Negative polar questions and bias in Korean

Youn-Gyu Park (The University of Texas at Austin)
youngyu.park@utexas.edu

1. Negative questions (Neg-Qs)

It is generally accepted that Neg-Qs can convey **speaker bias**.

(1) **Original speaker bias** (for a proposition *p*)
Belief or expectation of the speaker that *p* is true, based on their epistemic state prior to the current situational context. (cf., Ladd 1981: 66)

For instance, in English (*inter alia*, Goodhue 2022):

(2) a. Was it **not** raining? [Low Neg-Q, LNQ]
b. Was**n't** it raining? [High Neg-Q, HNQ; bias for *p*]

Korean exhibits two morphological negation forms. In polar questions, they can yield **different interpretations** (Kim 2016; Yang and Park 2024):

(3) a. **Short Form (SF) Neg-Q *an***: Unbiased
pi-ka **an** o-ni?
rain-NOM SF.NEG come-QUE
'Is it **not** raining?'
b. **Long Form (LF) Neg-Q (*-ci*) *anh-***: Ambiguous
pi-ka o-ci **anh**-ni?
rain-NOM come-CONN LF.NEG-QUE
'Is**n't** it raining? / Is it **not** raining?'

This study investigates the **discourse-sensitive behavior** of Neg-Qs in Korean, drawing on insights from Farkas and Bruce (2010), among others.

2. Key properties

When **the past tense marker *-ass/-ess*** is added to the verb, the SF.Neg *an* must precede the tense marker (SF.Neg-Q), but the LF.Neg *anh-* may appear before (Pre-T-LF.Neg-Q) or after (Post-T-LF.Neg-Q) the tense marker:

(4) a. pi-ka **an** o-**ass**-ni? [SF.Neg-Q]
rain-NOM SF.NEG come-PST-QUE
'Was it not raining?'
b. pi-ka o-ci **anh**-**ass**-ni? [Pre-T-LF.Neg-Q]
rain-NOM come-CONN LF.NEG-PST-QUE
'Was it not raining?/Wasn't it raining?'
c. pi-ka o-**ass**-ci **anh**-ni? [Post-T-LF.Neg-Q]
rain-NOM come-PST-CONN LF.NEG-QUE
'Wasn't it raining?'

While Post-T-LF.Neg-Qs do not license an NPI at all, Pre-T-LF.Neg-Qs can–but only under unbiased readings.

(5) a. *amwuto* o-ci **anh**-**ass**-ni? [Pre-T-LF.Neg-Q]
anyone.NOM come-CONN LF.NEG-PST-QUE
Int. 'Did nobody come? / *Didn't nobody come?'
b.**amwuto* o-**ass**-ci **anh**-ni? [Post-T-LF.Neg-Q]
anyone.NOM come-PST-CONN LF.NEG-QUE
Int. 'Didn't nobody come?'

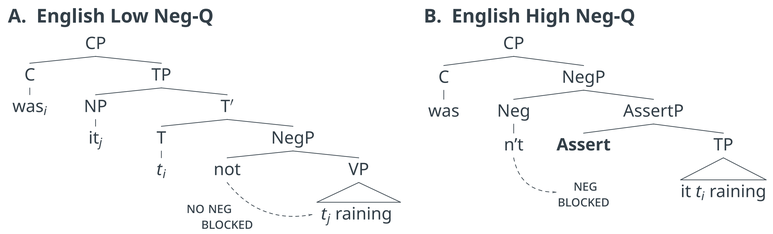
Post-T-LF.Neg-Q has a conjugated variant *-cahn-*, which incorporates the connective marker *-ci* and the LF.Neg; and conveys a **biased interpretation** only.

(6) John-i/*amwuto hakkyo-ey o-**ass**-**cahn**-a?
John-NOM/anyone.NOM school-to come-PST–CONN-LF.NEG-QUE
'Does**n't** John/*nobody come to school?'

3. Previous analyses

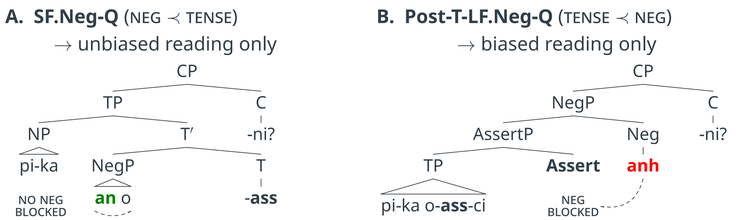
Goodhue (2022) argues that **syntax alone** determines the interpretation of English Neg-Qs.

Figure 1: Structures of English Low and High Neg-Qs (Goodhue 2022)



Yang and Park (2024), following Goodhue (2022), argue that Post-T-LF.Neg-Qs contain an AssertP triggering bias (Fig 2B), while SF.Neg-Qs do not (Fig 2A).

Figure 2: Structure of Korean Neg-Qs by Yang and Park (2024)



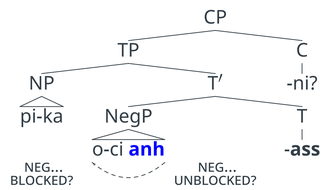
4. Discussion

4.1. AssertP and the ambiguity of Korean Pre-T-LF.Neg-Qs

- Experimental evidence by Kim et al. (2024) shows that Pre-T-LF.Neg-Qs can convey bias. ⇒ AssertP ✓
- Pre-T-LF.Neg-Qs, with **no bias**, can license **an NPI** (cf., (5)). ⇒ AssertP ✗

Figure 3: Possible structure of Korean Pre-T-LF.Neg-Q?

