Self-addressed questions and indexicality — The case of Korean¹

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Abstract. Korean questions are marked as true questions (with final particle ni) or self addressed questions (SAQ, henceforth) (with final na/ka). SAQ are characterized as "uttered in the absence of addressee" in the literature. We argue in favour of a more detailed pragmatic profile, as SAQ can be uttered in the presence of other persons and can contain second person pronouns 'you' that refer to these. SAQ in Korean are however incompatible with the performative honorific upni (Jang and Kim, 1998). We propose that Korean refers to contexts with bystanders in addition to speaker and addressee. SAQ require that sp(c)=ad(c), and prohibit upni because the speaker cannot honorify herself. Second person 'you' refers to the most salient bystander, which can differ from ad(c) in SAQ. The account extends to themesetting questions and other data.

Keywords: honorifics, second person pronouns, theme-setting questions, context, indexicals.

1. Introduction

What is a self-addressed question? While *any* question can be self-addressed if the speaker utters it in the absence of other persons, many languages offer special lexical means to indicate that a question is self-addressed. Self-addressed questions do not request an answer from anyone, the speaker seems to deliberate rather than ask, or the speaker asks herself rather than others. Case studies in the literature include SAQ in Salish languages (Littell et al., 2010, calling them *conjectural questions*), German questions with verb-end syntax and particle *wohl* (Thurmair, 1989; Truckenbrodt, 2006; Zimmermann, 2008, 2013), Italian questions in the evidential future (Mari, 2010; Eckardt and Beltrama, 2019), Japanese *daroo* questions (Hara, 2018) and more (see San Roque et al., 2017). The present paper investigates SAQ in Korean. Korean questions are marked as true questions with the particle *-ni*. Question particles are obligatory in polar questions but can sometimes be omitted in *wh*-questions. We will systematically use question particles in our data. (1) is a true question.

(1) Mary-ka o-ass ni? Mary-NOM come-PAST trueQ 'Has Mary come?'

Questions can alternatively be marked as self-addressed questions with the particles na or ka. While these are not freely interchangeable, speakers report that their pragmatic impact is the same. Example (2) shows a SAQ with the particle -na.

(2) Mary-ka o-ass na?
Mary-Nom come-PAST SAQ
'Has Mary come, I wonder.'

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The observation was first discussed in (Jang and Kim, 1998; Jang, 1999) on basis of (1), (2) and similar examples. They describe questions with na/ka as "usually used in a monologe" or "in absence of an interlocutor". While we agree that SAQ can be used under these circumstances we argue in favour of a more differentiated pragmatic profile. The present paper is structured as follows. Section 2 surveys data discussed by Jang and Kim (1998), in particular the interaction of SAQ markers and the performative honorific upni in Korean. We criticize Jang and Kim's (1998) prediction that second person pronouns are degraded in SAQ. New data in section 3 illustrate the use of SAQ na in contexts where other speakers are present, and its interaction with honorifics and the use of second person pronouns. Section 4 presents our formal account for Korean SAQ. In essence we propose that utterance contexts c in Korean define not only the usual parameters speaker, addressee, time, place and world but in addition the set of bystanders. SAQ markers and honorifics impose restrictions on context. The account can successfully explain the data, as we survey in 5.1. It is further corroborated by themesetting questions (5.2) and true questions asked to self (5.3). Section 6 lists earlier analyses of SAQ in other languages, specifically Speas and Tenny (2003), Truckenbrodt (2006), Littell et al. (2010), Farkas and Bruce (2010) and Farkas (2018) as well as Eckardt and Beltrama (2019). We argue that they cannot easily account for honorifics in true questions vs. SAQ in Korean whereas our Neo-Kaplanian analysis offers a better starting point to understand the case.

2. Korean SAQ and true Q

Korean questions are marked as true questions or self-addressed questions (SAQ) by different question particles, as shown in (1), (2) above.² Korean also uses honorific markers and Jang and Kim report that SAQ interact with honorification in an interesting way (Jang and Kim, 1998; Jang, 1999). The bound honorific morpheme *upni* must be used in an utterance when the speaker is socially lower than the addressee. Example (3) shows a question addressed to a socially higher person. As (4) shows the use of *upni* is blocked in SAQ questions with *na/ka*.

- (3) Mary-ka o -ass -upni -kka? Mary-NoM come -PAST -HON -true Q 'Has Mary come?' (addressing a higher person)
- (4) *Mary-ka o -ass -upni -ka/na? (Jang and Kim, 1998:195) Mary-Nom come -PAST -HON -SAQ unavailable: 'Has Mary come I wonder.'

