

JAPANESE FREE CHOICE AND EXISTENTIAL INDETERMINATES AS HIDDEN CLAUSES*

KEN HIRAIWA AND KIMIKO NAKANISHI
Meiji Gakuin University & Ochanomizu University

1 Introduction

Haspelmath (1997) observes that while there are languages in which some indefinite pronouns are formally identical to wh-pronouns (1), there are also many languages in which indefinite pronouns are built on wh-pronouns combined with different particles/morphemes (2).

- (1) a. *tís* ‘who’ ‘someone’ (Classical Greek)
b. *shéi* ‘who’ ‘someone’ (Mandarin Chinese)
c. *hak* ‘who’ ‘someone’ (Hopi)
- (2) a. *dare* ‘who’, *dare-ka* ‘someone’, *dare-mo* ‘anyone’ (Japanese)
b. *ki* ‘who’, *vala-ki* ‘someone’, *sen-ki* ‘anyone’ (Hungarian)
c. *nor* ‘who’, *nor-bait* ‘someone’, *i-nor* ‘anyone’ (Basque)

Kuroda (1965) calls wh-phrases such as *dare* indeterminates. Since then, it has been long assumed that indeterminates in Japanese require the particles such as *ka*, *mo*, and *demo*. Let us call it *the Indeterminate-Particle Generalization* (cf. Kuroda 1965, 2013, Nishigauchi 1990, Kishimoto 2001, Shimoyama 2001, 2006, 2008, Takahashi 2002, Watanabe 2004, 2006, Nakanishi 2006, Yatsushiro 2009, Hiraiwa 2015, 2017, 2018, Saito 2017, Uegaki 2018, among others).

- (3) The Indeterminate-Particle Generalization
In Japanese, indeterminates must co-occur with overt quantificational particles such as *ka* and *(de)mo*.

It follows from (3) that indeterminates cannot be bare (without any quantificational particle) in Japanese.

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In this paper, we first briefly overview the analysis of “bare” indeterminates by Nakanishi and Hiraiwa (2019) and Hiraiwa and Nakanishi (2020) and their arguments against (3). Then, we reconsider previous analyses of free choice and existential indeterminates. We argue that contrary to the common view, free choice and existential indeterminates are syntactically clausal. More specifically, free choice indeterminates have a hidden unconditional clause structure and existential indeterminates have a hidden embedded question clause structure.

2 Bare Indeterminates

The long-standing generalization in (3) faces serious counter-evidence. So-called unconditionals (or concessive conditionals; see Haspelmath and König 1998 and Rawlins 2008, 2013) license indeterminates, but Nakanishi and Hiraiwa (2019) and Hiraiwa and Nakanishi (2020) show that indeterminates can appear “bare” without any particle in unconditionals, as in (4) (see also Shimoyama (2006, fn. 27)), and refer to such indeterminates as *bare indeterminates*.

- (4) Dare-ga {ko-yooga/ki-tatte/kuru-nisitatte/kuru-tositatte/kuru-nisiro/kuru-niseyo/kuru
who-Nom come-Subj/come-Cond/come-Cond/come-Cond/come-Subj/come-Subj/come
-nodeare}(-*mo/*ka), Taro-wa yorokob-u daroo.
-Subj-MO/KA Taro-Top please-Pres will
'Whoever will come, Taro will be pleased.' (Nakanishi and Hiraiwa 2019)

Note that the indeterminate *dare* ‘who’ in (4) is licensed without an overt particle *ka* or *(de)mo*.¹

Rawlins (2008, 2013) extends a Hamblin analysis to unconditional constructions in English such as (5) (see also Jayaseelan 2001).

- (5) {Whatever/No matter what} Alfonso has, he should stay home. (Rawlins 2013, 146)

An *if*-conditional adjunct denotes a singleton proposition, and it provides a single restriction to an operator in the main clause (in the sense of Kratzer 1986). Rawlins analyzes an unconditional adjunct to be a question that denotes a set of propositions, as in (6c), and argues that it provides a set of restrictions to an operator in the main clause, as in (8) (assuming that the denotation of the Q-operator is (7)). Each alternative in (8) corresponds to a single *if*-conditional sentence (e.g., If Alfonso has a cold, he should stay home). Then a Hamblin default universal operator (\forall) is inserted, yielding a singleton set whose member is the conjunction of the alternatives in (8).

