

Ambiguity of the Japanese negative comparative expression *kurabe mono-ni nara-nai* 'cannot be compared'

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Abstract. The Japanese comparative expression *kurabe mono-ni nara-nai* 'cannot be compared' has some characteristics that ordinary comparatives lack. First, its meaning is ambiguous in terms of whether the subject *x* is much higher than the object *y* or whether *x* is much lower than *y* in terms of scale. Second, it always appears with negation. I will argue that these two kinds of interpretation can be derived from the interaction with negation and the notion of category, and that the polarity sensitivity of the expression is due to its interaction with the maxim of quantity (Grice 1975). I will also compare the Japanese data to some related expressions in Chinese, English, and Japanese and discuss their similarities and differences. This paper shows that there is a new type of comparative, context-dependent comparison in natural language whose relative relationship is not linguistically encoded explicitly.

Keywords. comparison; ambiguity; negation; *kurabe mono-ni nara-nai*; *cannot compare*; variations; Japanese; English; Chinese

1. Introduction. In English and Japanese, the meaning of comparison is usually expressed with a comparative morpheme/marker and a gradable predicate, as shown in:¹

- (1) a. Tom is taller than Mary (is). (*English*)
 b. Taro-wa Hanako-yori se-ga takai. (*Japanese*)
 Taro-TOP Hanako-than height-NOM tall
 'Taro is taller than Hanako.'

In (1), a target and a standard are compared based on a scale associated with a gradable predicate (e.g., *tall*, *takai* 'tall').

While such comparative constructions are typical, Japanese (and English) has comparative expressions that convey a comparative meaning without using comparative morphemes, standard markers, or gradable predicates. In this paper, I will take the Japanese negative comparative expression *kurabe mono-ni nara-nai* 'cannot be compared' as a case study and consider how the comparative meaning is derived and interpreted in such expressions.

The Japanese negative comparative expression *kurabe mono-ni nara-nai* 'cannot be compared' has several features that are not present in ordinary comparatives.

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¹ The following abbreviations are used for example glosses: ACC: accusative, CL: classifier, COND: conditional, CONT: contrastive, COP: copula, DAT: dative, EVAL: evaluative, GEN: genitive, NEG: negation/negative, NMLZ: nominalizer, NOM: nominative, NON.PST: non-past tense, PASS: passive, PL: plural, POLITE: polite, PRED: predicative, PROG: progressive, PRS: present, PRF: perfective, PRT: particle, PST: past, STATE: state/stative, TE: Japanese *te*-form, TOP: topic.

First, its meaning is ambiguous regarding whether, in terms of a scale, subject x is much higher or much lower than object y . Example (2) conveys that Siberia (=subject) has a much higher degree of coldness than Hokkaido (=object), which leads to a “much more” reading.

(2) (“Much more” reading)

Samu-sa-ni kanshite-wa Siberia-wa Hokkaido-to-wa kurabe mono-ni
cold-ness-to regarding-TOP Siberia-TOP Hokkaido-with-TOP compare thing-to
{nara-nai /??nar-u}.
become-NEG /become-NON.PST

‘lit. Regarding coldness, Siberia cannot be compared to Hokkaido.’ (= Siberia is much colder than Hokkaido.)

In contrast, example (3) conveys that Taro (=subject) has a much lower degree of strength than professional players (=object), resulting in a “much less” reading.

(3) (“Much less” reading)

Taro-wa (ama-de tsuyoi-to i-ttemo) puro-no senshu-to-wa kurabe
Taro-TOP amateur-in strong-that say-even.if professional-GEN player-with-TOP compare
mono-ni {nara-nai /??nar-u}.
thing-to become-NEG /become-NON.PST

‘lit. Even though Taro is a strong amateur, he cannot be compared to professional players.’ (= Taro is much less stronger than professional players.)
(Example from *Shinmeikai Kokugo Jiten* ‘Shinmeikai Japanese Dictionary’)

If we change the subject and object of the sentences, we obtain an opposite reading.²

Second, the expression is polarity-sensitive in that it must appear with negation, as shown in (2) and (3).

What is the exact meaning of *kurabe mono-ni nara-nai*? By what mechanism do the “much more” and “much less” readings in the sentence appear? Why is it that *kurabe mono-ni nar-u* must appear with negation? Is this phenomenon cross-linguistically general?

