine toward which polarity the question is biased.

3.3.1 Polarity Items A polarity item is a typical indicator of biases. Ladd (1989) demonstrates that the English negative question "Isn't there a vegetarian restaurant around here?" allows two possible interpretations.

In the context below, Kathleen uses the question "Isn't there a vegetarian restaurant around here?" to ask for confirmation of something she believes to be true.

- (16) [Kathleen and Jeff have just come from Chicago on the Greyhound bus to visit Bob in Ithaca.]

Bob: You guys must be starving. You want to go get something to eat?

Kathleen: Yeah, isn't there a vegetarian restaurant around here —Moosewood, or something like that?

Bob: Gee, you've heard of Moosewood all the way out in Chicago, huh? OK, let's go there.

(Ladd 1989: 164, underlines are mine)

On the other hand, in (17), Bob uses the NQ for a very different reason. According to Ladd, "he had previously assumed the truth of the proposition 'There is a vegetarian restaurant around here,' but has now inferred from what Kathleen says that this proposition is actually false, and is using the NQ to check this new inference" (Ladd 1989: 164).

- (17) [Bob is visiting Kathleen and Jeff in Chicago while attending CLS.]

Bob: I'd like to take you guys out to dinner while I'm here—we'd have time to go somewhere around here before the evening session tonight, don't you think?

Kathleen: I guess, but there's not really any place to go in Hyde Park.

Bob: Oh, really, isn't there a vegetarian restaurant around here?

Kathleen: No, about all we can get is hamburgers and souvlaki.

(Ladd 1989: 164)

He remarks that $p/\neg p$ reading NQs are different in terms of the scope of negation. Specifically, in p reading questions such as (16), the negation is outside the proposition under question. What is being questioned is the speaker's belief P . On the contrary, in cases such as (16), the negation is contained inside the proposition under question so that what is being questioned is the inference $\neg P$.

- (18) Isn't there a vegetarian restaurant around here?

a. p reading (Outside Negation)

not [there is a vegetarian restaurant around here]?

b. $\neg p$ reading (Inside Negation)

[There is not a vegetarian restaurant around here]?

He points out that the negative questions with PPI are limited to p reading only and those with NPI to $\neg p$ readings. For example, one can ask the question in (19a) only when he or she presumes that Jane is coming. In contrast, (19b) are restricted to a $\neg p$ reading where the speaker intends to confirm that Jane is not coming. The phrasal NPI lift a finger in (20) likewise confines the question to a $\neg p$ reading. He proposes that polarity items to disambiguate $p/\neg p$ readings given, the assumption that outside negation cannot license NPI.

- (19) a. Isn't Jane coming too?
 b. Isn't Jane coming either? (Ladd 1989: 166)
- (20) Aren't you going to lift a finger to help? (ibid.)

This distinction according to polarity items is commonly used approach in semantic analyses on negative interrogative constructions. Although I do not adopt the idea of inside/outside negation, the fact that the bias of an NQ is limited by polarity items is effective in conducting the survey.

3.3.2 *Noda in Japanese* It is not only polarity items that indicate speaker's bias in negative questions. The purpose of this section is to point out the pragmatic function of Japanese *noda* as a bias marker in negative questions, with corpus-based evidence and information provided by informants.

The basic negative question in Japanese "nai-ka" is consistent with *nai* (not, negation) and *ka* (question). In addition, there are also NQs "nai-no-ka" (NEG-no(da)-Q) with *no(da)*. "Nai-ka" and "nai-no-ka" are generally used in written discourse and therefore less common in conversation. Speakers are more likely to use "mas-en-ka" (Polite *masu* + NEG + Q) and "nai-desu-ka" (NEG + Polite *desu* + Q), which are the polite forms of "nai-ka". "Nai-no-ka" has only one variant with *desu*, namely "nai-no-desu-ka" (NEG + *no(da)* + Polite *desu* + Q). Here, we use these three variants, and examples are presented as follows:

- (21) a. "Masen-ka"
 Kare wa kokosei deha ari masen ka?
 he high school student not Q
 "Isn't he a high school student?"
- b. "Nai-desu-ka"
 Kare wa kokosei deha nai desu ka?
 he high school student not Q
 "Isn't he a high school student?"
- c. "Nai-no-desu-ka"
 Kare wa kokosei deha nai no desu ka?
 he high school student not Q
 "Isn't he a high school student?"

Analysis of BCCWJ, the electronic corpus of Japanese, reveals that "nai-no-desu-ka" is typically used as a $\neg p$ reading question. The distribution of bias in the three types of Japanese negative questions, as shown in the corpus, is presented below.