- (6) a. $\llbracket \mathbf{what} \rrbracket^{w,g} = \llbracket \mathbf{whatever} \rrbracket^{w,g} = \{x \in D_c : \text{non-human}(x)(w)\}$
b. $\llbracket \mathbf{whatever Alfonso has} \rrbracket^{w,g} = \{p : \exists x [\text{non-human}(x)(w) \ \& \ p = \lambda w'. \text{Alfonso has } x \text{ in } w']\}$
c. $\llbracket Q \rrbracket^{w,g}(\llbracket \mathbf{whatever Alfonso has} \rrbracket^{w,g}) = \llbracket \mathbf{whatever Alfonso has} \rrbracket^{w,g}$
(e.g., that Alfonso has a cold, that Alfonso has a measles, ...)

- (7) $\llbracket Q\alpha \rrbracket^{w,g} = \llbracket \alpha \rrbracket^{w,g}$ (Kratzer and Shimoyama 2002)

¹See Nakanishi and Hiraiwa (2019) for a full list of environments that allow for bare indeterminates.

- (8) {in all the closest worlds where Alfonso has a cold, he stays home, in all the closest worlds where Alfonso has the measles, he stays home, in all the closest worlds where Alfonso has the flu, he stays home, ...}

Nakanishi and Hiraiwa (2019) and Hiraiwa and Nakanishi (2020) extend Rawlins’s analysis to the Japanese unconditionals in (4) and propose the LF structure in (9).

- (9) [[[[... indeterminate ...] Q] [matrix clause]] \forall]

In (4), the indeterminate dare ‘who’ denotes a set of humans, as in (10a). This set combines with the denotation of the predicate, yielding the set of propositions in (10b).

- (10) a. $[[\text{dare}]]^{w,g} = \{x \in D_e : \text{human}(x)(w)\}$
 b. $[[\text{dare-ga ko-yooga/dare-ga kite-mo/dare-ga ko-yooto-(mo)}]]^{w,g}$
 $= \{p : \exists x[\text{human}(x)(w) \ \& \ p = \lambda w'. x \text{ came in } w']\}$

The set of propositions in (10b) combines with the Q-operator in (7), and it provides a set of restrictions to an operator in the main clause. In the end, a universal operator is inserted, which yields a singleton set like (11).

- (11) {Taro will be pleased if Alan comes, and Taro will be pleased if Bill comes, and Taro will be pleased if Conan comes, ...}

Nakanishi and Hiraiwa (2019) and Hiraiwa and Nakanishi (2020) demonstrate that an indeterminate does not require an overt operator such as *ka* or *(de)mo*, contrary to the long-standing view. Rather, syntactically, a bare indeterminate is licensed by an invisible Q-morpheme with a [Q]-feature (see Cable 2010).²

- (12) [[... indeterminate ...] $X_{[+Q]}$]

3 Free Choice and Existential Indeterminates

The analysis of bare indeterminates in unconditionals in Nakanishi and Hiraiwa (2019) and Hiraiwa and Nakanishi (2020) leads us to reconsider simple cases where indeterminates clearly appear to be licensed by an overt particle *ka* or *(de)mo*. In this short paper, we focus on two cases of indefinite pronouns, free choice indeterminates and existential indeterminates.

3.1 Free Choice Indeterminates as Hidden Unconditional Clauses

First, let us consider free choice indeterminates. Free choice indeterminates consist of an indeterminate pronouns (e.g. *dare* ‘who’, *nani* ‘what’) and the morpheme *demo*.

- (13) a. Dare-demo soo omou daroo.
 who-DEMO so think will
 ‘Anyone will think so.’ (free choice)

²See Nakanishi and Hiraiwa (2019) and Hiraiwa and Nakanishi (2020) for more details and arguments for bare indeterminates.

- b. Nan(i)-demo tabemasu.
 what-DEMO eat.will
 ‘I will eat anything.’ (free choice)

Although they are systematically built in this way, their morpho-syntactic structure has not been investigated in detail. The morpheme *demo* has often been considered to be an indivisible particle.