As for the meaning of *kurabe mono-ni naru* (without negation), I first argue in Section 3 that it presupposes that the target and standard belong to the same comparison class (CC) and entails that they can be compared inside the same “category”. The presupposition component plays an important role in distinguishing between a literal use and a non-literal (comparative use). I will then argue that the two kinds of intensified meanings (a “much more” reading and a “much less” reading) can be derived by negating that the target and standard belong to the same category.

As for polarity sensitivity, I claim in Section 5 that the expression’s polarity sensitivity comes from the interaction with the maxim of quantity (Grice 1975).

Finally, Section 6 compares Japanese *kurabe mono-ni nara-nai* with similar expressions in Chinese, English, and Japanese and discusses their similarities and differences. I suggest that expressions without ambiguity have a high scalar presupposition.

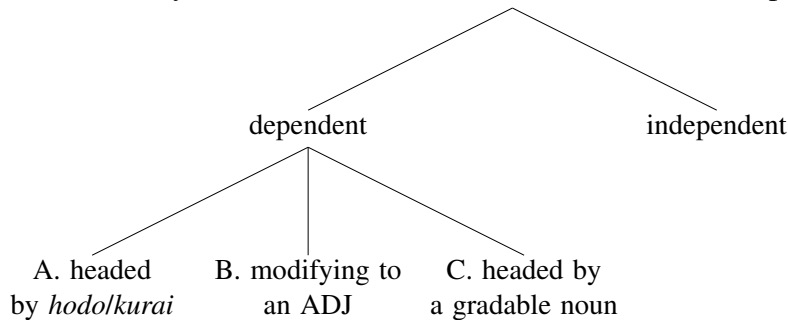
² Note that, as we will discuss in Section 8 in English, *cannot compare*, *does not compare*, or *cannot be compared* can basically only express a “much less” reading.

This paper shows that it is possible to convey the meaning of comparison without explicitly representing a relative relationship. The Japanese *kurabe mono-ni nara-nai* belongs to a new type of comparison, namely, a context-dependent comparison whose relative meaning is not explicitly encoded in grammar but is determined by context.

2. Taxonomy of *kurabe mono-ni nara-nai*: Dependent and independent types. Before examining the meaning and use of *kurabe mono-ni nara-nai* in detail, let us first review the environment in which it occurs.

There are two main types of environments in which *kurabe mono-ni nara-nai* is used: one is used in the main clause (independent type), and the other is used in the embedded environment (dependent type), which has three subtypes (Types A, B, and C), as shown in (4):

(4) The taxonomy of *kurabe mono-ni nara-nai* ‘cannot be compared’



The dependent and independent types of *kurabe mono-ni nara-nai* have the following characteristics:

(5) Dependent type

- a. *Kurabe mono-ni nara-nai* is embedded inside a clause. It is dependent (modifying a noun/adjective).
- b. In Types A and B, there is an explicit adjective in the main clause. Types A and B are explicit regarding the meaning of the comparison.
- c. In Type C, the embedded clause with *kurabe mono-ni nara-nai* modifies into a gradable noun. The scale is specified through the meaning of the gradable noun; however, the sentence can be ambiguous between a “much more reading” and a “much less reading”.

(6) Independent type

- a. *Kurabe mono-ni nara-nai* is used independently. It does not function as a modifier.
- b. There is no explicit gradable adjective. The information of scale (measure function dimension) is often signalled by a gradable noun in the subject (e.g., *the cold in Hokkaido*) or adverbial phrase (e.g., *regarding the coldness*).
- c. A sentence, itself, can be ambiguous between a “much more” reading and a “much less” reading. Contextual information usually disambiguates these two readings.

Let us examine each type based on specific examples.

2.1. DEPENDENT TYPE A. In dependent Type A, the dependent clause is headed by *kurai/hodo* ‘degree’, and the degree is modified to the adjective in the main clause.³ The adjectives in the main clause can vary.

- (7) Sakhalin-no fuyu-wa Hokkaido-to-wa kurabe mono-ni nara-nai
 Sakhalin-GEN winter-TOP Hokkaido-with-TOP compare thing-to become-NEG
 {hodo/kurai} samui.
 degree/degree cold
 ‘Winters in Sakhalin are far colder than in Hokkaido.’