According to the authors' intuition, -ka/-na indicates that the question is asked in the absence of an interlocutor. They propose that in SAQ, the speaker addresses himself and hence sp(c) = ad(c). Given that the speaker is not socially higher than himself, this can explain the prohibition against upni in SAQ.

Jang and Kim point out that the proposal is supported by the *Genius* examples in (5)/(6) where SAQ markers interact with the use of second person ne(-ka) 'you' (Jang and Kim, 1998:195f). Speaker A can ask (5) addressing self. In contrast, A cannot ask (6) in the presence of a second person B.

 $^{^2}$ Speakers prefer na or ka in different examples. The choice seems to rest on morphophonological factors and we do not aim to capture these preferences. We double-checked all uses of particles and the glossing as SAQ marker vs. trueQ marker with native informants.

- (5) The Genius example (first person)
 nay-ka chencay -i -n -ka?
 I-NOM genius -be -PRESENT -SAQ
 'Am I a genius, I wonder.'
- (6) The Genius example (second person)
 *ne-ka chencay -i -n -ka?
 you-NOM genius -be -PRESENT -SAQ
 unavailable: 'Are you a genius, I wonder.'

Jang and Kim thus take (6) as further evidence in favour of the assumption that SAQ contexts are contexts where sp(c) = ad(c). While speaker-addressee-identity is unproblematic for the first person pronoun nay, it interferes with the interpretation of second person ne: second person pronouns denote the addressee. If we furthermore presuppose that the referent of second person ne must differ from the speaker we predict that (6) imposes inconsistent requirements on the context where sp(c) = ad(c).

However, as Jang and Kim point out, their diagnosis is challenged by the following observation.

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(7) The Genius example (past)

'ne-ka chencay -i -ess -ten -ka? (Jang and Kim 1998: 197)

you-Nom genius -be -PAST -Recoll -SAQ

'Were you a genius? (conjecture)'
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While (7) is still slightly marked the authors report that the change from present to past tense significantly improves the example. This effect is unexpected, as the change in tense does not have any influence on the protagonists in context. Jang and Kim tentatively suggest that past tense allows to dissociate the present addressee B_{now} from its younger self B_{past} . This, they propose, allows to dissociate the referent of 'you' from the addressee and hence allows *ne* to refer to B_{past} while the context remains one where sp(c) = ad(c).

We argue that their account of (7) is inadequate as the proposed distinction of B_{now} / B_{past} does not resolve the puzzle posed by (7). They assume that (7) has a self-addressing context c where sp(c) = ad(c). The real physical situation includes A (speaker) and B (other person). If we follow Kaplan's classical analysis of indexicals, the second person pronoun ne-should refer to ad(c) (Kaplan, 1989). Hence (7) should be tantamount to the question "Is A a genius?". This prediction is simply false, and the steps in the analysis are not affected by the fact that B has two identities B_{now} vs. B_{past} . The puzzle remains. If Jang and Kim want to claim that ne 'you' can possibly refer to an individual who is not the addressee in c—pace traditional Kaplan—it is unclear why this should be facilitated by the fact that the referent of ne is coming in two different identities B_{now} and B_{past} .

We hence conclude that Jang and Kim's tentative remarks are insufficient to solve the puzzle posed by (7). In the next section, we survey more examples in order to see how the referent of ne ('you') and ad(c) are related.

3. More evidence on Korean SAQ

Jang and Kim describe *na* as a question particle indicating that Q is asked in the absence of an interlocutor. A closer look reveals that this description is too simple. Imagine a situation where

A and B are standing in front of A's house. A is searching bags and pockets for the key. According to our informants, A can utter either the true question (8a) or the SAQ (8b) in the given situation.

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(8) The Key example

a. yelsoy-ka eti(-ey) iss -ni?
key-NOM where(-LOC) exist -trueQ?

'Where is the key?'

b. yelsoy-ka eti(-ey) iss -na?
key-NOM where(-LOC) exist -SAQ?

'Where is the key, I wonder.
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A will preferably utter (8a) iff A believes that B might know the answer. A will preferably utter (8b) iff A doesn't believe that B can provide the answer and does not request B to answer. Yet, A may intend B to hear the utterance; for instance to inform B why the door is still locked.