Table 3.1

		Total	Raw number out of 500			
			p	\neg p	neutral	invalid
Nai ka	Masen ka	10312	153 (30.6%)	30 (6%)	270 (54%)	47 (9.4%)
	Nai desu ka	5246	255 (51%)	6 (1.2%)	19 (3.8%)	220 (44%)
Nai no ka	Nai no desu ka	1379	3 (0.6%)	495 (99%)	0 (0%)	2 (0.4%)

The examples are cited in Japanese in the appendix. I restricted the following word to periods, quotes or question marks in order to exclude samples that are not questions. Despite the specific search string, there were some irrelevant tokens among the hits. I exclude them mainly for two reasons. First, some of these tokens cannot be considered questions (Appendix 1d), and second, others are part of other constructions (Appendix 2d, 3d, 4c).

Note that the neutral negative questions in Japanese are used as hedged questions for avoiding the corresponding positive polar question, which is perceived as more direct. In contrast, English does not have this usage of NQs for avoiding a direct question because NQs are regarded as less polite, threatening others' negative face by presupposing the positive proposition. For example, a Japanese NQ "Onaka ga suite imasen ka?" is literally translated as "Aren't you hungry?" in English. Although the English question inevitably presumes a positive proposition, the Japanese question might only function as an information-seeking question. Japanese speakers frequently use negative questions in order to avoid the positive equivalence.

The negative-biased character of "Nai-no-ka" is also attested by informants. "Nai-no-ka" cannot occur in contexts with a positive proposition. The context in (22) includes the positive proposition "You went out with someone" as inferred from the prior context and PPI darekato ('someone' in English). (22c) with noda is pragmatically infelicitous in a positive context. In contrast, "nai-no-ka" is felicitous in the context with a negative proposition, as in (23c).

(22) PPI "darekato"

Kino machi de mikaketa kigashimasu ga,

Yesterday city in see think

a. dareka-to dekake masen-desita ka?

Someone-with go out not-did Q

b. dareka-to dekake naka-tta desu ka?

Someone-with go out not-Past Q

c. #dareka-to dekake naka-tta no desu ka?

Someone-with go out not-Past Q

"I think I saw you in the city yesterday, didn't you go out with

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someone?"

(23) NPI "daretomo"

Kino-wa ie no akari-ga tsuite imashita ga,
Yesterday-TOP home of lights-NOM on be-Past

a. ?daretomo dekae masen-deshita ka?

With-anyone go out not-Past Q

b. ?daretomo dekae naka-tta desu ka?

With-anyone go out not-Past Q

c. daretomo dekae naka-tta no desu ka?

With-anyone go out not-Past Q

"Lights were on at your home yesterday. Didn't you go out with anyone last night?"

Similarly, "nai-no-ka" would normally be considered ill-formed in the positive context of (24c) with PPI, while it naturally occurs in the negative context of (25c).

(24) PPI "nanika"

[It is the birthday of the speaker. Yet the addressee seems to forget it.]

a. Nanika wasurete imasen ka?

Something forget not Q

b. Nanika wasurete inai desu ka?

Something forget not Q

c. #Nanika wasurete inai no desu ka?

Something forget not Q

"Don't you forget something?"

(25) NPI "hitokuchi-mo"

A: Sekkaku ryori-o tsukutta noni, onaka-ga ippai
Bother meal-ACCmake although stomach-TOP full
dato itte tabete kure na-kattan desu yo.
that say eat not-did

"Although I bother cooking dinner for him, he didn't have it, saying that he's full."

B: Shitsurei desu ne.

Rude be

a. ??Hitokuchi mo tabe masen-deshita ka?

single bite even eat not-did Q

b. ??Hitokuchi mo tabe naka-tta desu ka?

single bite even eat not-did Q

c. Hitokuchi mo tabe naka-tta no desu ka?

single bite even eat not-did Q

"That is rude! Didn't he eat a single bite?"

It is clear that the questions formed with “nai-no-ka” are used in $\neg p$ readings. This represents a new finding about the function of noda.

- (26) The pragmatic function of noda marks the preposed proposition as a speaker’s bias.

For example, “Nai-ka” in (27a) can be both a p and $\neg p$ reading because there is no bias-marker. The addressee would judge whether it is positive-biased or negative-biased depending on the prior context. On the contrary, in questions with noda such as (27b), the negative bias preposed immediately before noda (“Kare wa kokosei deha nai” translated as “He is not a high school student”) marks a speaker’s bias. As a result, the questions with “nai-no-ka” are restricted to a $\neg p$ reading.

- (27) a. Kare wa kokosei deha arimasen ka?
 [Kare wa kokosei] deha arimasen ka?
 [Kare wa kokosei deha arimasen] ka?
- b. Kare wa kokosei deha nai no desu ka?
 [Kare wa kokosei deha nai] no desu ka?

The case of “no-dewa-nai-ka” can provide supporting evidence of this idea. “No-dewa-nai-ka” is another type of question with noda. In this type, Noda is inserted before negation, while it is inserted after negation in the type of “nai-no-ka.” The p reading is expected for “no-dewa-nai-ka” given the fact that noda comes before negation. The positive proposition “Kare wa kokosei” (translated as “He is a high school student”) is marked as a bias under this assumption about noda.