Haspelmath (1997, 135), however, observes that “many indefiniteness markers [HN: free choice markers] contain an element that goes back to a form of the verb ‘be’” and proposes a concessive conditional clause as its source construction. From the perspective of our analysis, it follows that the licenser for free choice indeterminates should not be the particle *demo*, contrary to the standard assumption. Rather, the licenser for free choice indeterminates is an invisible Q-morpheme, just as it is for bare indeterminates in unconditionals.

We propose that what looks like a particle *demo* in Japanese is in fact composed of a copula verb *de*, an existential verb *ar*, and the particle *mo*, and that these form an unconditional clause.

- (14) [CP [Dare / Nan(i) de ar-te mo] Q] ...
 who / what Cop exist-Cond MO
 ‘Whoever/Whatever it may be, ...’ (unconditional)

Nishiyama (1999) argues that the copula in Japanese consists of a copula *da* and an existential verb *-aru* and that the short forms *da* and *dat-ta* are contracted forms of *de ar-u* and *de ar-ta*, respectively.³

- (15) a. Ken-wa gakusee {da / de ar-u}.
 Ken-Top student Cop / Cop exist-Pres
 ‘Ken is a student.’
 b. Ken-wa gakusee {dat-ta / de ar-ta}.
 Ken-Top student Cop-Past / Cop exist-Past

Now, suppose that the existential verb *ar* undergoes ellipsis. Then, we obtain the surface free choice forms *dare demo* and *nan(i) demo* in (16).

- (16) [CP [Dare / Nan(i) de ~~ar-te~~ mo] Q] ...
 who / what Cop exist-Cond MO
 ‘Whoever/Whatever it may be, ...’ (free choice)

There are several pieces of evidence for our claim that free choice indeterminates are syntactically clausal, in addition to the morphological presence of the copula.⁴ First, unconditionals and free choice indeterminates are semantically equivalent, as shown in (17).

³We assume that the vowels *e* and *a* merges into *a* in /de ar-te/, resulting in /dat-ta/ in (15b).

(i) /e/+a/ → /a/

⁴In fact, *wh-ever* free choice pronouns in English also introduce unconditional clauses.

(i) a. You can eat whatever you want.
 b. Whoever comes will be very welcome.

- (17) a. [Dare de ar-te mo] soo omou daroo.
 who Cop exist-Cond MO so think will
 ‘Whoever it may be will think so.’ (unconditional)
- b. [Dare de ~~ar-te~~ mo] soo omou daroo.
 who Cop exist-Cond MO so think will
 ‘Anyone will think so.’ (free choice)

Second, free choice indeterminates in Japanese can never be case-marked (Hiraiwa 2015, 2017). This is natural if they are unconditional clauses, which cannot be case-marked, either.

- (18) a. [Dare de ar-te mo](-*ga) soo omou daroo.
 who Cop exist-Cond MO so think will
 ‘Whoever it may be will think so.’ (unconditional)
- b. [Dare de ~~ar-te~~ mo](-*ga) soo omou daroo.
 who Cop exist-Cond MO so think will
 ‘Anyone will think so.’ (free choice)

Third, whenever an unconditional is ungrammatical, a free choice indeterminate is also ungrammatical. The reason indeterminate *naze* ‘why’ is ill-formed both in unconditional and free choice forms.

- (19) a. *Naze de ar-te mo, minna soo omou daroo.
 why Cop exist-Cond MO everyone so think will
 ‘Everyone will think so, whatever the reason is.’ (unconditional)
- b. *Naze de ~~ar-te~~ mo, minna soo omou daroo.
 why Cop exist-Cond MO everyone so think will
 ‘Everyone will think so, whatever the reason is.’ (free choice)

Similarly, the following contrast illustrates the same point. Semantically, *-demo*, *-datte*, *(de)-sae(mo)*, and *(de)-sura(mo)* all mean ‘even NP’ when attached to an ordinary noun, but only *-demo* can take an indeterminate, as shown in (20)–(21).^{5,6}

⁵Note that the same forms are also used concessive conditionals without any indeterminate.

