

Purposeful Questions: Agent-Oriented Embedded Questions in Japanese and Korean

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Semantically Selected Embedded Questions:

- (1) Yuka-wa [ima nanji-ka]
Yuka-Top [now what.time-Q]
sitte-iru/tazune-ta/shirabe-ta/oshiete-kure-ta
know-Prog/ask-Past/check-Past/teach-give-Past
'Yuka knows/asked/checked/told me what time it is/was.'

The predicates that semantically select questions: *ask, inquire, wonder, tell, inform, guess, depend on, investigate, check, know, remember, forget, notice, hear, find out, discover, etc....*

Semantically Unselected Questions in Japanese and Korean:

- ▶ Speaker-Oriented Questions (Tomioka and Kim 2015)

- (2) [Ame-ga hut-ta-no-ka] jimen-ga nurete-iru.
rain-Nom fall-Past-NML-Q ground-Nom wet-Prog
'Lit: [Whether it rained], the ground is wet.'

- ▶ Agent-Oriented Questions

- (3) a. [Ame-ga hutte-i-nai-ka] mado-kara soto-o nozoi-ta.
rain-Nom fall-Prog-Neg-Q window-from outside-Acc peek-Past
'Lit: [Whether it was not raining], (I) looked outside from the window.'
- b. [Soto-no tenki-wa dou natte-iru-ka] mado-kara
[Outside-Gen weather-Top how become-be-Q] window-from
soto-o nozoi-ta.
outside-Acc peek-Past
'Lit: [How the weather outside was], (I) looked outside from the window.'

Example from Korean

▶ Speaker-Oriented EQ

- (4) [Pi-ka w-ass-nun-ci] matang-i ceceiss-ta.
[rain-Nom come-Past-Ind-Q] ground-Nom wet-Decl
'Lit: [Whether it rained], the ground is wet.'

▶ Agent-Oriented EQ

- (5) Mary-ka [Paul-i iss-nun-ci] pyekcang mwun-ul
Mary-Nom Paul-Nom be.there-Adn-Q closet door-Acc
yele-po-ass-ta.
open-try-Past-Decl
'Mary tried opening the closet door, (to find out) [whether Paul was there].'

- ▶ The semantic contribution of an Agent-Oriented EQ: The action depicted by the matrix clause is done in order to find out the answer of the EQ.

In order who to find out? it does not have to be the subject of the main clause.

- (6) Daremo-ga [buki-o motte i-nai-ka] shintai-kensa-o
Everybody-Nom [weapon-Acc have be-Neg-Q] body-check-Acc
s-are-ta.
do-Pass-Past
'Everybody was body-checked in order (for the police/the examiners) to find out whether they (did not) have weapons.'

But the notion of 'agent' must be understood very broadly.

- (7) Uchi-no inu-wa [kyoukenbyou-ni kakatte-i-nai-ka] kinou
We-Gen dog-Top [rabies-Dat contract-be-Neg-Q] yesterday
kensa-o uke-ta.
examination-Acc receive-Past
'Our dog had an examination yesterday, (in order to find out whether it is (not) contracted with rabies.'

In this example, the person who wishes to find out the answer is the owner (the first person plural).

- ▶ The matrix predicate must clearly indicate ‘purposefulness’.
- (8) [sono karee-ga kara-sugi-nai-ka]
[that curry-Nom spicy-exceed-Neg-Q],
??tabe-ta/tabete-mi-ta/?hitokuch-dake chotto tabe-ta.
eat-Past/eat-try-Past/one.bite-only little eat-Past
‘Lit: Whether the curry isn’t too spicy], (I) ate it/tried eating it/had just one bite of it.’
- (9) [taipo-ga nai-ka] sono-ronbun-o ??yon-da/chuui bukaku
[typo-Nom be.not-Q] that-article-Acc read-Past/carefully
yon-da/mouichido yominaoshi-ta
read-past/once.more reread-Past
‘Lit: [Whether it contains no typos], (I) read the paper / read the paper carefully / read the paper one more time.’