We must hence distinguish between the presence/absence of a second person and the fact whether the second person is addressed in the sense relevant for true questions. The presence of second persons becomes linguistically relevant when A uses a second person pronoun *ne*. Consider the following situation: A is visiting B at her home. They watch a van from the local flower shop arriving in front of B's house. B is surprised. A comments:

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(9) The Fleurop example
ne-ka kkochtapal-ul pat -ullye -na?
you-NOM flowers-ACC receive-MOD.POSS -SAQ?
'Will you perhaps get flowers, I wonder.'
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Like in (8b), A doesn't believe that B can answer and does not request B to answer. Nevertheless A can use a second person pronoun *ne* to refer to B. Our informants report that (9) sounds conjectural, but we will leave this nuance aside. The use of honorific *upni* is still unacceptable in (9). This judgment was not influenced by the social ranking between A and B. The *Fleurop* example challenges simple conclusions that we might draw from the *Genius* example in (6). Example (6) doesn't show that second person pronouns in SAQ are generally unacceptable. If that were the case, (9) should likewise be unacceptable, which it is not.

Further probing of the *Genius* example revealed that it improves in situations where the referent of *ne* 'you' cannot possibly answer the question. Imagine that A studies the photo/ picture of a PhD applicant. The person is not present and thus cannot possibly answer A's question.

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(10) The Photo example

'ne-ka chencay -i -n -ka?

you-Nom genius -be -PRES -SAQ

'Are you a genius I wonder.'
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(10) was judged to be slightly marked but overall acceptable. Similar situations were likewise classed as marked but acceptable, for instance if A is looking at a trained (but non-speaking) dog, or if A is looking at a baby—the offspring of two nobel prize winners—who cannot speak yet. In summary, second person pronouns in SAQ are permitted when *ne* ('you') refers to a non-speaking entity or a human who is not able to answer and hence not requested to answer.

We conclude that the *Genius* question (6) in the given situation must violate more subtle restrictions imposed by SAQ and will return to the example in Section 5.1 after having presented our analysis.

4. Analysis

Section 4 introduces the elements of our analysis. In 4.1 and 4.2 we argue that Korean utterance contexts make use of the parameter of *bystanders* and show how the addressee of a question can be dissociated from the referent of second person *ne* 'you'. In 4.3 we refine Jang and Kim's semantics of the SAQ markers *na* and *ka*. 4.4 treats honorific *upni*.

4.1. Korean context

Following (Kaplan, 1989), utterance situations in the real world are modeled by contexts c. These are mapped to speaker, addressee, time, place etc. by functions sp, ad, time, place and thus provide the persons and parameters necessary to determine the meaning of indexicals. Korean examples like the Key example, repeated below, show that contexts are not fully determined by the real-world utterance situation. Context c also depends on the speaker's intentions. Whether a bystander B is conceived as addressee or not depends on the intentions of speaker A. Hence the same physical situation allows for both the SAQ and true Q version of (11).

(11) A and B in front of A's house, A searching for key. yelsoy-ka eti(-ey) iss-na?/ ni? key-Nom where(-Loc) exist-SAQ? / -trueQ?

When asking the -ni question A intends that ad(c) = B. By attributing the role of addressee to B, A signals 'I want B to answer the question' and 'I believe that B might know the answer'.³ In this context B is requested to react by answering. When asking the -na question in (11), A construes a context where ad(c) = sp(c) (see 4.3.). Other persons B may be present but A does not pose any requests to B. We leave it open whether A requests A to do anything; to our intuition this is not the case.

For Korean, we model the *bystanders* in context with a function $by: c \to X$, where X is a set of persons who count as bystanders in c.⁴ Example (8b), for instance, includes B as a bystander; B is physically close to the speaker and able to hear the utterance. Bystanders who are not the addressee ad(c) do not undertake the obligations of the addressee; specifically, they do not have to answer to questions.

Finally, we propose that one of the bystanders can be identified as the most salient bystander by the speaker. Addressee and bystanders are related in the following ways:

³ A tempting default for contexts c could be: $sp(c) \neq ad(c)$ and the speaker requests the addressee to react in standard ways to major speech acts: $update\ belief$ in reaction to assertions; answer to questions and obey to imperatives. In view of the many counterexamples in the literature we refrain from this strong assumption. More research would be needed to understand how the default can be overwritten.

⁴ $by(c) = \emptyset$ is possible.

- (12) a. The speaker sp(c) is never a bystander: $sp(c) \notin by(c)$.
 - b. If possible, $ad(c) \in by(c)$.
 - c. If $ad(c) \in by(c)$ then ad(c) counts as the most salient bystander.

These assumptions will allow us to give a uniform semantics for the Korean second person pronoun *ne* in section 4.2.

While it is normally assumed that the utterance context is more or less determined by the physical situation of utterance, our proposal is not the first one to give up this assumption. Von Fintel and Gillies (2010) point out the possibility to construe different sets of persons as 'the speaker(s) in c' in their analysis of English epistemic *might*. In a similar vein, the present study probes the relation between physical utterance situation and the addressee parameter of context.