- (i) a. [Ken de ar-te mo] soo omou daroo.
 Ken Cop exist-Cond MO so think will
 ‘Even if it is Ken, he will think so.’ (concessive conditional)
- b. [Ken dat-te] soo omou daroo.
 Ken Cop-Cond so think will
 ‘Even if it is Ken, he will think so.’ (concessive conditional)
- c. [Ken de ~~ar-te~~ mo] soo omou daroo.
 Ken Cop exist-Cond MO so think will
 ‘Even if it is Ken, he will think so.’ (concessive conditional)

⁶There is another copular form of free choice indeterminate such as (i).

- (i) Dare de ar-e soo omou daroo.
 who Cop exist-Imp so think will
 ‘Whoever it may be will think so.’ (free choice / unconditional)

- (20) a. Ken de ~~ar~~-te mo
Ken cop exist-Cond MO
'even Ken' (even-NP / concessive conditional)
- b. Ken dat-te (<de ar-te)
Ken Cop-Cond
'even Ken' (even-NP / concessive conditional)
- c. Ken-(de)-{sae/sura}(-mo)
Ken-Cop-even-MO
'even Ken'
- (21) a. dare de ~~ar~~-te mo
who Cop exist-Cond MO
'whoever' (free choice / unconditional)
- b. dare dat-te (<de ar-te)
who Cop-Cond
'whoever' (free choice / unconditional)
- c. *dare-(de)-{sae/sura}(-mo)
who-Cop-even-MO
'whoever'
'whoever'

The contrast is subsumed under our analysis, because example (22) does not have well-formed unconditional clause counterparts.⁷

- (22) *Dare de (ar-te) sae/sura(-mo)
who Cop exist-Cond even-MO
'whoever'

3.2 Existential Indeterminates as Hidden Question Clauses

Our analysis of bare indeterminates also reconsiders a traditional analysis of existential quantifiers. Consider (23).

- (23) [Dare-ka]-ga ki-ta.
who-KA-Nom come-Past
'Someone came.'

It has been assumed in the literature that *dare-ka* 'someone' is composed of an indeterminate *dare* 'who' and an existential or disjunction particle *ka* (Hagstrom 1998, Takahashi 2002, Yatsushiro 2009, Watanabe 2006, Hiraiwa 2015, 2017, Uegaki 2018). There is a serious problem with such an analysis, however: *ka*, unlike *mo*, cannot be attached to a noun. This is illustrated in (24)–(25).

⁷For a reason that is not relevant to us here, the merger of the two vowels is obligatory in (19b) and (20b).

- (24) a. [Dare mo]-ga ki-ta.
 who MO-Nom come-Past
 ‘Everyone came.’ (universal)
- b. [Dare mo] ko-nakat-ta.
 who MO come-Neg-Past
 ‘No one came.’ (strong NPI/NCI)
- c. [Taro mo] ki-ta.
 Taro MO come-Past
 ‘Taro also came.’ (additive)
- (25) a. [Dare ka]-ga ki-ta.
 who KA-Nom come-Past
 ‘Someone came.’ (existential)
- b. *[Taro ka]-ga ki-ta.
 Taro KA-Nom come-Past
 ‘Taro (or someone else) came.’

Our analysis of bare indeterminates leads us to think that this particle *ka* should be a question complementizer, which is a visible Q-morpheme. And in fact, The Q-morpheme *ka* in Japanese takes a single argument, namely, a sentence, as Szabolcsi (2015) points out.⁸

That is, existential indeterminates in Japanese should have a structure of an embedded question.

This hypothesis may sound radical, given the standard analysis of Japanese existential indeterminates, but Haspelmath (1997, 130) observes that it is indeed an attested pattern in some Indo-European languages. He calls this type of existential quantifiers *dunno*-indefinites.⁹

⁸In disjunction, *ka* needs to take two arguments.

- (i) [Taro ka Hanako (ka)]-ga ki-ta.
 Taro KA Hanako KA-Nom come-Past
 ‘Taro or Hanako came.’

⁹Haspelmath (1997, 133) observes that the *dunno*-type existential indefinites are interpreted as specific-unknown. He speculates that “in all the non-specific functions it would be nonsensical for the speaker to state that he or she does not know the referent because if the referent is non-specific, nobody could possibly know it.”