- (28) Kare ha kokosei na no dewa nai desuka?
 [Kare ha kokosei na] no dewa nai desuka?

In fact, it is evident from the corpus that this type of NQ can only have a p reading. According to BCCWJ, 318 out of 323 samples are p reading NQs and no example of $\neg p$ readings were found (Table3.2).

Table 3.2

	Total	Raw number out of 323			
		p	$\neg p$	neutral	invalid
No-deha-nai-desu-ka	323	318 (98.5%)	0 (0%)	0 (0%)	5 (1.5%)

At this point, we can argue that *noda* is useful to mark a speaker's positive/negative bias according to their position. However, we cannot distinguish $p/\neg p$ by the existence or non-existence of *noda*. As we can see in Table 3.1, NQs without *noda* can be used in both p and $\neg p$ readings. In my survey, I use polarity items and discourse contexts in addition to *noda* in order to make sure toward which polarity the NQs have a bias.

4 SURVEY RESULT

I conducted an investigation with native speakers about the acceptability of NCRs. The informants included 17 English speakers (10 for the interview, 7 for the questionnaire), 20 Japanese speakers (3 for the interview, 17 for the questionnaire), and 10 French speakers (3 for the interview, 7 for the questionnaire). They were asked to judge whether each sentence is natural as an answer to the given negative question. I offered four possible sentences as answers for each question: [Yes][Hai][Si] + (Positive sentence), [Yes][Hai][Si] + (Negative sentence), [No][Iie][Non] + (Positive sentence) and [No][Iie][Non] + (Negative sentence). The subjects evaluated the pragmatic acceptability of each answer according to three levels: \square / ? / *.

4.1 English

Although the canonical answer in English is [Yes], (Positive sentence), some informants accepted the non-canonical responses, namely [Yes], (Negative sentence) / [No], (Positive sentence). For example, 5 out of 17 speakers consider it possible to reply [No], (Positive sentence) to the question in (27).

(29) $\neg p$ reading

A: Didn't you go out with anyone last night?

B: Yes, I went out with Mary.

B: ?? Yes, I didn't.

B: ?No, I went out with Mary.

B: No, I didn't.

Table 4.1.1

	Yes, POS	Yes, NEG	No, POS	No, NEG
□	14	1	3	14
?	1	0	2	0
*	2	16	12	3

Table 4.1.1 shows how many speakers chose each acceptability level for every answer. Shaded areas show the number of speakers who accepted NCRs.

More informants accepted NCRs to the $\neg p$ reading NQ with a strong NPI lift a finger in (30).

(30) $\neg p$ reading

A: Didn't you lift a finger to help him?

B: Yes, I helped him.

B: ??Yes, I didn't help him.

B: ?No, I helped him.

B: No, I didn't help him.

Table 4.1.2

	Yes, POS	Yes, NEG	No, POS	No, NEG
□	16	1	3	17
?	1	1	7	0
*	0	15	7	0

However, NCRs were not equally accepted as an answer to every negative question. Interestingly, most of informants thought it impossible to reply in using a non-canonical response when the questions were positive-biased, as in (31).

(31) p reading

A: Didn't you go out with someone last night?

B: Yes, I went out with Mary.

B: *Yes, I didn't.

B: *No, I went out with Mary.

B: No, I didn't.

Table 4.1.3

	Yes, POS	Yes, NEG	No, POS	No, NEG
□	17	0	0	17
?	0	0	2	0
*	0	17	15	0

Therefore, it is likely that English speakers are, to some extent, affected by the questioner's bias in the same way as Japanese speakers. Most of the informants found it difficult to judge whether the answers were natural. In fact, they admitted that they would be confused if others responded with only "yes" or "no" to their negative questions. Previous analyses also point this out. (cf. Otsuka 1970, Pope 1973).

It is also worth noting that among NCRs [Yes], (Negative sentence) was less common than [No], (Positive sentence). This presumably relates to the discourse function of NCRs. According to the informants, the NCR [No], (Positive sentence) is associated with disagreement more so than the corresponding canonical response. Thus, speakers had a good reason to choose NCRs, that is, in order to emphasize their denial of a questioner's negative claim. On the other hand, the NCR [Yes], (Negative sentence) expresses a pragmatic concept of agreement with the questioner's assertion. In these cases, they had little need to choose the unusual response form.

4.2 Japanese

The Japanese case is more complicated. First, Japanese canonical responses are different according to p and $\neg p$ readings. The responses [Hai], (Positive sentence) / [Iie], (Negative sentence) are used with p reading NQs, and the responses [Hai], (Negative sentence) / [Iie], (Positive sentence) are used with $\neg p$ reading NQs. However, this is not always the case. [Hai], (Negative sentence) / [Iie], (Positive sentence) were accepted with $\neg p$ reading NQs by some of informants. Although the acceptability of this form is quite low, it is worth considering. If Japanese speakers only responded strictly to the questioner's bias, there should be no shaded area in Table 4.2.1.