2.2. DEPENDENT TYPE B: MODIFYING AN ADJECTIVE. Next, let us consider the dependent Type B. In this type, the clause with *kurabe mono-ni nara-nai* modifies an adjective:

- (8) Musume-no hoo-mo Kanako-to-wa kurabe mono-ni nara-nai
 daughter-GEN direction-also Kanako-with-TOP compare thing-to become-NEG
 takasoo^{na} wanpiisu-o ki-tei-ru.
 look.expensive one.piece-ACC wear-PROG-PRS
 ‘The daughter is also wearing an expensive-looking one-piece dress, which cannot be compared with Kanako’s.’ (= The daughter’s dress seems to be much more expensive than Kanako’s.) (BCCWJ: OB3X_00267)

- (9) Ogori-wa shinkansen-ga toma-ru-towa i-e, katsute Suounokuni-no
 Ogori-TOP Shinkansen-NOM stop-NON.PST-that possible.to.say once Suo.province-GEN
 kokufu-ga oka-re-tei-ta Hoofu-to-wa yahari kurabe mono-ni
 government-NOM locate-PASS-PRF-PST Hofu-with-TOP still compare thing-to
 nara-nai chiisana^{na} machi-dear-u.
 become-NEG small town-PRED-NON.PST
 ‘Although Ogori has a Shinkansen train stop, it is still a small town that cannot be compared to Hofu, where the national government of Suo Province was once located.’ (BCCWJ: PM12_00007)

There can be many possibilities regarding the analyses of these examples, among which is to assume that there is an implicit *hodo/kurai* ‘degree’ or corresponding operator in the logical structure. This would allow for a uniform analysis of Types A and B.

2.3. DEPENDENT TYPE C: HEADED BY A GRADABLE NOUN. Let us now turn to the dependent type C, wherein the embedded clause is headed by other degree nouns. It forms a relative clause. There is no gradable predicate, and the scale is specified via a gradable noun. In this type, there can be a “much more” reading and a “much less” reading.

³ Note that *hodo* also has an equative use. In such a case, it behaves as an NPI (e.g., Tanaka et al. (2019); Tanaka & Mizutani (2021)):

- (i) Hokkaido-wa Sakhalin-hodo-(wa) {samuku-nai / ??samui}.
 Hokkaido-TP Sakhalin-*hodo*-CONT.TOP cold-NEG / cold
 ‘Hokkaido {is not/??is} as cold as Sakhalin.’

See Tanaka et al. (2019); Tanaka & Mizutani (2021) for the meaning and distribution of *hodo*.

(10) (“Much more” reading)

Sudeni Hoover seiken-no jidai-ni shi.seifu-wa Washington-ni
already Hoover administration-GEN time-at city.government-TOP Washington-to
shi-choo-o okuri shuu.seifu-to-wa kurabe mono-ni nara-nai
mayor-ACC send state.government-with-TOP compare thing-to can.be-NEG
sekkyokusei-o motte renpoo seisaku-o yookyuu-shi RFC hoo-o umidas-u
aggressiveness-ACC with federal policy-ACC demand-do RFC act-ACC create-NON.PST
hito-tsu-no chikara-to nat-tei-ta.
one-CL-GEN force-to become-PRF-PST

‘As early as the Hoover administration, the city’s government sent mayors to Washington to demand federal policy with an aggressiveness incomparable to that of the state government and was one of the forces behind the RFC Act.’ (BCCWJ: PB13_00107)

(11) (“Much less” reading)(Context: The speaker is talking about “CS TV”. It had a total of just over 150,000 subscribers.)

Sen.man-o koe-ru BS-kei-no eisei hoosoo-to-wa kurabe
10.million-ACC over-NON.PST BS-type-GEN satellite broadcast-with-TOP compare
mono-ni nara-nai kibo-dat-ta.
thing-to become-NEG scale-PRED-PST

‘The scale of the CS TV service was incomparable to that of BS satellite broadcasting, which had over 10 million subscribers.’
(BCCWJ: PB36_00050)

2.4. INDEPENDENT TYPE. Now, let us consider the independent type, which is the focus of this paper. As mentioned earlier, in the independent type, *kurabe mono-ni nara-nai* is used independently and is in the main clause. Crucially, in this type, there is no explicit gradable adjective in the sentence, and the sentence can be ambiguous between a much more and much less reading. The following are examples of each reading found in the BCCWJ corpus:

(12) (“Much more” reading)

a. Sasugani shunin kyooju-no kenkyuushitsu-wa hiroku-te Tadano-no
as.expected chair professor-GEN office-TOP spacious-and Tadano-GEN
heya-nado-to-wa kurabe mono-ni nara-nai.
room-EVAL-with-TOP compare thing-to become-NEG