- (i) Haspelmath (1997, 133)
- a. *You can take any apple. I don’t know which one.
- b. þær on innan gióng / nið nat-hwīlc, se þe neh gefeng / hæcðnum horde.
 there on inside went of.men Indef-which he that near caught heathen treasure
 ‘Some men or other crept inside it, who reached out toward the heathen treasure.’ (Old English)

Existential indeterminates in Japanese are not necessarily specific-unknown, however.

- (ii) a. [Kokoroatari-wa na-i kedo, mosi {dare-ka / dare-ka-sir-a}(-ga) ki-ta-ra], osiete.
 idea.in.mind-Top exist.Neg-Pres but if who-KA / who-KA-know-Neg-Nom come-Past-Cond tell.me
 ‘Please tell me if anyone comes, although I don’t have anyone in mind.’
- b. [Mosi dare da ka sira-nai kedo ki-ta-ra], osiete.
 if who Cop Q know-Neg-but come-Past-Cond, tell.me
 ‘Although I don’t know who will, please tell me if anyone comes.’

- (26) Haspelmath (1997, 131)
- a. neizwer ‘somebody’ <ne weiz wer ’(I) don’t know who’ (Middle High German)
 - b. nāthwā ‘somebody’ <ne wāt hwā ‘(I) don’t know who’ (Old English)
 - c. nekkver ‘somebody’ <*ne wait ik hwarir ’I don’t know who’ (Old Norse)
 - d. neștine ‘some’ < Latin: nescio quis ‘I don’t know who’ (Romanian (dialectal))
 - e. na(m)koj ‘somebody’ <ne znam koj ‘I don’t know who’ (Bulgarian (dialectal))
 - f. někŭto ‘somebody’ <*ne vě kŭto ‘I don’t know who’ (Old Church Slavonic)
 - g. je ne sais quel ‘some kind of’ <cf. je ne sais (pas) quel ‘I don’t know which’ (French)

Building on Haspelmath’s observation, we propose that so-called existential indeterminates in Japanese has been grammaticalized from an embedded question by *dummo*-deletion and sluicing within the embedded question clause.

- (27) Sakki [[_{CP} dare {~~-da~~ / ~~-dat-ta~~} ka] ~~sira-na-i~~]-ga ki-ta.
 just.now who Cop / Cop-Past Q know-Neg-Pres-Nom come-Past
 ‘Someone came just now. (Lit. Although I don’t know who it is/was, someone came)’

It is worth pointing out that an embedded question clause alone can also be existentially interpreted, as shown in (28). Such an example collaborates our hypothesis that *ka* in existential indeterminates is a question complementizer.

- (28) Sakki [[_{CP} dare dat-ta ka] ~~sira-na-i~~]-ga ki-ta yo.
 just.now who Cop-Past Q know-Neg-Pres-Nom come-Past Sfp
 ‘Someone came just now. (Lit. [(I don’t know) who it was] came just now.’

Although example (28) does not contain the predicate ‘I don’t know’, it is equally possible to express existential interpretation using a full adverbial clause, which patterns with correlatives in their semantic interpretation (see Srivastav 1991).

- (29) Sakki [[_{CP} dare dat-ta ka] sira-na-i]-ga ki-ta yo.
 just.now who Cop-Past Q know-Neg-Pres-but come-Past Sfp
 ‘Someone came just now. (Lit. [Although I don’t know who it was] came just now.’

Thus, it follows that so-called existential indeterminates in (23) has been derived from the full adverbial clause in (29) by *dunno*-deletion and sluicing, as shown in (27).

The strongest piece of evidence for our analysis comes from (i), the existence of an intermediate form between (27) and (29). Unlike (28), it is intriguing to see that *dunno*-deletion is only partial: what is elided is not the entire predicate *sira-na-i* ‘(I) not know’ but the negative marker *na-i* alone. The verbal remnant in (i) cannot be explained if we assume a traditional analysis that takes *ka* to be a noun-attaching particle.^{10,11}

¹⁰Haspelmath (1997) suggests that the *dunno*-indefinite in Albanian in (i) might be analyzed as deletion of negation alone.

(i) Albanian (Haspelmath 1997, 131)
 di-kush ‘someone’, di-ç ‘something’, di-ku ‘somewhere’ (*di* = ‘know’)

¹¹This partial form *ka sira* is also used in self-questions.