4.2. Second person *ne-ka* 'you.NOM'

We turn to the interpretation of ne 'you'. Kaplan's (1989) interpretation of indexicals would predict that Korean second person $[[ne]]^c = ad(c)$. The data suggest that we have to modify this analysis. We propose that the referent of ne is the most salient bystander B in by(c).

(13) $[ne]^c = B$ for the most salient bystander B in by(c).

This definition interacts with the assumptions in 4.1. as follows. If $sp(c) \neq ad(c)$, then $ad(c) \in by(c)$ and ad(c) counts as the most salient bystander. Assumptions (12b,c) hence entail that ne in the normal case refers to ad(c), like Kaplan's analysis would have it. If however sp(c) = ad(c), the addressee is not in by(c) due to assumption (12a). In this case, ne refers to the most salient bystander and this referent does not count as the addressee in c. Example (8b) can serve as a first illustration of a context c where B is a bystander but not the addressee. Note that assumption (12a) generalizes Kaplan's presupposition that second person pronouns never refer to the speaker (Schlenker, 2018). The analysis dissociates the referent of ne 'you' and the addressee ad(c) and thus allows us to deal with the data in section 2 and 3.

4.3. ka/na and context

We assume that the self-addressed question particle na/ka in Korean questions imposes a restriction on the context of utterance. Jang and Kim's core idea remains one prominent factor of its meaning.

- (14) $[[-na/ka]]^c \text{ is defined in context } c \text{ iff } sp(c) = ad(c)$ If $by(c) \neq 0$ then ag/ka program ages that
 - If $by(c) \neq \emptyset$ then na/ka presupposes that
 - 1. Ignorance/Inability: sp(c) believes that no x in by(c) can answer Q.
 - 2. Release: sp(c) does not request any $B \in by(c)$ to answer Q.

If defined, $[[-na/ka]]^c = \lambda Q_{\ll s,t>,t>}Q$

As a first consequence, -na/ka allows questions in situations where no other person is present and the speaker is practically forced to adopt sp(c) = ad(c). The definition accounts for the intuition voiced by Jang and Kim that the speaker seems to talk to herself. Under which additional circumstances are -na/ka questions possible in the presence of other persons B? (14)

limits such questions to contexts where the speaker doesn't think that B can answer the question and doesn't request that B should answer. These specific restrictions serve to distinguish SAQ from certain true questions (see 5.1) and are necessary to explain the *Genius* example in (6).

4.4. Honorofic upni

Let again be c the utterance context, sp(c) the speaker in c, ad(c) the addressee in c. For the sake of simplicity we will assume that the honorific morpheme upni takes scope over the entire sentence. The use of upni in sentence S limits the contexts c in which upni S can be uttered.

(15)
$$[[upni \ S]]^c = [[S]]^c \text{ iff } sp(c) \text{ is strictly socially inferior to } ad(c)$$

 $[[upni \ S]]^c = *$ undefined otherwise.

We acknowledge that this proposal does not attempt to do justice to the factors that determine social hierarchy. In many cultures "socially inferior" is a multi-factorial concept and the simplifying assumption that individuals are linearly ordered in social strata is not justified (see e.g., McCready, 2014 on Thai). We disregard the cultural issue whether *upni* defines a partial linear order on any given group of speakers. We assume however that "strictly socially inferior" is not a reflexive relation and that, consequently, no individual *a* can be strictly socially inferior to *a*. This is consistent with the analysis of *upni* as a performative honorific in Korean (Kim and Sells, 2007) and echoes the proposal in Jang and Kim (1998).

5. Predictions and further corroborating evidence

5.1. Predictions

Before looking into the data we would like to clarify our aims. We are only interested in those aspects of meaning that determine whether a question is a true question or SAQ. We ignore further semantic contributions of question particles, such as turning a denotation of type <s,t> (declarative) into type <<s,t> (question). We likewise leave it open how and why question particles are restricted to questions.⁵ This having been said, we will now return to our examples.

Examples (1) and (2) illustrate the basic distinction between true questions and self-addressed questions. According to our analysis, na in (2) restricts the possible uses of (2) to contexts c where sp(c) = ad(c), thus suspending all possible requests by the speaker to others. Likewise, the speaker does not request herself to answer. Whether sp(c) expects other reactions of bystanders or not will be determined by context, see 5.2. The denotation of na in (14) rests on the assumption that the semantic argument is already a question (type <<s,t>,t>). We thus dissociate question formation from na as pragmatic marker. Our meaning component can be combined with other possible semantic effects of na, for instance turning a proposition into a polar question. These may be shared by the complementary trueQ particle ni and its allomorphes. TrueQ marking ni does not pose restrictions on c. We assume that contexts of communication have distinct speaker and addressee by default. The speech act of (canonical) questioning where $sp(c) \neq ad(c)$ conveys that the speaker requests the addressee to answer. Cases like exam questions or questions to the culprit in (16) show that the speaker does not always expect that the addressee can answer, so this should not be a requirement of ni.