Optional Presence of *to*

- (10) [Ame-ga hutte-i-nai-ka]-**to** mado-kara soto-o nozoi-ta.
rain-Nom fall-Prog-Neg-Q-Comp window-from outside-Acc peek-Past
'Lit: [Is it is not raining?], (I) looked outside from the window.'

In Kim, J-Y (in progress), this type of question is analyzed as a 'bare quotative question'; a question that the referent of the matrix subject has at the time of the event depicted by the main clause. Is an Agent-Oriented EQ an instance of *to*-less Bare Quotative Question?

Such a scenario is unlikely for a variety of reasons.

Bare Quotative Questions?

Agent-Oriented EQ \neq Bare Quotative Q

Bare Quotatives are not limited to interrogative sentences – other clause types are also allowed, but for non-interrogative quotatives, the presence of *to* is obligatory.

- (11) a. [Yononaka-no yaku-ni tachi-tai]-to/* \emptyset , Kenji-wa
[world-Gen use-Dat stand-want]-Comp/ \emptyset , Kenji-Top
igakubu-ni susun-da.
medical.school-to advance-Past
'Wanting to work for the sake of other people, Kenji enrolled in a
medical school.'
- b. [Kaette-kite-kara tabe-you]-to/* \emptyset , Mana-wa ichigo-o
[return-come-after eat-Exhort]-Comp/ \emptyset , Mana-Top strawberry-Acc
reizouko-ni shimatte-oi-ta.
fridge-Loc put.away-put-Past.
'Mana put the strawberries in the fridge so that she could eat them after
she came back.'

Agent-Oriented EQ \neq Bare Quotative Q

- (12) [Okane-wa tarite-iru-ka]-to/* \emptyset , sobo-ga kodukai-o
[money-Top suffice-Prog-Q]-Comp/ \emptyset , grandma-Nom pocket.money
kure-ta.
give-Past
'Lit: 'Do you have enough money?', Grandma gave me some cash.'
- (13) [Kyou-wa nani-o shiyou-ka]-to/* \emptyset , eki-e aruite-itta-ra,
[today-Top what-Acc do-Q]-Comp/ \emptyset , station-to walk-go-when,
battari tomodachi-ni at-ta.
unexpectedly friend-Dat see-Past
'Lit: When I was walking towards the station, [what shall I do today?], I ran into a friend.'

Bare Quotative Questions?

Agent-Oriented EQ \neq Bare Quotative Q

- ▶ The interpretation of an indexical is different.

(14) [Boku-no saihi-ga ochite i-nai-ka]-to/ \emptyset , Naoki-ga
[I-Gen wallet-Nom fall result-Neg-Q]-Comp/ \emptyset , Naoki-Nom
chuushajou-o kumanaku shirabe-ta.
parking.lot-Acc carefully check-Past
'Lit: [Has my wallet not fallen?]/[whether my wallet has not fallen],
Naoki checked the parking lot meticulously.'

(i) With *to* \rightarrow *boku* = Naoki or the speaker. (ii) \emptyset \rightarrow *boku* = the speaker.

- ▶ When the agent is implicit, a bare quotative does not work well.

(15) Uchi-no inu-wa [kyoukenbyou-ni kakatte-i-nai-ka]-???to/ \emptyset kinou
We-Gen dog-Top [rabies-Dat contract-be-Neg-Q] yesterday
kensa-o uke-ta.
examination-Acc receive-Past
'Our dog had an examination yesterday, (whether it is (not) contracted
with rabies).'

This example sounds like the dog is thinking!

Interim Summary

1. An Agent-Oriented EQ cannot be a *to*-less Bare Quotative Q.
2. While a Bare Quotative Q is a relevant question that the referent of the matrix subject has at the time of the main clause event, the semantic relation between an Agent-Oriented EQ and the hosting main clause is much tighter.
3. An Agent-Oriented EQ indicates that the action depicted by the matrix clause is done so that the person who is in control of the event finds out the answer of the EQ.

If one wishes to paraphrase the meaning of an Agent-Oriented EQ, the two extra expressions and one implicit element must be added.