- (30) Sakki [[_{CP} dare ka] sira-~~na-i~~]-ga ki-ta yo.
 just.now who Q know-Neg-Pres-Nom come-Past Sfp
 ‘Someone came just now.’

The grammaticalization path from the full clause in (29) to the nominal in (23) reminds us of the grammaticalization of sentential connective *ga* to nominative case marker *ga*, as Ishigaki (1955) and Kuroda (1999) point out. The embedded question ‘I don’t know who’ originally combined with concessive sentential connective *ga* and expressed existential quantification as an adverbial clause ‘although I don’t know who’. But as sentential connective *ga* underwent grammaticalization into nominative case marker *ga*, (28) was established by eliding the predicate ‘I don’t know’. (i) was derived by eliding the copula and the matrix negation. And finally, deletion of the entire matrix predicate led to the contemporary existential quantifier expression in (23).¹²

Our analysis also predicts that the same *dunno*-deletion should also be possible with non-indeterminates. This is indeed the case. Examples (31) express uncertainty ‘I don’t know if it is/was X’.¹³

- (31) a. [Ken’ichi da(-ta) ka Kenzi da(-ta) ka sira-na-i]-ga ki-ta yo.
 Ken’ichi Cop-Past Q Kenzi Cop-Past Q-Nom come-Past-but Sfp
 ‘A man came, although I don’t know if it was Ken’ichi or it is Kenzi.’
 b. [Ken’ichi da(-ta) ka Kenzi da(-ta) ka sira-~~na-i~~]-ga ki-ta yo.
 Ken’ichi Cop-Past Q Kenzi Cop-Past Q-Nom come-Past-Nom Sfp
 ‘A man came, although I don’t know if it was Ken’ichi or it is Kenzi.’
 c. [Ken’ichi da(-ta) ka Kenzi da(-ta) ka ~~sira-na-i~~]-ga ki-ta yo.
 Ken’ichi Cop-Past Q Kenzi Cop-Past Q-Nom come-Past-Nom Sfp
 ‘A man came, although I don’t know if it was Ken’ichi or it is Kenzi.’

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- (i) {Dare-ga/Ken-ga} ki-ta no ka sira.
 who-Nom/Ken-Nom come-Past C Q know.Neg
 ‘I wonder who came.’ / ‘I wonder if Ken came.’

It is probably not accidental that *ka sira* is a form used for what von Fintel and Iatridou (2019) call unasked questions, which do not ask for information. The morpheme *yara* in another existential indeterminate form *dare yara* ‘someone’ also builds an unasked question.

- (ii) Dare-ga kuru no yara.
 who-Nom come C YARA
 ‘I wonder/don’t know who will come.’

¹²We leave it as an open question what the syntactic category of existential indeterminates such as *dare-ka* and *nani-ka* is, while we have shown that existential indeterminates have been developed from embedded question clauses. It is worth pointing out, however, that they come in two varieties: case-marked and non-case-marked existential indeterminates (see Hiraiwa 2015, 2017). It is highly likely that the former is grammaticalized into a DP in contemporary Japanese.

¹³See Hiraiwa (2020) for arguments from Okinawan against homophony between disjunction and existential morphemes and arguments for homophony between question and existential morphemes.

4 Unselected Embedded Questions

Our *dunno*-deletion analysis of Japanese existential indeterminates also extends to “(speaker-oriented) unselected embedded questions” discussed in Kim and Tomioka (2014). In Japanese and Korean, question clauses that are apparently not selected by question-taking predicates are possible.

- (32) [Ame-ga hut-ta no ka], zimen-ga nurete-i-ru.
rain-Nom fall-Past C Q ground-Nom get.wet-Prog-Pres
‘Lit. Whether it has rained, the ground is wet.’

Kim and Tomioka (2014) note that the speaker-oriented unselected embedded question in (32), for example, has the following properties.

- (33) Kim and Tomioka (2014)
- a. The speaker asserts that the ground is wet.
 - b. The speaker is not certain whether it rained.
 - c. The speaker believes that if it had rained, it would constitute a good reason for why the ground is wet.