⁵ See Jang and Kim (1998) for the interaction of particles and indefinites/question pronouns in Korean.

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(16) B took the key yesterday night; today it is missing.

A interrogates B, suspecting that B lost it and has no idea where it is.
yelsoy-ka eti(-ey) iss-ni?
key-NOM where(-LOC) exist-trueQ?

'Where is the key?'
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We leave it open whether all questions are united by the speaker's desire that the CG be updated by the answer (Truckenbrodt, 2006). Again, such proposals are compatible with the present account but require further testing.

The account can successfully predict the conflict between SAQ na and honorific upni in (3)/(4), repeated below.

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(3) Mary-ka o -ass -upni -kka?
Mary-NoM come -PAST -HON -true Q
'Has Mary come?' (addressing a higher person)
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(4) *Mary-ka o -ass -upni -ka/na? Mary-Nom come -PAST -HON -SAQ unavailable: 'Has Mary come I wonder.'

The performative honorific *upni* S restricts the possible utterance contexts c to those where the speaker is strictly socially inferior to the addressee. SAQ questions with ka/na are only defined in c if sp(c) = ad(c). Given that no person x can be strictly superior to x themselves, there is no possible context c in which (4) can felicitously be uttered. Interestingly, the pragmatic contradiction translates into native speakers' judgment that (4) is ungrammatical.⁶

The *Key example* in (8a,b) is likewise accounted for by the present analysis. Korean contexts are sufficiently rich to allow for a bystander B who is not the addressee. In the trueQ (8a) the speaker construes the physical situation as a context where B is the addressee: $A \neq ad(c) = B$. A therefore requests B to answer the question; in the given situation we may infer further beliefs of A like, A believes that B might know where the key is. Examples like (16) show that this is not necessarily part of the meaning of the question. In the SAQ, (8b) the speaker construes the situation as one where A is also the addressee and B is thus under no obligations. We propose that B figures as a bystander in (8b) even though the sentence itself does not include any items that refer to B.

Matters are different in this respect in examples Fleurop (9) and $Photo \ talk$ (10). The questions are marked with na and thus require a context c where sp(c) = ad(c). According to 4.2 we have $ad(c) \notin by(c)$. The pronoun ne 'you' in this context refers to the most prominent bystander and we may assume that B figures as the most salient bystander. Yet B is not the addressee and therefore does not adopt the obligations of addressee in a true question. In other words, B is not requested or expected to answer. This is what characterizes the Fleurop example as well as the acceptable versions of the Genius example.

Finally turn to Jang and Kim's original *Genius* example repeated below.

⁶ The case resembles pragmatic accounts of unlicensed use of NPIs. (Krifka, 1995; Kadmon and Landman, 1995) make a similar case for ungrammatical NPIs due to contradictory pragmatic content.

(6) The Genius example (second person)
*ne-ka chencay -i -n -ka?
you-NOM genius -be -PRESENT-SAQ
unavailable: 'Are you a genius, I wonder.'

We suspect that Jang and Kim rated the example as "ungrammatical" because they found it difficult to conceive of a context c where A = sp(c) encounters bystander B and believes that B is not able to answer this particular question. Our analysis assumes that using ka, the speaker believes that no bystander can answer the question. We therefore predict that A can not construe B as a bystander and the utterance in (6) causes a clash.

We can also host Jang and Kim's intuition that the past tense version of (6) is more acceptable. Imagine that A and B consider B's past self, wondering whether strange habits might in fact have been early signals of genius. In this situation A can grant B ignorance about his former self, which echoes Jang and Kim's intuition that the distinction between B_{now} and B_{past} is crucial for the case. While the observation made no sense in their original analysis it can explain the effect in the present account. Our account allows A to construe B as a *bystander* who can be addressed with *ne* in a SAQ.

The following data supports our proposal that SAQ can only be asked when A believes that B does not know the answer. According to our informants (17) is only possibly if A deliberately and almost offensively ignores B.

(17) The Quiz Game example

A and B take part in a quiz game where A has to guess B's fake personality. B impersonates Einstein and has already given A some clues. A, talking to himself:

#ne-ka mwullihakca -i -n -ka?

you-NOM physicist -be-PRESENT-SAQ

unavailable/offensive: 'Are you a physicist, I ask myself-but-not-you.'