- (16) a. [Ame-ga hutte-i-nai-ka] mado-kara soto-o nozoi-ta.
rain-Nom fall-Prog-Ned-Q window-from outside-Acc peek-Past
'Lit: [Whether it is not raining], (I) looked outside from the window.'
- b. [Ame-ga hutte-i-nai-ka] **shiru tame-ni** mado-kara soto-o
rain-Nom fall-Prog-Ned-Q **know sake-Dat** window-from outside-Acc
nozoi-ta.
peek-Past
'Lit: In order to find out whether it is (not) raining, (I) looked outside from the window.'

Added ingredients: (i) purpose-clause (ii) a predicate that means 'to know', 'to discover', 'to find out', etc., and (iii) the controlled subject of the predicate in (ii).

Following Nissenbaum (2005) and Grosz (2014), let us assume that a purpose/rationale clause involves modality of the teleological flavor.

- (17) [Anna-wa mou neta-ka], shinshitsu-o sotto nozoite-mita.
Anna-Top already asleep-Q, bedroom-Acc quietly peek-saw
'Lit: [Whether Anna had gone asleep already], (I) quietly looked into the bedroom.'
- (18) $\lambda w. \lambda e. [\text{looking-into-the bedroom } (e)(w) \ \& \ \text{Agent}(e)(\text{the-speaker})(w) \ \& \ \forall w'. w' \text{ is compatible with the goals relevant to } e \text{ in } w: \exists p [p \in \llbracket \text{whether Anna had gone asleep} \rrbracket \ \& \ \text{Dox}_{\text{speaker}, w'} \subseteq p]$

$\text{Dox}_{x,w} = x$'s belief worlds in w .

In the above interpretation, we ignore tense and the factivity associated with a predicate like 'find out'.

Null Rationale Clauses?

Possible Hypothesis: With an Agent-Oriented EQ, there is a phonologically empty structure that corresponds to the semantics of a rationale clause.

One advantage: An overt rationale clause has the same restriction on 'control'.

- (19) [kyoukenbyou-ni kakatte-i-nai-ka]-shiru/tashikameru-tame-ni uchi-no
[rabies-Dat contract-be-Neg-Q]-know/ascertain-sake-Dat we-Gen
inu-wa kinou kensa-o uke-ta.
dog-Top yesterday examination-Acc receive-Past
'Lit: Our dog had an examination yesterday, in order to see whether it is (not)
contracted with rabies.'

The controlled subject in the rationale clause is (or can be at least) the owner of the dog.

However, the ‘empty rationale clause’ analysis over-generates. By adding an overt rationale clause, even an intrinsically non-purposeful action can be re-analyzed as a purposeful one. But an Agent-Oriented EQ needs a predicate that clearly indicates purposefulness.

- (20) a. ??[Dono-gurai kuufuku-ni tae-rareru-ka], kinou yuushoku-o
Which-extent hunger-Dat bear-can-Q, yesterday dinner-Acc
tabe-nak-atta.
eat-Neg-Past
‘[How much (I) could stand hunger], (I) didn’t eat dinner yesterday.’
- b. [Dono-gurai kuufuku-ni tae-rareru-ka]-o shiru-tame-ni, kinou
Which-extent hunger-Dat bear-can-Q-Acc know-sake-Dat, yesterday
yuushoku-o tabe-nak-atta.
dinner-Acc eat-Neg-Past
‘In order to find out how much I could stand hunger, (I) didn’t eat dinner
yesterday.’

- (21) a. ???[Kodomo-no guai-ga yoku-natta-ka], uchi-ni kae-tta.
[child-Gen condition-Nom well-became-Q], home-Dat return-Past
'[Whether my child was feeling better], (I) went home.'
- b. [Kodomo-no guai-ga yoku-natta-ka]-o shiru-tame-ni,
[child-Gen condition-Nom well-became-Q]-Acc know-sake-Dat,
uchi-ni kae-tta.
home-Dat return-Past
'In order to know whether my child was feeling better, (I) went home.'

On top of this over-generation problem, there is also an issue of eliding a lexical predicate like 'to know', 'to find out'. What makes it possible for this kind of verb to be phonologically silent with an Agent-Oriented EQ?