‘As might be expected, the chair professor’s office is spacious and cannot be compared to Tadano’s office.’ (BCCWJ: OB3X_00154)

b. Sono kinben-sa-to.ki.tara tabun sonohen-no
its industrious-NMLZ-when.it.comes.to probably average-GEN
sarariiman-to-wa kurabe mono-ni nara-nai-daroo.
office.worker-with-TOP compare thing-to become-NEG-will

‘When it comes to their diligence, they are probably incomparable to that of the average office worker.’ (BCCWJ: PB25_00107)

(13) (“Much less” reading)

- a. OXY (Occidental)-ga ikani Libya saidai-no sanyu gaisha-to
OXY (Occidental)-NM how Libya largest-GEN oil.produce company-that
i-ttemo icchoo koto are-ba Major-no kyooryokuna chikara-to-wa
say-even.if sudden event be-COND Major-GEN strong power-with-TOP
kurabe mono-ni nara-nai-kara kumishi-yasui-ue Sadafi-jishin-ga eraku
compare thing-to become-NEG-because manage-easy-and Sadafi-self-NOM very
kanjootekina yoosu-desu-yo.
emotional look-PRED.POLITE-PRT
‘Even though OXY (Occidental) is the largest oil producer in Libya, it cannot
compare with the majors, so it is easy to control. Sadafi himself seems very emo-
tional.’ (BCCWJ: OB1X_00205)
- b. (“Much less” reading)
Mercedes-Benz-ga 120-nen-no rekishi-o mots-u-noni.taishite
Mercedes-Benz-NOM 120-yea-GEN history-ACC have-NON.PST-whereas
Lexus-wa tatta 16-nen shika keika shi-tei-nai-noda-kara. Kagayakashii
Lexus-TOP only 16-year *shika* pass do-PRF-NEG-*noda*-because illustrious
rekishi-to dentoo-o hoko-ru oobei-no kookyuusha
history-and tradition-ACC boast-NON.PST Europe.US-GEN luxury.car
burando-gun-to-wa sono ten-nitsuite-wa kurabe mono-ni
brand-group-with-TOP that point-about-TOP compare thing-to
nara-nai-koto-wa Matsumoto-shi-mo yoku ninshiki shi-tei-ru.
become-NEG-fact-TOP Matsumoto-Mr-also well recognize do-PROG-PRS
‘Whereas Mercedes-Benz has a history of 120 years, Lexus is only 16 years old.
Matsumoto is well aware that Lexus cannot compare in this respect with the lux-
ury car brands in Europe and the US, which boast an illustrious history and tradi-
tion.’ (BCCWJ: PB55_00233)

3. Corpus data. To check the frequency of the types of *kurabe mono-ni nara-nai*, I examined data in the Balanced Corpus of Contemporary Written Japanese (BCCWJ). A BCCWJ string search for *kurabe mono-ni nara-nai* yielded 95 hits as of April 24, 2023. (In the string search, *mono* was searched in hiragana.) As can be seen in Table 1, both dependent and independent types are frequently used. It was also found that, in the independent type, there were approximately the same number of examples of “much-more” and “much-less” readings.

Dependent	(Type A) Headed by <i>hodo</i> (followed by an ADJ)	30
	(Type A) Headed by <i>kurai</i> (followed by an ADJ)	25
	(Type B) Modified to an ADJ	9
	(Type C) Headed by a gradable noun	7
Independent	1. “Much-more reading”	12
	2. “Much-less reading”	12

Table 1. Frequency of *kurabe mono-ni nara-nai* (BCCWJ)

4. Analysis of *kurabe mono-ni nara-nai*. Having clarified the distribution patterns of *kurabe mono-ni nara-nai*, in this section, we will focus on the independent type of *kurabe mono-ni nara-nai* and consider its semantic ambiguity and polarity sensitivity.

4.1. COMPARISON CLASS AND CATEGORY. As we have observed in the Introduction section, *kurabe mono-ni nara-nai* can be ambiguous between a “much more” reading and a “much less” reading:⁴

(14) Samu-sa-ni kanshite-wa Siberia-wa Hokkaido-to-wa kurabe mono-ni
cold-ness-to regarding-TOP Siberia-TOP Hokkaido-with-TOP compare thing-to
nara-nai.
become-NEG
'lit. Regarding coldness, Siberia cannot be compared to Hokkaido.' (= Siberia is much colder than Hokkaido.) (“Much more” reading)

(15) Taro-wa (ama-de tsuyoi-to i-ttemo) puro-no senshu-to-wa kurabe
Taro-TOP amateur-in strong-that say-even.if professional-GEN player-with-TOP compare
mono-ni nara-nai.
thing-to become-NEG
'lit. Even though Taro is a strong amateur, he cannot be compared to professional players.' (= Taro is much less weak than professional players.) (“Much less” reading)

Through what mechanism does the scalar meaning (the meaning of separation/distance) of *kurabe mono-ni nara-nai* emerge? And how can semantic ambiguity be explained?