The speaker’s uncertainty can be naturally explained if we extend our *dunno*-deletion to unselected embedded questions. We suggest that unselected embedded questions express the speaker’s uncertainty exactly because they are selected by the predicate ‘I don’t know’, to which *dunno*-deletion applies.¹⁴

- (34) [[Ame-ga hut-ta no ka] sira-na-i ga], zimen-ga nurete-i-ru.
rain-Nom fall-Past C Q know-Neg-Pres but ground-Nom get.wet-Prog-Pres
‘Lit. Whether it has rained, the ground is wet.’

We would like to consider why the particle *ka*, in contrast with the particle *mo*, often resists being separated from an indeterminate.

- (35) *[[Dare-o hihansi-ta hito]-ka-ga John-o home-ta.
who-Acc criticize-Past person-Q-Nom John-Acc praise-Past
‘A person who criticized someone praised John.’ (Yatsushiro 2009; judgement is ours)

While Yatsushiro (2009) claims that it is grammatical, it is not acceptable for a vast majority of Japanese native speakers, including us. This makes sense under our analysis because the bracketed part of example (35) cannot be interpreted as an unselected embedded question, as shown in (36). In general, a copula cannot be omitted in a copular *wh*-question.

- (36) *[[Dare-o hihansi-ta hito]-ka, John-o home-ta.
who-Acc criticize-Past person-Q John-Acc praise-Past
‘Lit. (I don’t know) who a person who criticized was, but that person praised John.’

Interestingly, inserting a copula between the relative clause and the particle *ka* significantly improves the example, as it forms an unselected embedded question (see Section 4).

¹⁴See footnote 13. Given the fact that questions in Old Japanese and Okinawan are morphologically embedded clauses, unselected embedded questions may not be as bizarre as they may appear.

- (37) [[Dare-o hihansi-ta hito] dat-ta ka], John-o home-ta.
 who-Acc criticize-Past person Cop-Past Q John-Acc praise-Past
 ‘Lit. (I don’t know) who a person who criticized was, but that person praised John.’

5 Conclusion

In this paper, we have proposed, contrary to the common view, that free choice and existential indeterminates in Japanese are syntactically clausal. The former is derived from a copular unconditional clause by deleting the existential verb. The latter originate from an adverbial clause containing an embedded question, from which the matrix predicate ‘I don’t know’ is deleted with sluicing applying to the embedded question. We have clarified a grammaticalization path from a question-embedding adverbial clause to an existential indeterminate.

References

- Cable, Seth. 2010. *The grammar of Q: Q-particle, wh-movement, and pied-piping*. New York, NY: Oxford University Press.
- von Fintel, Kai, and Sabine Iatridou. 2019. Unasked questions. A paper presented at WAFL 15.
- Hagstrom, Paul. 1998. *Decomposing Questions*. Ph.D. dissertation, MIT.
- Haspelmath, Martin. 1997. *Indefinite pronouns*. Oxford: Oxford University Press.
- Haspelmath, Martin, and Ekkehard König. 1998. Concessive conditionals in the languages of Europe. In *Adverbial constructions in the languages of Europe*, ed. Johan van der Auwera, 563–640. Berlin: Mouton de Gruyter.
- Hiraiwa, Ken. 2015. The QP syntax: Noun class, case, and augment. In *Proceedings of NELS 45*, ed. Thuy Bui and Deniz Özidiz, 1–11. Amherst, MA: GLSA.
- Hiraiwa, Ken. 2017. Labeling roots: Indeterminates and particles. In *Proceedings of NELS 47, volume 2*, ed. Andrew Lamont and Katerina Tetzloff, 79–88. Amherst, MA: GLSA.
- Hiraiwa, Ken. 2018. Something visible in Japanese. *Glossa* 3(1), 132 [DOI: <http://doi.org/10.5334/gjgl.361>].
- Hiraiwa, Ken. 2020. The origin and architecture of existential quantifiers in Okinawan. In *Proceedings of the 94th annual meeting of the Linguistic Society of America*. LSA.
- Hiraiwa, Ken, and Kimiko Nakanishi. 2020. Bare indeterminates in unconditionals. In *Proceedings of the 94th annual meeting of the Linguistic Society of America*. LSA.
- Ishigaki, Kenji. 1955. *Zyosi no rekisiteki kenkyuu*. Tokyo: Iwanami.
- Jayaseelan, K. A. 2001. Questions and question-word incorporating quantifiers in Malayalam. *Syntax* 4(2):63–93.
- Kim, Jooyoung, and Satoshi Tomioka. 2014. Two types of unselected embedded questions. In *Proceedings of the 31st west coast conference on formal linguistics*, ed. Robert E. Santana-LaBarge, 276–284. Somerville, MA: Cascadilla Press Project.
- Kishimoto, Hideki. 2001. Binding of indeterminate pronouns and clause structure in Japanese. *Linguistic Inquiry* 32(4):597–633.
- Kuroda, S.-Y. 1965. *Generative Grammatical Studies in the Japanese Language*. Doctoral Dissertation, MIT, Cambridge, MA.