Interim Summary 2

1. Although we do not know what an Agent-Oriented EQ is and how it comes to mean what it means, we know what it is NOT.
2. It is not a Bare Quotative Question.
3. It does not involve a silent structure that corresponds to the meaning of a rationale clause.
4. So, we are running out of options...

We propose to go back to the very beginning and ask the following question:

Is an Agent-Oriented EQ truly unselected?

1. On the one hand, there is no clear notion of ‘semantic selection’ or ‘thematic relation’ in the traditional sense between an Agent-Oriented EQ and the main clause predicate. At least, not in the way that predicates like ‘ask’ or ‘know’ semantically select questions.
2. On the other hand, only certain kinds of predicates can host Agent-Oriented EQs:
 - ▶ verbs of ‘investigation’, ‘seeking’, or ‘paying close attention’
 - ▶ complex-predicates of the form *V-te-miru* ‘try V-ing’,
 - ▶ verbs with some adverbial expressions that signal ‘intentions’ or ‘purpose’ (e.g., carefully, repeatedly, one by one, etc.).
3. What is the best way to characterize the compatibility between an Agent-Oriented EQ and the main predicate?

Let us have a closer look at the type of predicate that can have an Agent-Oriented EQ.

First, they all depict 'purposeful' actions. So, those predicates that do not clearly indicate purposes or goals cannot have Agent-Oriented EQs: *die, fall, get sick, etc..*

But many actions, perhaps most of them, that are engaged by sentient entities can be considered purposeful, but Agent-Oriented EQs are much pickier. Do we have a better criterion?

Agent-Oriented EQs are compatible only with predicates which depict actions with knowledge-related purposes.

Many actions set their goals that have something to do with some physical change: One eats to satisfy one's hunger. One walks to move from one location to another. Such actions are, though purposeful, not easily compatible with Agent-Oriented EQs.

However, verbs such as 'check', 'investigate', or 'seek' portray actions the purposes of which are to gain new knowledge or information. When one completes an action of investigating something (successfully), one gains new knowledge or information. This, we argue, is the key to understand Agent-Oriented EQs.

The addition of *-te-mitu* illustrates this point very nicely.

- (22) [Aji-wa dou-ka] karee-o tabete-mi-ta/??tabe-ta
[taste-Top how-Q] curry-Acc eat-try-Past/eat-Past
'[How it turned out], (I) tasted the curry/ate the curry.'

The action of eating does not present itself as a knowledge-seeking activity, but just adding *-te-miru* to it makes all the difference. Now, the action is not about satisfying my hunger or get nutrition but about gaining some information about the taste of the curry.

Gaining new information and having a question are closely connected.

- ▶ Many formal theories of discourse (e.g., Roberts 1996) take each assertion as a proposal to change the context by presenting the propositional content of the assertion as new information.
- ▶ Assertions are not made randomly. Each assertion is considered as an answer to a question that functions as a discourse topic in the utterance context. In Roberts (1986), this question is called *QUD: Question-under-Discussion*.
- ▶ Therefore, an assertion entails the presence of a QUD.

If a predicate that takes an Agent-Oriented EQ sets its goal to acquire new information, then, it means that there exists a relevant question to which the sought-after new information constitutes an answer to it.

$$(23) \quad \llbracket \text{tabete-miru} \rrbracket = \lambda w. \lambda x. \lambda y. \lambda e. \text{taste}(e)(w) \ \& \ \text{Theme}(x)(e)(w) \ \& \ \text{Agent}(y)(e)(w)$$

By spelling out the lexical/phrasal entailment of purposefulness of the predicate, we get:

$$(24) \quad \llbracket \text{tabete-miru} \rrbracket = \lambda w. \lambda x. \lambda y. \lambda e. \text{taste}(e)(w) \ \& \ \text{Theme}(x)(e)(w) \ \& \ \text{Agent}(y)(e)(w) \ \& \ \exists Q_{\langle \langle s, t \rangle, t \rangle}. \forall w'. w' \text{ is compatible with the goals relevant to } e \text{ in } w, \exists p \in Q \ \& \ \text{Do}_{x,y,w'} \subseteq p.$$

As you may have noticed, this is very close to the meaning of a rationale clause shown in (18), but the meaning does not come from a particular structure associated with a rationale clause but from the lexical (entailed) meaning of the predicate. An Agent-Oriented EQ is identified with this existentially quantified question. But how?