(32) p reading

Kino mikaketa kigashimasu ga, dareka to dekae masen deshita ka?
 "I think I saw you yesterday. Didn't you go out with someone?"

Table 4.2.1

	Hai, POS	Hai, NEG	Iie, POS	Iie, NEG
□	19	0	0	19
?	1	4	2	1
*	0	16	18	0

The acceptability of a NCR decreased when the question was interpreted as a $\neg p$ reading NQ.

(33) $\neg p$ reading

Kino wa ie ni ita yo desu ga, daretomo dekake naka-tta no desu ka?

“It seems that you stayed at home yesterday. Didn’t you go out with anyone?”

Table 4.2.2

	Hai, POS	Hai, NEG	Iie, POS	Iie, NEG
□	0	20	18	0
?	0	0	1	2
*	20	0	1	18

The Japanese NCR is rather vague when compared to that of English. More examples allow us to confirm that the acceptability of NCRs somewhat increases in p readings. There are more shaded areas that indicate the occurrence of an NCR in p readings (34) and (35) than in $\neg p$ reading (36).

(34) p reading

Kao ni mioboe ga arimasu.

face remember be

Imamade ichido oaisita koto ga arimase-n ka?

ever once meet be-NEG Q

“I saw your face before. Didn’t we meet each other once before?”

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Table 4.2.3

	Hai, POS	Hai, NEG	Iie, POS	Iie, NEG
□	19	2	2	19
?	0	3	2	0
*	1	15	16	1

(35) p reading

Mada yoru no hachiji desu yo. Kanojo, mo nete imasen ka?
 Still night of 8 o'clock she already sleepnot Q
 "It's still eight o'clock. Isn't she sleeping already?"

Table 4.2.4

	Hai, POS	Hai, NEG	Iie, POS	Iie, NEG
□	18	2	2	18
?	1	4	2	1
*	1	14	16	1

(36) ¬p reading

Imamade ichido mo kaigai ni i-tta koto ga nai no desu ka?
 Ever once even abroad go-Past not Q
 "Haven't you ever been abroad?"

Table 4.2.5

	Hai, POS	Hai, NEG	Iie, POS	Iie, NEG
□	0	20	18	0
?	1	0	2	2
*	19	0	0	19

4.3 French

Most of the French informants did not accept any non-canonical answer among the four categories: [Si] + (Positive sentence), [Si] + (Negative sentence), [Non] + (Positive sentence) and [Non] + (Negative sentence).

(37) p reading

Tu n'es pas sortie avec quelqu'un hier?

You not-be go out with someone yesterday

“Didn't you go out with someone yesterday?”

Table 4.3.1

	Si, POS	Si, NEG	Non, POS	Non, NEG
□	10	0	0	10
?	0	1	0	0
*	0	9	10	0

(38) ¬p reading

Tu n'es pas sortie avec personne hier?

You not-be go out with no one yesterday

“Didn't you go out with anyone yesterday?”

Table 4.3.2

	Si, POS	Si, NEG	Non, POS	Non, NEG
□	10	0	1	8
?	0	0	1	1
*	0	10	8	1

For both p readings and ¬p readings, the non-canonical answers were rarely accepted. Instead, [Oui], (Positive sentence), which is not the canonical form of the response, was widely accepted as an answer to both p and ¬p negative questions.

(39) p reading

A: Tu n'es pas sortie avec quelqu'un hier?

B: Oui, je suis sortie avec Louis.

Yes I am go out with Louis

“Yes, I went out with Louis.”

B: *Oui, je ne suis pas sortie.

Yes I not am go out

“Yes, I didn't go out.”

Table 4.3.3

	Oui, POS	Oui, NEG
□	3	0
?	5	0
*	2	10

(40) ¬p reading

A : Tu n'es pas sortie avec personne hier?

B : Oui, je suis sortie avec Louis.

B : *Oui, je ne suis pas sortie.

Table 4.3.4

	Oui, POS	Oui, NEG
□	1	0
?	4	2
*	5	8

Although Asakura (2002) already noted that we can respond with [Oui], (Positive sentence) to positive-biased NQs , it is now evident that [Oui] is available as an answer not only to positive-biased NQs but also to negative-biased NQs in French. According to the informants' intuitions, the answer Si seems to express contrast between the negation in the question and the positive truth. On the other hand, the NCR with Oui sounds more neutral with respect to the given question.

4.4 Survey Results

The table below shows the survey results for three languages. Responses to negative questions were confusing even for native speakers. NCRs did indeed occur with some regularity. For this reason, they were unlikely speaker's errors.