This shows that the SAQ marker ka does more than release B from the obligation to answer. It also requires a context where A believes that B cannot answer Q, be it due to ignorance, be it for other reasons.

5.2. Further corroboration: Theme-setting questions

While our analysis primarily aimed at self-addressing questions, it can account for more questions that match the criteria in (14). Consider a context where speaker A opens a lecture on astronomy with a theme-setting question: "How does a solar eclipse arise?". Obviously A does not request the audience to answer and neither believes that the audience can answer. And indeed, theme-setting questions in Korean are marked with *na*.

(18) ilsik-un ettehkey sayngki -na? solar.eclipse-TOP how arise -SAQ 'How does an eclipse arise?' (theme-setting question)

⁷ We are aware of the paradox inherent in the *Genius* examples: While A can be unaware of his own genius in (5) he presupposes B's full knowledge in (6). We leave these tangles of human modesty and self-awareness unexplored.

According to our account, [[na]] imposes the following restrictions on context c.

- (14) $[[-na/ka]]^c$ is defined in context c iff sp(c) = ad(c)If $by(c) \neq \emptyset$ then na/ka presupposes that
 - 1. Ignorance/inability: sp(c) believes that no x in by(c) can answer Q.
 - 2. Release: sp(c) does not request any $B \in by(c)$ to answer Q.

We propose that the speaker in (18) construes context c with the audience as bystanders and himself the addressee. The speaker does not expect the audience to be able to answer and does not request the audience to answer. Our analysis predicts that na is allowed in this context.

We moreover predict that second person pronouns can be used in theme-setting questions like *How do you become a millionaire in 5 years?* and refer to the audience. This prediction is difficult to test as Korean has subject and object pro-drop (Kwon et al., 2006) and questions like the *millionaire* example are realized with non-overt second person pronouns *pro*. In order to extend our analysis to these we'd have to spell out a semantic treatment of *pro* in Korean, which is beyond the range of the present study. We therefore confine ourselves to the observation that reference to the audience is possible in theme-setting questions; our account is tailored to account for this constellation.

Informants report that the trueQ particle ni is not used in theme-setting questions. We assume that this is due to Maximize Presupposition, which forces the speaker to use the more contentful form na if possible. The full range of use of trueQ ni is still open and we are thus unable to say whether ni by necessity expresses a request to some addressee. If this is the case, it offers a further reason why ni is inappropriate in theme-setting questions.

5.3. Real self-talk

Finally, we found that speakers cannot address *themselves* with *ne* 'you' in Korean SAQ questions. When speaker A is talking to herself using a second person pronoun, as in (19), the question is only acceptable as a true question (*ni*). Imagine that A, alone and in search of her key, wants to ask herself a question like English "*Now, where is your key...*".

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(19) a. Ney yelsay-ka eti(-ye) iss- ni?
Your key-Nom where(-Loc) exist -trueQ
'Where is your key?'
b. *Ney yelsay-ka eti(-ye) iss- -na?
Your key-Nom where(-Loc) exist -SAQ
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While the true question (19a) can be used under these circumstances, the SAQ (19b) is not an option. Our analysis makes correct predictions for (19b), as shown in (20).

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(20) [[na]]^c requires that sp(c) = ad(c).
There are no further bystanders. Hence by(c) = \emptyset.
[[ne-]]^c must refer to the most salient bystander (= (13))
Hence ne cannot refer. The utterance is ill-formed.
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It is less clear why (19a) is an acceptable way of self-talk. We see at least two possible explanations. One explanation—less attractive to our mind—could stipulate that trueQ ni in (19a) also allows contexts where sp(c)=ad(c). This assumption, in turn, requires a special semantics for ne in (19a) to allow for $[[ne]]^c = sp(c)$. We do not see how this special treatment of ne fits the overall picture and how it can be restricted to "self-talk in true questions" in a nonstipulative manner. It also violates (21), to our mind a reasonable universal requirement on second person pronouns.

(21) Second person pronouns *pro* require $[[pro]]^c \neq sp(c)$

While we did not explicitly adopt (21) as a presupposition of *ne* ('you') it effectively follows from our analysis. It seems desirable to maintain this prediction.

Avoiding these complications, an alternative explanation of (19a) could rest on play-acting in self-addressed talk. We see (19a) as evidence in favour of the idea that self-talk can address the speaker's *alter ego* (Socka, 2004), an imaginary second interlocutor A' distinct from A. This assumption allows us to integrate (19a) into the present proposal as follows.

a. [[ni]]^c = allows for sp(c) ≠ ad(c)
 speaker A appears in c as two different entities: A-as-speaker ≠ A-as-addressee.
 A-as-addressee is an imaginary interlocutor
 A-as-addressee ∈ by(c) is the most salient bystander
 b. [[ney]]^c = A-as-addressee

Obviously this preliminary proposal comes with its own stipulations and we do not aim to settle the case as part of the present paper. Yet, Korean allows us to probe the ontology and pragmatics of self-addressing in more detail than the traditional range of European languages and offers an excellent testing ground for future studies on self-talk and soliloquy.