One possible way to implement: The existential meaning is ‘disclosed’ (cf. Dekker 1993 for indefinites), and the free variable is abstracted.

- (25) a. $\llbracket \text{tabete-miru} \rrbracket = \lambda w. \lambda x. \lambda y. \lambda e. \text{taste}(e)(w) \ \& \ \text{Theme}(x)(e)(w) \ \& \ \text{Agent}(y)(e)(w) \ \& \ \exists Q_{\langle \langle s,t \rangle, t \rangle}. \forall w'. w' \text{ is compatible with the goals relevant to } e \text{ in } w, \exists p [p \in Q \ \& \ \text{Dox}_{y,w'} \subseteq p]$
- b. After \exists -disclosure and λ -abstraction:
 $\llbracket \text{tabete-miru} \rrbracket = \lambda w. \lambda x. \lambda y. \lambda Q. \lambda e. \text{taste}(e)(w) \ \& \ \text{Theme}(x)(e)(w) \ \& \ \text{Agent}(y)(e)(w) \ \& \ Q_{\langle \langle s,t \rangle, t \rangle}. \forall w'. w' \text{ is compatible with the goals relevant to } e \text{ in } w, \exists p [p \in Q \ \& \ \text{Dox}_{y,w'} \subseteq p]$

This is, in effect, an instance of post-lexical selection process. This is certainly an unusual move.

Our proposal may indeed be surprising, but each of its subcomponents has some fairly well-established phenomenon that can be analogized.

- ▶ **Pragmatic Enrichment:** A process based on *Principle of Informativeness* of Atlas and Levinson (1981) or *R-principle* of Horn (1984). It is a conversational implicature that is derived by the hearer's 'filling in the gap' between a given linguistic form and its presumed communicational content.
- ▶ Although conversational in nature, this type of meaning is 'intrusive' and can become a part of the truth condition of a sentence.

(26) If Masha gets married and has a child, her parents will be happy. On the other hand, If she has a child and gets married, they will be upset.

- ▶ Quote from Bach (2006, p 1) : '... speakers can communicate things that are neither fully determined by the semantics of the uttered sentence nor merely conversationally implicated. ? various cases of what are commonly thought to be instances of generalized conversational implicature are actually instances of this intermediate phenomenon, call it "implicature," "explicature," or, to be neutral, ?enrichment.'¹

¹*Implicature* is the term Bach (1996) uses, and *explicature* was proposed by Carston (2004).

- ▶ **Phrasal Theta Role Assignment:** Marantz (1983) noted that subject θ -roles are not determined by verbs alone but the combinations of verbs and their internal arguments.
- ▶ **Applicatives:** Typically non-arguments/adjuncts, such as locatives and instrumentals, can be promoted to arguments in the applicative constructions. For instance, one can think in the following way.
 1. ‘Masha opened the door’ gets the interpretation $\lambda e. \text{open}(e) \ \& \ \text{Theme}(\text{the door})(e) \ \& \ \text{Agent}(\text{Masha})(e)$.
 2. We can enrich the content and get: $\lambda e. \text{open}(e) \ \& \ \text{Theme}(\text{the door})(e) \ \& \ \text{Agent}(\text{Masha})(e) \ \& \ \exists x. \text{Instrument}(e)(x)$.
 3. The applicative morpheme erases the existential quantifier and makes the variable available for λ -abstraction: $\lambda e. \lambda x. \text{open}(e) \ \& \ \text{Theme}(\text{the door})(e) \ \& \ \text{Agent}(\text{Masha})(e) \ \& \ \text{Instrument}(e)(x)$.
 4. Then, the sentence surfaces as “Masha open-appl-ed the door this key.”

An Agent-Oriented EQ may be a question-version of applicative argument.

Big Question: Why is an Agent-Oriented EQ possible in Japanese and Korean but not in other languages such as English?

Applicative may be an important factor for cross-linguistic variations. While pragmatic enrichment and phrasal theta assignment are expected to be (more or less) universal, the syntax of applicative is not.

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