Negative polar questions and bias in Korean

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1. Negative questions (Neg-Qs)

It is widely assumed 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 her 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 has two morphological negations. In polar questions, the two negation markers can deliver **different readings** (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, 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 cannot license an NPI at all, Pre-T-LF.Neg-Qs can–but only in 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?'

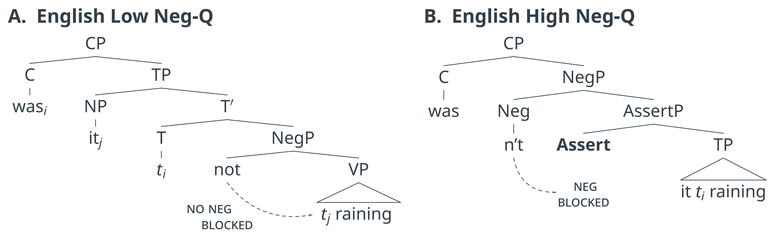
Pre-T-LF.Neg-Q has a conjugated variant *-cahn-*, which incorporates the connective marker *-ci* and the LF.Neg; it induces only a **biased interpretation**.

(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

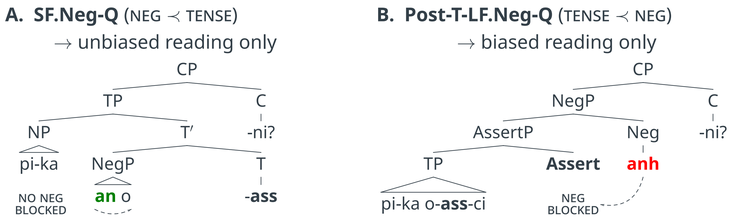
Goodhue (2022) argues that it is **syntax alone** that determines the reading of English Neg-Qs.

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



Yang and Park (2024), following Goodhue (2022), argue that Post-T-LF.Neg-Qs contain 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

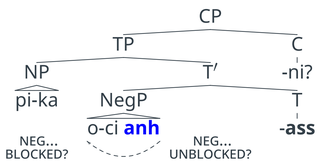
4.1. Syntax-only?

This syntax-only account faces challenges: the ambiguity of 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: 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 original speaker is **biased** and (ii) knows that the interlocutors **share the truth-value**:

(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 the prejacent's truth-value to be shared among interlocutors (i.e., 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 key concepts from **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) $s_2 = s_1$	Projected Set (PS): $ps_2 = \{s_1 \cup \{\neg p\}\}$	

This study argues the following:

- Korean biased Neg-Qs denote a singleton set $\{p\}$ with the surface polarity reversed (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

By applying the key notions from the discourse-based framework, we can capture the complex linguistic pattern of Korean Neg-Qs in a streamlined manner.

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