Bare Indeterminates in Japanese

1. Indeterminates and Particles

Haspelmath (1997) shows that a number of languages of the world have so-called indeterminate systems, where indeterminate pronouns always combine with particles. In the case of Japanese, all the previous studies agree that an indeterminate needs to be licensed by an overt particle *ka* or *(de)mo* (Kuroda 1965, 2013, Nishigauchi 1990, Shimoyama 2001, 2006, Takahashi 2002, Watanabe 2004, Yatsushiro 2009, Hiraiwa 2017, Saito 2017).

(1) a. Dare-*(**mo/ka**)-ga kita. b. Dare-*(**mo**) konakatta. c. Dare-*(**demo**) koreta.
who-MO/KA-Nom came who-MO/KA came.Neg who-DEMO can.came
'Everyone/Someone came.' 'No one came.' 'Anyone could come.'

We present novel data indicating that the Japanese indeterminates are actually licensed without the presence of a particle to associate with (hereafter *bare indeterminates*). Conversely, we also point out an example in which *mo* cannot license an indeterminate. We argue that what truly licenses a bare indeterminate is a covert Q-morpheme and that our long-standing, traditional understanding of indeterminates has been misguided.

2. Bare Indeterminates in Concessive Conditionals

Surprisingly, an indeterminate can appear "bare" in concessive conditionals (among other constructions that license bare indeterminates). Crucially, the particles *ka* and *(de)mo* are ungrammatical in these constructions. (2) poses a challenge to any previous analysis that requires an indeterminate to be licensed by an overt particle (cf. Shimoyama 2006, fn 27).

(2) {[Dare-ga ko-yoo-ga / kita-tte / kuru-ni-seyo]} (***mo**/***ka**), uresii.
who-Nom come-Sbj-but came-Cond come-Dat-do.Imp MO/KA happy
'No matter who comes, I'm happy.'

However, a mere concessive or conditional structure is unable to license an indeterminate.

(3) *Dare-ga {kita keredo-(**mo**) / kita-ra}, uresii.
who-Nom came though-MO came-Cond happy
'(lit.) Although who came / If who comes, I'm happy.'

It is also important to note that the ungrammaticality of (3) indicates that the presence of *mo* (which is inherent in the expression *keredo-mo* 'although') is irrelevant for licensing indeterminates, contrary to the traditional view.

3. Proposal: A Covert Q-morpheme Licenses Bare Indeterminates

We propose that it is a covert Q-morpheme within the concessive conditional adjunct clause that licenses bare indeterminates in (2), as in (4) (word order irrelevant below).

(4) [$_{CP}$ [… bare indeterminate …] Q] ….

Both syntactic and semantic considerations provide evidence for the structural licensing configuration in (4). We adopt Rawlins' (2008, 2013) compositional analysis of English concessive conditionals (e.g., *Whoever comes, it will be fun*), which is based on the LF in (5).

(5) [∀[[Q[… *wh*- …]] [main clause]]]

Under his analysis, *wh-ever* denotes sets of alternatives (in the sense of Hamblin 1973), and via pointwise functional application, the alternatives expand until they meet an operator that selects them (Kratzer and Shimoyama 2017). Rawlins argues that the *wh-ever* adjunct is an interrogative clause, and that the interrogative operator in (6a) takes scope over the *wh-ever* adjunct. The *wh-ever* adjunct denotes a set of alternative propositions, and the interrogative operator lets these alternatives through. Then each alternative provides a domain restriction to the modal in the main clause. Rawlins further argues that a default Hamblin universal operator

in (6b) needs to be inserted in the LF in order to produce a singleton set.

(6) a. $[\![Q\alpha]\!]^{w,g} = [\![\alpha]\!]^{w,g}$

b. $[\![\forall\alpha]\!]^{w,g} = \{\lambda w'.\ \forall p[p \in [\![\alpha]\!]^{w,g} \rightarrow p(w')=1]\}$ (Kratzer and Shimoyama 2017:127)

We extend Rawlins's analysis to the Japanese concessive conditionals in (2). Semantically, following Shimoyama (2001, 2006), we assume that indeterminates introduce sets of alternatives. Syntactically, we show that the concessive conditional clause is an interrogative clause. A piece of evidence comes from the fact that the disjunctive connective *soretomo* 'or' can be used in concessive conditionals (as in (7)) and interrogatives, but not in declaratives, simple conditionals, or concessives. This evidences for the existence of a covert Q-morpheme and a set of alternative propositions, which in turn yields the LF representation in (5).

(7) Taro-ga ko-yoo-ga **soretomo** ko-nakaroo-ga, uresii.
who-Nom come-Sbj-but or come-Neg.Sbj-but happy
'Whether Taro comes or not, I'm happy.'

In this way, our analysis departs from the traditional view that Japanese indeterminates require the presence of an overt licensing particle, namely, *ka* or *(de)mo*. It so happens that semantic operators are often realized as such specific particles, which has deceived our eyes. Our analysis is also supported by the fact that a root question also allows bare indeterminates (in the optional absence of *ka*), which can be explained by a covert Q-morpheme.

4. Consequences: Existential Quantifiers and Free Choice Expressions Reconsidered

Our view of Q-morpheme licensing leads us to rethink the structures of existential quantifiers like *dare-ka* in (1a) and free choice expressions like *dare-demo* in (1c). It has been assumed that indeterminates in these expressions are licensed by the particles *ka* and *demo*. We argue, however, that these expressions are syntactically clausal. Note the parallelism between the free choice expression in (8a) and the concessive conditional adjunct clause in (8b).

(8) a. [Dare demo] koreta.
who DEMO can.came
'Anyone could come.'

b. [[Dare de ~~atte~~ mo] Q] koreta.
who Cop exist MO Q can.came

(8a) is derived from (8b) by deleting the existential verb *atte* (see Nishiyama 1999 on the structure of copular sentences in Japanese). Thus, (8a) is another example of a covert Q-morpheme licensing of bare indeterminates, despite the apparent presence of *(de)mo*. The adjunct clause status also explains why free choice expressions cannot be case-marked.

It also follows that the existential quantifier in (1a) is syntactically clausal: it has a structure of embedded questions, and the negative question-taking verb *siranai* is deleted. This means that the indeterminate in (9a) is licensed by a Q-morpheme *ka*.

(9) a. [Dare (datta) ka]-(ga) kita.
who Cop.Past Q-Nom came
'Someone came.'

b. [Dare (datta) ka] ~~siranai~~]-(ga) …
who Cop.Past Q know.Neg-Nom

This is empirically supported by the existence of another existential quantifier in (10), which can be derived simply by deleting sentential negation.

(10) a. [Dare ka sira]-(ga) kita.
who Q know.Neg-Nom came
'Someone came.'

b. [Dare ka] sira~~nai~~-]-(ga) …
who Q know.Neg-Nom

Traditional analyses that assume *ka* to be a noun-attaching (disjunction) particle cannot explain the form in (10). We also show that Naha Okinawan (a Ryukyuan language), which lacks a disjunction particle, also builds existential quantifiers based on interrogative constructions.