The first point we need to consider is the intuition that *kurabe mono-ni nara-nai* conveys that a target and a standard do not belong to the same category.⁵ By category, I mean it is a set of similar things concerning a level. I assume that a target *x* and standard *y* belong to the same category if they belong to the same group in terms of level. I consider that the notion of category comes from *mono* ‘thing’. *Mono* literally means physical objects but in the case of *kurabe mono*, its meaning is abstract and interpreted as objects to be compared:

- (16) a. oki mono ‘things to put’
b. kurabe mono ‘object(s) of comparison’ (target(s) of comparison)

The notion of category plays an important role in deriving a distance between a target and a standard. By saying that they are not in the same category, it will create a large gap between a target and a standard.

Note that although a sentence with *kurabe mono-ni nara-nai* conveys that a target and a standard are not in the same category, it presupposes that the target and the standard belong to the same comparison class (CC). A CC is a frame of reference or standard of comparison.

⁴ Note that if we switch the subject and object, then we obtain the opposite interpretations (the information in parentheses in (15) is ignored):

- (i) Samu-sa-ni kanshite-wa Hokkaido-wa Siberia-to-wa kurabe mono-ni nara-nai.
cold-ness-to regarding-TOP Hokkaido-TOP Siberia-with-TOP compare thing-to become-NEG
'lit. Regarding coldness, Hokkaido cannot be compared with Hokkaido.' (= Hokkaido is much less cold than Siberia.) (“Much less” reading)
- (ii) Puro-no senshu-wa Taro-to-wa kurabe mono-ni nara-nai.
professional-GEN player-TOP Taro-with-TOP compare thing-to become-NEG
'lit. Professional players cannot be compared to Taro.' (= Professional players are much stronger than Taro.) (“Much more” reading.)

⁵ I thank Yukinori Takubo for the valuable comment and discussion.

Formally, it is a set of individuals. The notion of CC is often discussed in the semantics of relative gradable adjectives, such as *tall* (e.g., Klein 1980, 1991; Kennedy 2007; Solt 2011).⁶ For example, to interpret the sentence “Bill is tall,” we need to make reference to a CC. The CC covers a large range of contextually related individuals (e.g., from a very short person to a very tall person in the same class).

The fact that a target and a standard in a sentence with *kurabe mono-ni nara-nai* must belong to the same CC is supported by the fact that if a target and a standard are fundamentally different (e.g., shelf vs. human (=17); building vs. mountain (=18)), then we cannot use *kurabe mono-ni nara-nai* even if they are measured based on the same scale (dimension):

- (17) Takasa-ni kanshite-wa kono tana-wa {ano tana / #Taro}-to-wa kurabe mono-ni
Height-to regarding-TOP this shelf-TOP {that shelf / Taro}-with-TOP compare thing-to
nara-nai.
become-NEG

‘lit. Regarding the height, this shelf cannot be compared to {that shelf/#Taro}.’
This shelf >!!_{height} {that shelf/Taro}

- (18) Takasa-ni kanshite-wa {Burj Khalifa / #Fujisan}-wa Tokyo Tower-to-wa kurabe
Height-to regarding-TOP Burj Khalifa / Mt. Fuji-TOP Tokyo tower-with-TOP compare
mono-ni nara-nai.
thing-to become-NEG

‘lit. Regarding height, {Burj Khalifa/#Mt.Fuji} cannot be compared with Tokyo Tower.’
{Burj Khalifa/#Mt.Fuji} >!!_{height} Tokyo Tower

Note that the following example is still odd even though the target and standard are the same kind; that is, places:

- (19) ?? Samu-sa-ni kanshite-wa Okinawa-wa Hokkaido-to-wa kurabe mono-ni
cold-ness-to regarding-TOP Okinawa-TOP Hokkaido-with-TOP compare thing-to
nara-nai.
become-NEG

‘lit. Regarding coldness, Okinawa cannot be compared to Hokkaido.’
 (“Much more” reading: Hokkaido >!!_{cold} Okinawa)

This is because it is difficult to believe that Okinawa belongs to the same CC as Hokkaido. To compare Okinawa and Hokkaido, the two must be related, but they do not appear to be. Intuitively, it appears that Okinawa cannot be positioned on the cold scale.⁷