Pre-T-LF.Neg-Q (NEG ≺ TENSE)



- If there is no AssertP, how can we account for unbiased reading?
- If there is an AssertP, what about biased reading?
- If Pre-T-LF.Neg-Qs have AssertP, where?

4.2. Context sensitivity

Neg-Qs are sensitive to **contextual evidence** as well (Romero 2024: 283):

(7) A: Where do you want to go for dinner? [neutral evidence on *p*]
B_1: #Is there **no** vegetarian restaurant around here?
B_2: Is**n't** there a vegetarian restaurant around here?
B_3: ce cip pipimpap {(#)**an** phal-a? / phal-ci **anh**-a}?
that place Bibimbap SF.NEG sell-QUE / sell-CONN LF.NEG
'{#Does that place **not** / Does**n't** that place} serve Bibimbap?'

(8) A: Since you guys are vegetarian, we can't go out in this town, where it's all meat and potatoes. [evidence against *p*]
B_1: Is there **no** vegetarian restaurant around here?
B_2: Is**n't** there a vegetarian restaurant around here?
B_3: ce cip pipimpap {**an** phal-a? / phal-ci **anh**-a}?

4.3. Tense marker and negation in LF.Neg-Qs

This study claims an LF.Neg precedes the tense marker *iff* (i) the utterer is **biased** and (ii) assumes that the participants **share the truth-value** of *p*:

(9) [Context 1] Last summer, A and B traveled to Japan **together**.
[Context 2] Last summer, **only B** traveled to Japan.
A: caknyen ilpon, emcheng tew-**ess**-ci **anh**-a?
last.year Japan really hot-PST-CONN LF.NEG-QUE
Int. 'Wasn't it really hot in Japan last year?' [Context 1 ✓; 2 ✗]
A: caknyen ilpon, emcheng tep-ci **anh**-**ass**-e?
last.year Japan really hot-CONN LF.NEG-PST-QUE
Int. 'Wasn't it really hot in Japan last year?' [Context 1 ✓; 2 ✓]

Unlike Pre-T-LF.Neg-Qs, Post-T-LF.Neg-Qs require that the truth-value of the prejacent be part of **the common ground (*CG*)** (cf., Farkas and Bruce 2010).

5. A discourse-based approach

To provide a formal analysis with a focus on discourse, this study adopts the core notions of **the Table model** (Farkas and Bruce 2010).

(10) A: Is Sam home? (s_1) B: No, he isn't. (s_2)

A	Table	B
	⟨'Sam is home' [Interr.]; $\{p, \neg p\}$⟩ ⟨'No, he isn't' [Decl.]; $\{\neg p\}$⟩	$\neg p$
Common Ground (CG) $s_2 = \{s_1 \cup \{\neg p\}\}$		Projected Set (PS): $ps_2 = \{s_2\}$

Towards a discourse-based analysis

- By uttering Korean biased Neg-Qs, speaker commits a singleton set $\{p\}$ with the reversed surface polarity (cf., Rudin 2024).
- Context-sensitivity can be captured on the Table; preceding utterance of Neg-Qs (i.e., s_1) determines the licenseability (cf., (7) - (9)).
- If Common Ground (*CG*) contains the bias of Neg-Qs (i.e., $\{p\} \subset CG$), the question can be realized as a Post-T-LF.Neg-Q; otherwise, only Pre-T-LF.Neg-Qs are available (cf., (9)).
- The form-meaning mismatch, without requiring a functional phrase or hidden structure, can be accounted for within the Construction Grammar framework (i.a., Ginzburg and Sag 2000; Goldberg 2006; Kim 2016).

6. Theoretical implication

Incorporating the core notions of the discourse-based framework allows for a unified account of the complex distribution and interpretation of Korean Neg-Qs, aligning their syntactic variation with context-dependent meaning.

Selected References

Farkas, Donka F. and Kim B. Bruce. 2010. On reacting to assertions and polar questions. *Journal of Semantics* 27: 81–118.
Ginzburg, Jonathan and Ivan Sag. 2000. *Interrogative investigations*. Stanford: CSLI publications.
Goldberg, Adele E. 2006. *Constructions at work: The nature of generalization in language*. Oxford: Oxford University Press.
Goodhue, Daniel. 2022. Isn't there more than one way to bias a polar question? *Natural Language Semantics* 30: 379–413.
Kim, Jong-Bok. 2016. *The Syntactic Structure of Korean: A Construction Grammar Perspective*. Cambridge: Cambridge University Press.
Kim, Jong-Bok, Jungsoo Kim and Yunju Nam. 2024. Variations in answering negative polar questions in Korean: An experimental study. *Lingua* 310: 1–24.
Ladd, Robert D. 1981. A first look at the semantics and pragmatics of negative questions and tag questions. In Robert A. Hendrick, Carrie S. Masek and Mary Frances Miller (eds.), *Papers from the seventeenth regional meeting of the chicago linguistic society*, 164–171.
Romero, Marbiel. 2024. Biased polar questions. *The Annual Review of Linguistics* 10: 279–302.
Romero, Marbiel and Chung-Hye Han. 2004. On negative *yes/no* questions. *Linguistics and Philosophy* 27: 609–658.
Rudin, Deniz. 2024. Question bias as the pragmatics of context update. Unpublished manuscript.
Yang, Heesun and Bum-Sik Park. 2024. The syntax and semantics of the High Negation Question in Korean. In Xiangyu Li, Zetao Xu, Yuqiao Du, Zhuo Chen, Chenghao Hu, Zhongyang Yu and Victor Junnan Pan (eds.), *Proceedings of Generative Linguistics in the Old Wrold in Asia XIV*, 358–365.