Table 4.4 Canonical/Non-canonical responses

	bias	Canonical response	Non-canonical response
English	p	Yes, POS / No, NEG	
	\neg p		Yes, NEG / No, POS
Japanese	p	<i>hai</i> , POS / <i>iee</i> , NEG	<i>hai</i> , NEG / <i>iee</i> , POS
	\neg p	<i>hai</i> , NEG / <i>iee</i> , POS	
French	p	Si, POS / Non, NEG	Oui, POS
	\neg p		

In English, NCRs were accepted as an answer to negative-biased negative questions in particular. This pattern may be the result of the discourse function of English NCRs, which express disagreement with the previous negative claim. As for Japanese, the NCRs *hai*, NEG / *iee*, POS were accepted with p reading NQs, while possible NCRs *hai*, POS / *iee*, NEG were judged infelicitous as a response to a \neg p reading NQ. Finally, French has non-canonical responses to negative questions formed as [Oui], (Positive sentence). The use of a NCR with *Oui* expresses the speaker's neutral stance toward the question, whereas the canonical response *Si* conveys a contrast between the negation in the question and the positive truth.

5 HYPOTHESIS

5.1 Question-Answering System in NQs

Following the survey results presented in Chapter 4, I formed a hypothesis about the common question-answering system among the three languages.

- (41) When speakers answer NQs, they consider these three elements of the NQ:
- (i) Bare proposition
 - (ii) Negation
 - (iii) Speaker's bias (at speech time)

The point is that the target of the responses in each language was not confined to one element; rather, speakers perceived all three elements when they formulated their responses. Although there was a preferred target in each language, speakers still recognized the need to consider all three elements. In fact, all of the occurrences

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of NCRs can be regarded as the result of speakers responding to a different target than the usual. The table below shows whether each element is positive or negative in $p/\neg p$ readings along with which element each language responds to in their canonical and non-canonical answers.

Table 5 Three elements in NQ to be considered

	bare proposition	morphological negation	bias at speech time
p (Positive-biased)	POS	NEG	POS
$\neg p$ (Negative-biased)	POS	NEG	NEG
	↑	↑	↑
【Canonical】	E, F(Non)	F(Si)	J
【Non-canonical】	F(Oui/Non)	J	E

First, English chiefly responds to the bare proposition. Therefore, the answer takes the form of YES+POS or NO+notPOS(NEG). However, English also may be affected by speaker's bias. In that case, the answer is YES+POS, NO+notPOS(NEG) in a p reading NQ (Table 5.1), and YES+NEG, NO+ notNEG(POS) in a $\neg p$ reading NQ (Table 5.2). There is no NCR that functions as an answer to a p reading because the answer ends up taking the same form as the canonical one.

Table 5.1 Didn't you go out with someone last night? (=31)

	bare proposition	morphological negation	bias at speech time
p (Positive-biased)	POS	NEG	POS
	↑		↑
	CR(canonical response)		NCR

Table 5.2 Didn't you lift a finger to help him? (=30)

	bare proposition	morphological negation	bias at speech time
\neg p (Negative-biased)	POS	NEG	NEG
	↑		↑
	CR		NCR

Second, Japanese responses are usually targeted to the questioner's bias at speech time. Consequently, the answer takes the form of YES+POS, NO+notPOS(NEG) for a p reading NQ, and YES+NEG, NO+ notNEG(POS) for a \neg p reading NQ. At the same time, Japanese can be affected by negation. In that case, the answer is YES+NEG or NO+ notNEG(POS) for either p or \neg p reading NQs. Therefore, there is a NCR for a p reading NQ (table 5.3), whereas we expect no NCR for a \neg p reading NQ because the polarity of the target is already negative (table 5.4).

Table 5.3 Kao ni mioboe ga arimasu. Imamade ichido oaishita koto ga arimasen ka? (=34)

	bare proposition	morphological negation	bias at speech time
p (Positive-biased)	POS	NEG	POS
		↑	↑
		NCR	CR

Table 5.4 Kino wa ie ni ita yo desuga, daretomo dekae nakatta no desuka? (=33)

	bare proposition	morphological negation	bias at speech time
\neg p (Negative-biased)	POS	NEG	NEG
		↑	↑
		NCR	CR

Finally, French speakers react to the different targets in the canonical response. When the negative sentence is true, they respond according to the bare proposition.

Meanwhile, when the positive sentence is true, they answer with *Si* to contradict the negation. Following this, the canonical answer would be $[\text{Si}] + \text{notNEG}(\text{POS})$, $\text{Non} + \text{notPOS}(\text{NEG})$. In the non-canonical response for French. The focus is only on the bare proposition. As a result, the non-canonical response is formed as $\text{Oui} + \text{POS}$, $\text{Non} + \text{notPOS}(\text{NEG})$.