6. Alternative accounts

Our Neo-Kaplanian analysis builds on Jang and Kim's work and extends their proposal in a conservative fashion. The present section reviews alternative analyses of SAQ in other languages and argues that they do not offer a better basis for our data.

6.1. Speas and Tenny (2003), Oguro (2017)

Speas and Tenny claim that root clauses contain a level of speech act phrase (SAP) that includes a SpeakerP, a HearerP and potentially other phrases that serve to represent perspectival and epistemic centers in syntax. While their original proposal is programmatic rather than designed for particular data it was adopted to analyse honorific marking in Japanese (Myiagawa, 2012) and extended to self-addressed questions in Japanese in Oguro (2017). While Oguro's restrictions on the syntax of SAP seems to successfully predict the possible and impossible cooccurrences of honorifics and various question particles in Japanese the putative mapping between SAP and pragmatics remains unclear. We are particularly worried that basic semantic facts of the account, such as the logical type of possible denotata of SpeakerP and HearerP are left open. While the syntactic operations proposed—for instance, binding of pronouns—strongly suggest denotations of type e, the paraphrases of pragmatic effects of SpeakerP and HearerP point more in the direction of propositional denotata, that is type $\langle s,t \rangle$. A further

semantically unexplained element in Oguro (2017) is the *point-of-view* head (POV), which is crucial to distinguish SAQ from true questions. According to Oguro the presence of POV is only mandatory in self-addressed questions and, if bound by the SpeakerP, ensures that the question is intended as a SAQ.

Finally, the predictions entailed by Speas and Tenny, and Oguro about the use of questions and SAQ in inappropriate contexts are unclear. Are sentences, uttered in an inappropriate context, syntactically ill formed or does syntax code a different kind of markedness, such as pragmatic incoherence (#), presupposition failure or even simply false utterances? The present analysis has the advantage that pragmatic factors are coded in pragmatics and make predictions about appropriate and inappropriate uses that can be directly tested in a well-understood interface between grammar and meaning.

6.2. Truckenbrodt (2006)

German shows a close correlation between word order and speech act type (Lohnstein, 2007) and it is thus attractive to spell out a link between syntax and pragmatics. Truckenbrodt proposes that C-features in German can capture this correlation. The idea is that features code pragmatic restrictions on utterance context c, which, in turn, guide the possible interpretations of sentences. The feature $\langle \mathbf{epist} \rangle$ contributes that sp(c) desires a CG update and $\langle \mathbf{deont}(\mathbf{sp})(\mathbf{ad}) \rangle$ contributes that sp(c) requests ad(c) to effect a CG update. The \mathbf{deont} feature can however lack the \mathbf{ad} argument, in which case no request to the addressee is issued. This, Truckenbrodt argues, codes the pragmatic profile of self-addressed questions and SAQ thus carry the feature $\langle \mathbf{deont}(\mathbf{sp}), \mathbf{epist} \rangle$.

If we grant that a proper syntax-pragmatics interface can be spelled out and that the truth conditions of **deont** and **epist** can be made sufficiently precise to demarcate the correct contexts, we could propose to code SAQ in Korean as <**deont(sp)**, **epist>** as well. This however covers only part of the pragmatic restrictions imposed by SAQ markers. For one, na/ka convey the ignorance/inability condition (see (14)), which would have to be added. Besides, Truckenbrodt's account is not designed to capture the incompatibility between honorific *upni* and SAQ. The features do not code the identity or non-identity of speaker and addressee; likewise the absence of an **ad** feature does not make predictions about the absence/presence of an interlocutor or bystander. The account can thus at best provide a partial basis to explain Korean. The major benefit of syntactic features in the analysis of German—where speech act type and word order correlate—does not play out in Korean where the basic word order remains the same for all speech act types.

6.3. Conversational scoreboard theories

Recent models for question-answer dialogue provide useful tools to investigate discourse. We base our discussion on the table theory (Farkas and Bruce, 2010) but believe that the observations generalize to other models. The table theory codes questions and assertions as moves in a conversational game that allow the interlocutor various moves in reaction. Farkas and Roelofson (2015), Farkas (2018) demonstrate for the SAQ marker *oare* in Romanian how

⁸ In declarative sentences ad(c) is requested to believe the content of the declarative; in questions ad(c) is requested to answer.

the model can account for questions that do not request an answer from the addressee. Their analysis builds on Farkas and Bruce's (2010) observation that silence in reaction to assertions is usually interpreted as tacit consent (whereby the model refines Stalnaker's 2002 view that assertion effects a common ground update). SAQ, according to Farkas (2018), are questions where remaining silent is simply a normal reaction for the addressee. In other words, SAQ do not request an answer.