- Kuroda, S.-Y. 1999. Syubunaizai kankeisetu. In *Kotoba no kaku to syuuen*, ed. S.-Y. Kuroda and Masaru Nakamura, 27–103. Tokyo: Kurosio Publishers.
- Kuroda, S.-Y. 2013. Prosody and the syntax of indeterminates. *Lingua* 124:64–95.
- Nakanishi, Kimiko. 2006. *Even, only*, and negative polarity in Japanese. In *Proceedings of SALT 16*, ed. Masayuki Gibson and Jonathan Howell, 138–155. Ithaca, NY: CLC Publications.
- Nakanishi, Kimiko, and Ken Hiraiwa. 2019. Nihongo no hadaka huteego: Zyoohozookensetu ni okeru ninka mekanizumu o toosite [bare indeterminates in Japanese: A view from a licensing mechanism in unconditionals]. In *Hiteehyoogen no koozoo, imi, kinoo [the structure, meaning, and function of negative expressions]*, ed. Osamu Sawada, Hideki Kishimoto, and Ikumi Imani, 154–179. Tokyo: Kaitakusya.
- Nishigauchi, Taisuke. 1990. *Quantification in the theory of grammar*. Dordrecht: Kluwer Academic Publishers.
- Nishiyama, Kunio. 1999. Adjectives and the copulas in Japanese. *Journal of East Asian Linguistics* 8:183–222.
- Rawlins, Kyle. 2008. (un)conditionals: An investigation in the syntax and semantics of conditional structures. Doctoral Dissertation, UCSC.
- Rawlins, Kyle. 2013. Unconditionals. *Natural Language Semantics* 40:111–178.
- Saito, Mamoru. 2017. Japanese wh-phrases as operators with unspecified quantificational force. *Language and Linguistics* 18(1):1–25.
- Shimoyama, Junko. 2001. WH-constructions in Japanese. Doctoral Dissertation, University of Massachusetts, Amherst, Amherst, MA.
- Shimoyama, Junko. 2006. Indeterminate phrase quantification in Japanese. *Natural Language Semantics* 14:139–173.
- Shimoyama, Junko. 2008. Indeterminate pronouns. In *The Oxford handbook of Japanese linguistics*, ed. Shigeru Miyagawa and Mamoru Saito, 372–393. New York, NY: Oxford University Press.
- Srivastav, Veneeta. 1991. The syntax and semantics of Hindi correlatives. *Natural Language & Linguistic Theory* 9(4):637–686.
- Szabolcsi, Anna. 2015. What do quantifier particles do? *Linguistics and Philosophy* 38:159–204.
- Takahashi, Daiko. 2002. Determiner raising and scope shift. *Linguistic Inquiry* 33(4):575–615.
- Uegaki, Wataru. 2018. A unified semantics for the Japanese Q-particle ka in indefinites, questions and disjunctions. *Glossa* 3:413–450 [DOI: <https://doi.org/10.5334/gjgl.238>].
- Watanabe, Akira. 2004. The genesis of negative concord: Syntax and morphology of negative doubling. *Linguistic Inquiry* 35(4):559–612.
- Watanabe, Akira. 2006. Functional projections of nominals in Japanese: Syntax of classifiers. *Natural Language & Linguistic Theory* 24(1):241–306.
- Yatsushiro, Kazuko. 2009. The distribution of quantificational suffixes in Japanese. *Natural Language Semantics* 17:141–173.