Table 5.5 Tu n'es pas sortie avec quelqu'un hier? (=37)

	bare proposition	morphological negation	bias at speech time
p (Positive-biased)	POS	NEG	POS
\neg p (Negative-biased)	POS	NEG	NEG
	↑	↑	
	CR(Non)	CR(Si)	
	NCR(Oui, Non)		

5.2 A Case Study of English Declarative Negative Questions

This section examines a relevant construction, declarative negative questions, in order to verify the hypothesis. English declarative negative questions, such as “You are not a student?” are deemed to be a confirmation rather than an information seeking question. According to their structure, we can consider them to be a statement that highlights the speaker’s bias. In fact, informants accepted the agreement response “Right” to those questions, while they admit that the use of agreement phrases to NQs are less natural.

It is evident from both the corpus and audio-visual materials that acceptability of NCRs to declarative negative questions is considerably high, compared to the case of inverted NQs. Five out of eight informants accepted NCRs to the question in (40).

- (42) He didn't call you last night?
- Yes, he called me.
 - ??Yes, he didn't call me.
 - ?No, he called me.
 - No, he didn't call me.

Table 6

	Yes, POS	Yes, NEG	No, POS	No, NEG
□	7	1	4	8
?	0	1	1	0
*	1	6	3	0

Furthermore, NCRs to English declarative negative questions are frequently found in audio-visual materials such as movies and television, as in (41a) (41b). Uchida (1987) likewise point out the non-canonical use of Yes/No to the declarative negative question in (42).

- (43) a. “But I don’t wanna sound desperate.” “Yeah.” (Yes Man)
 b. “What, you didn’t think it was important?” “No, no, of course it is.” (Gossip Girl)
- (44) “You don’t have tell me if you don’t want.” “No, I do.” he said “I want to tell you” (Uchida 1987: 281)

The high acceptability of NCRs to declarative negative questions supports my hypothesis because they illustrates that more English speakers allow the NCRs when the speaker’s negative bias in the question receives more attention.

6 CONCLUSION

This paper focused on the non-canonical responses to NQs, which have been neglected by previous analyses. The aims of the analysis was to explore when NCRs can/cannot be accepted in English, French, and Japanese.

The findings of this study are discussed in turn below:

1. In English, the non-canonical responses [Yes], (Negative sentence) / [No], (Positive sentence) are accepted particularly as answers to negative-biased negative questions.
2. In French, the non-canonical responses to negative questions is formed as [Oui], (Positive sentence).
3. The occurrence of NCRs among the three languages can be accounted for in terms of variation in the target element to which the languages react.

This paper also attempted to further our understanding of bias in negative

questions. I distinguished between positive-biased and negative-biased negative questions according to the difference in bias at speech time, which causes speakers to utter them. For example, positive-biased NQs express a speaker's attitude of disagreement with the negative context, whereas negative-biased NQs indicate a speaker's orientation toward negative propositions, namely that they convey the speaker's surprise, uncertainty, or even unhappiness about the fact that the negative proposition is true.

This paper also discussed the factors that make negative questions biased toward positive or negative answers. I showed that Japanese *noda* functions as a marker of speaker's bias in negative questions with corpus-based evidence and information provided by informants.

Many problems still remain. The distinctions between the acceptability and unacceptability of the non-canonical responses are rather ambiguous and arbitrary. More data are needed for further discussion. Moreover, we lack examples of the actual use of NCRs from corpora, books, and audio-visual materials. Finally, the question why NCRs occur is still unsolved, although it is suggested that the discourse function of NCRs triggers their use.

REFERENCES

- Adachi, Taro (1992) " 'Katamuki' o Motsu Gimonbun: Joho Yokyubun kara Joho Teikyobun e," *Nihongo Kyoiku* 77, 49-61.
- Akiyama, M. Michael (1992) "Cross-Linguistic Contrasts of Verification and Answering Among Children," *Journal of Psycholinguistic Research* 21: 2, 67-85.
- Araki, Kazuo and Minoru Yasui (1992) *Sanseido's New Dictionary of English Grammar*, Sanseido, Tokyo.
- Asakura, Sueo and Koichi Kinoshita (2002) *Shin Furansu Bunpo Jiten*, Hakusuisha, Tokyo.
- Brown, Penelope and Stephen C. Levinson (1987) *Politeness: Some Universals in Language Usage*, Cambridge University Press, New York.
- Heinemann, Trine (2006) "Will You or Can't You?: Displaying Entitlement in Interrogative Requests," *Journal of Pragmatics* 38, 1081-1104.
- Heritage, John (2002) "The Limits of Questioning: Negative Interrogatives and Hostile Question Content," *Journal of Pragmatics* 34, 1427-1446.
- Heritage, John and Geoffrey Raymond (2005) "The Terms of Agreement: Indexing Epistemic Authority and Subordination in Talk-in-Interaction," *Social Psychology Quarterly* 68: 1, 15-38.
- Huddleston, Rodney and Geoffrey K. Pullum (2002) *Cambridge Grammar of the English Language*, Cambridge University Press, Cambridge.
- Keisanen, Tiina (2006) *Patterns of Stance Taking: Negative Yes/No Interrogative and Tag Questions in American English Conversation*, Doctoral Dissertation at University of Oulu.
- Kobayashi, Toshihiko (1998) "Japanese Learners' SLA in Responses to English