The case of Korean poses a challenge for the table model, which endorses a realistic notion of context. The interlocutors as given by the real-world utterance situation are represented as interlocutors at the table, and in the simplest case there are two individuals that alternatingly adopt the role of speaker and addressee. While intentional elements are proposed in some applications (e.g., "attributive" commitments in Malamud and Stevenson, 2015; Poschmann, 2008) the model assumes an overall fixed range of interlocutors. The model thus offers no natural starting point to code the difference between a person figuring as addressee or bystander, and it therefore will also have problems in accounting for the interplay between honorification and SAQ in Korean. If we adopt Farkas' (2018) semantic analysis of *oare* for Korean *na/ka* we can not explain why the speaker may not use honorific *upni* as soon as s/he offers the addressee "silence" as a further permissible reaction to a question. In their present form, table theories cannot downgrade interlocutors to bystanders and cannot code that speakers construe a situation as one of addressing self.

6.4. Truth-conditional accounts of self-addressed questions

Finally, we want to relate our model to approaches that seek to derive the pragmatics of SAQ from the semantic denotation of the questions posed. These accounts assume that questions with additional elements (here: evidential markers) are somehow too demanding and the speaker cannot rationally expect that the addressee will provide an answer. As an escape interpretation, authors argue, the addressee is permitted to remain silent (going with Farkas, 2018) and/or invited to join speculative discourse with the speaker. Several studies in different languages observe that SAQ are used as conversation starters or topic setters rather than just serving as statement of ignorance.

The idea is spelled out in Littell et al. (2010)'s analysis of Salish questions with inferential evidential markers that, according to the authors, are interpreted as *conjectural questions*. A similar road is taken in Eckardt and Beltrama (2019) who investigate German SAQ in verbend syntax and marked with evidential *wohl*. Adding *wohl* and the effect of verb-end syntax to question Q, they derive a denotation that can be paraphrased as: 'Which of the answers to Q can be inferred if we two pool our relevant knowledge?'. Again, addressee B cannot (usually) straightforwardly answer this question and instead has to remain silent or enter joint speculative discourse.

Like the table models in 5.3, such accounts are not prepared to cover the different roles of a second person B in dialogue, and hence make wrong (or no) predictions about the use of honorifics. Both Littell et al. and Eckardt/Beltrama view the addressee of an SAQ as a full-fledged participant in context and do not propose that sp(c)=ad(c). It will hence be difficult to explain why a full-fledged addressee can no longer be addressed with honorific *upni* if he figures in a SAQ. The link between honorification and SAQ in Korean needs a more differentiated notion of interlocutors, as provided by our Neo-Kaplanian analysis.

7. Summary

We investigated Korean questions marked as self-addressed questions with na/ka. We started from data in Jang and Kim (1998), Jang (1999) who suggest that SAQ questions are asked in a context c where speaker and addressee are identical. While the assumption can also explain why honorific upni is prohibited in SAQ, it is challenged by observations about second person ne 'you'. Second person pronouns can be used to refer to other persons even in SAQ. These persons must however be unable to answer the question and the speaker does not request an answer. We derived these pragmatic requirements on basis of systematically elicited examples. Our analysis rests on (a) bystanders as an additional parameter of Korean utterance contexts and (b) a generalized analysis of second person pronouns as 'the most salient bystander'. We propose the following pragmatic requirements of na/ka: The speaker and addressee in c are identical, and if there are bystanders in c, the speaker does not request them to answer and does not believe that they can answer the question. The latter requirement captures the fact that Korean speakers cannot use SAQ if they simply want to release the second person from giving an answer (the Quiz Game example).

The analysis can successfully account for the full range of SAQ examples: the *Key, Genius* (first person), *Genius* (second person), *Genius* (second person, past), *Fleurop* and *Photo talk*. It extends to theme-setting questions in Korean. Finally, it correctly predicts that the speaker cannot address to herself with *ne* 'you' in SAQ in Korean. The language thus differs from SAQ questions in other, notably Europan languages, and offers a new way to probe soliloquy and imaginary *alter ego*. To round out the picture it will be interesting to test further types of non-canonical question, such as rhetorical questions and exam questions, as well as the interaction of questions with other pragmatic markers like evidential *-te* (Lim, 2011). We leave these for future study.

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