- Negative Interrogative Sentences,” *Language Studies* 6, 35-42, Otaru University of Commerce, Hokkaido.
- Koshik, Irene (2005) *Beyond Rhetorical Questions: Assertive Questions in Everyday Interaction*, John Benjamins Publishing, Amsterdam.
- Koza, Akiko (1989) “-Ka, -Noka: Kaiwabun ni okeru Baai,” *Kyoiku Kokugo* 97, 23-33.
- Kunihiro, Tetsuya (1982) *Hasso to Hyogen*, Nichieigo Hikaku Koza 4, Taishukan, Tokyo.
- Kuno, Susumu (1973a) *The Structure of the Japanese Language*, MIT press, Massachusetts.
- Kuno, Susumu (1973b) *Nihon Bumpo Kenkyu*, Taishukan Shoten, Tokyo.
- Kusumoto, Tetsuya (1994) “Hiteigimombun to Sono Outou ni kansuru Oboegaki,” *Tokyo Gaikokugo Daigaku Ryugakusei Nihongo Kyouiku Center Ronshu* 20, 1-14, Tokyo University of Foreign Studies, Tokyo.
- Ladd, D. Robert (1981) “A First Look at the Semantics and Pragmatics of Negative Questions and Tag Questions,” *CLS* 17, 164-171.
- Matsuo, Fumiko (2004) “Hiteigimombun no Kaisyaku to Sono Syuhen,” *Baiko Gakuin Daigaku Joshi Tanki Daigakubu Ronsyu* 37, 46-56, Baiko Gakuin University and Baiko Gakuin Women's Junior College, Yamaguchi.
- Nakao, Toshio (2003) *Henka suru Eigo*, Hitsujishobo, Tokyo.
- Nakau, Minoru (1984) “Sitsugi Outou no Hasso to Rinri,” *Nihongogaku* 3: 4, 13-20.
- Noda, Harumi (1997a) “-Noka?, -No?, -Ka?, -φ?: Shitsumombun no Bumatsu no Katachi,” in Tatsuo Miyajima and Yoshio Nitta (eds.), *Nihongo Ruigihyogen no Bumpo Tambunhen*, 210-219, Kuroshio Shuppan, Tokyo.
- Noda, Harumi (1997b) *No(da) no Kinou*, Kuroshio Shuppan, Tokyo.
- Oguma, Kazuro (1990) “‘Nodesuka’ no Gimombun o Megutte: Imiron to Buntairon,” *Buntairon Kenkyu* 36, 27-38.
- Otsuka, Takanobu (1970) *Sanseido's Dictionary of English Grammar*, Second Edition (Revised & Enlarged), Sanseido, Tokyo.
- Pope, Emily (1973) “Question-Answering Systems,” *CLS* 9, 482-492.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech and Jan Svartvik (1985) *A Comprehensive Grammar of the English Language*, Longman, New York.
- Reese, Brian Jon (2007) *Bias in Questions*, Doctoral Dissertation at the University of Texas at Austin.
- Romeo, Maribel and Chung-hye Han (2004) *On Negative Yes/No Questions*, *Linguistics and Philosophy* 27, 609-658.
- Sasaki, Hideki (1990) “Nihongo no Hiteigimombun ni taisuru Outoubun: Eigo Kyoiku no Tachiba kara,” *Komazawa Joshi Tanki Daigaku Kenkyu Kiyu* 23, 93-101, Komazawa Women's University, Tokyo.
- Swan, Michael (2007) *Oxford Jitsurei Gendai Eigo Yoho Jiten*, (Third Edition), translated by Seiji Yoshida, Kenkyusha, Tokyo. [Originally, Swan, Michael (2005) *Practical English Usage* (Third Edition), Oxford University Press, Oxford.]
- Tanomura, Tadaharu (1988) “Hiteigimombun Syoko,” *Kokugogaku* 152, 109-123.
- Tanomura, Tadaharu (1991) “Gimombun ni okeru Kotei to Hitei,” *Kokugogaku* 164, 115-128.

A QUESTION-ANSWERING SYSTEM IN NEGATIVE QUESTIONS

- Terakado, Noboru and Toshiya Sato (2008) "Hiteigimombun ni taisuru Nihongo to Dokugo, Eigo no Kangaekata no Soui," *Claritas* 21, 80-98, Aichi University of Education, Aichi.
- Uchida, Seiji (1987) "Futatsu no Yes/No," *The Rising Generation* 133, 6, 280-282.
- Yoshimura, Akiko (1999) *Hitei Kyokusei Gensho*, Eihosha, Tokyo.

CORPUS

Balanced Corpus of Contemporary Written Japanese: BCCWJ
 (<http://www.kotonoha.gr.jp/shonagon/>)

SOURCES

- Gossip Girl First Season (2010) Dir. Josh Schwartz. Perf. Blake Christina Lively, Warner Home Video, DVD.
- The daily script (<http://www.dailyscript.com/>): DS
- Yes Man (2008) Dir. Peyton Reed. Perf. Jim Carrey. Warner Bros. Pictures. Film

APPENDIX

This appendix provides examples of three forms of Japanese negative questions which we investigate in the section 3.3.2. All sentences here are cited from BCCWJ.

(1) *masen-ka*

Positive-biased

a. [From the book *Genki na Ashi no Tsukurikata*, 2004.]

「あらためてこう言われると、何もわからないまま治療を受けるのはなんと怖いことかと思いませんか」

Negative-biased

b. [From the novel *Chitei Dodompa Otoko*, 1986.]

「おいゴンドム。なんでそんなにひっしになって漕ぐんだよ」「気づきませんか？」ゴンドムはボートを漕ぎながら言う。「へ？」「近づいてきてるんです」

Neutral

c. [From the novel *Perikan Bengoshi to Cho Narikin Kyuden*, 1991.]

「奥さま、なにかお心当たりはありませんか」「ううん。ないわ」京子は、反射的に首を振った。

Invalid

d. [From the novel *Kaze no Kumikyoku*, 2004.]

すると、どうでしょう、ライオンはすごすごと引き下がっていくではありませんか。

(2) *nai-desu-ka*

Positive-biased

a. [From the journal *Chijo*, 2005]

わかっているつもりでも、いざ「なにか？」と聞かれると説明できないことって多くないですか？とくに「農政問題」ってそうじゃないでしょうか。

Negative-biased

b. [From the book *Reichiro Shiki Gaisha Hihyo*, 2003]

礼一郎「オモリ載せてる？ドコに。」スティック荒井「あれご存じないですか。リアのフロアですよ」

Neutral

c. [From the book *Zou ga Naita Hi*, 2004.]

テレビ番組のスタートに間に合わせようと、さっそく「ゆずっていただけるゾウさんはいないですか？」と、何カ所もの動物園に問い合わせをしました。

Invalid

149 out of 220 lines I considered to be invalid in the samples of “*nai-desu-ka*” are the part of “*no-dewa-nai-desu-ka*,” which I investigated again later.

d. [From the novel *Akachan o Sagase*, 2001]

「初対面の相手にそんなことして人格を疑われない人、普通いないんじゃないですか？」「陽奈ちゃんだって似たようなことしてるじゃない」

(3) *nai-no-desu-ka*

Positive-biased

2 out of 3 positive-biased examples are formed as “*no-dewa-nai-no-desu-ka*” with two *noda* inserted both before and after negation.

a. [From the abstracts of the 080th Japanese Diet, 1977.]

「業界を守ろう、生産者を守ろうといったものは崩れておるといふふうに理解できるんじゃないのですか。そういうふうに考えざるを得ないのじゃないのですか。いかがですか。」

b. [From the abstracts of the 129th Japanese Diet, 1994.]

「非常に大きな株の買入れの能力、逆に言えば、株価操縦能力を持つのでないのですか。」

Negative-biased

c. [From the novel *Gin no Senshi*, 2002.]

「この国の人々は、祭りの日には祈らないのですか？いや、祭りの日だけでなく、あまり祈ること自体に熱心ではないようですね」

Invalid

There is only one invalid example of “*nai-no-desu-ka*”. In this sentence, “*nai*” is not a negation but the part of the adjective “*abunai* (dangerous)”.

d. [From the web site Yahoo! Chiebukuro]

危ないのですか？危ないです。

(4) *no-dewa-nai-desu-ka*

Positive-biased

a. [From the novel *Isen Kokushi*, 2001.]

「そうですか？本当は、寝吉から知らされたと思っていたのではないですか？」「とんでもない。このような大事、間違えるわけがない。」「そうですか...」

b. 「たった今、電話がありました。自己に遭われたそうで、すぐに行ったほうがいいのではないですか？」「お義兄さんが...事故？」「ええ、上で車が待っています。」

Invalid

All of the five invalid examples of “*no-dewa-nai-desu-ka*” are dismissed because “*no*” is not “*noda*” but the part of a noun “*mono* (thing)”.

c. [From the book *Yoroppa: E de Miru Rekisi Sampo*, 1999.]

「画家の業績は最初期から始まり、どう成長して行くかを見せるものではないですか。これでは全く正反対ですよ。」

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