⁶ Klein (1980:13) describes a CC as follows: “It is, I think, fairly uncontroversial that something like a CC does figure in the background assumptions against which sentences containing vague predicates are evaluated. Presumably, it is related to the rather amorphous idea of a ‘topic of conversation’; in many cases, the CC is just the set of things that the participants in a conversation happen to be talking about at a given time. In formal terms, a CC is a subset of the universe of discourse which is picked out relative to a context of use.” (Klein 1980:13)

⁷ In fact, in many cases, *kurabe mono-ni nara-nai* is used when a target and a standard both satisfy a contextually determined standard of a scale. In the following example, both Siberia and Hokkaido are considered to be cold:

- (i) A: Siberia-no samu-sa-wa Hokkaido-to onaji-kurai-desu-ka?
Siberia-GEN cold-NMLZ-TOP Hokkaido-as same-degree-PRED.POLITE-Q
‘Is Siberia as cold as Hokkaido?’

4.2. DERIVING AMBIGUITY. Let us now consider the meaning of *kurabe mono-ni nara-nai* in a formal way. I define the meaning of *kurabe mono-ni naru* (without negation) as follows (The underlined part is a presupposition):

- (20) $\llbracket \text{kurabe mono-ni naru} \rrbracket = \lambda y \lambda x \lambda S : x \text{ and } y \in CC_S. x \text{ and } y \in \text{the same category} \wedge \text{can-be-compared}(x, y) \text{ in terms of } S$

Kurabe mono-ni naru (without negation) presupposes that a target x and standard y are members of the same CC and denotes that (i) the target x and standard y belong to the same category and (ii) x can be compared to y in terms of the scale S .

Note that the scale S is implicit. The information of scale is often signalled by external adverbial phrases or by the gradable noun in the subject (e.g., the coldness in Siberia). Technically, S is a measure function of type $\langle e, \langle d, t \rangle \rangle$ which relates individuals to degrees based on a dimension (e.g., the scale of cold: $\lambda x \lambda d. \text{cold}(x) = d$).

Negation then derives ambiguity. By adding negation, the sentence conveys that it is not the case that [the target x and standard y belong to the same category and can be compared in terms of the scale S]. This implies that a large gap exists between x and y . Using this approach, the preconditions and at-issue meanings of (21) and (22) can be analysed as follows:

- (21) Samu-sa-ni kanshite-wa Siberia-wa Hokkaido-to-wa kurabe mono-ni
cold-ness-to regarding-TOP Siberia-TOP Hokkaido-with-TOP compare thing-to
nara-nai.
become-NEG

Presupposition: Siberia and Hokkaido are a member of CC_{cold} .

At-issue: \neg [Siberia and Hokkaido \in the same category \wedge can-be-compared(Siberia, Hokkaido) in terms of the “cold” scale]

- (22) (Context: Taro is a strong and popular amateur martial artist, but there are many strong professional players in his field.)

Tsuyo-sa-de-wa Taro-wa puro-no senshu-to-wa kurabe mono-ni
strong-NMLZ-with-TOP Taro-TOP professional-GEN player-with-TOP compare thing-to
nara-nai.
become-NEG

Presupposition: Taro and professional players are a member of CC_{strong} .

at-issue: \neg [Taro and professional players \in the same category \wedge can-be-compared(Taro, professional players) in terms of the “strong” scale]

Theoretically, a sentence with *kurabe mono-ni nara-nai* is ambiguous; however, contextual information and world knowledge usually resolve this ambiguity. Notably, (21) is interpreted as a “much more” reading because Siberia is north of Hokkaido, and (22) is interpreted as a “much less” reading because Taro is being compared to professional players.

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- B: Iie. Siberia-no samu-sa-wa Hokkaido-to-wa kurabe mono-ni nari-masen.
No Siberia-GEN cold-NMLZ-TOP Hokkaido-with-TOP compare thing-to become-NEG.POLITE
'No, the cold in Siberia cannot be compared to Hokkaido.' (= Siberia is much colder than Hokkaido.)

However, as discussed in the next section, the target or standard can have a low evaluative marker and low degree; therefore, there is no requirement that both must meet the standard of the adjective. See also example (14).

In addition, the ambiguity of *kurabe mono-ni nara-nai* can be resolved by adding a low evaluative marker *nado* to either the subject or the object.

(23) (“Much more” reading)

Uta-no umasa-de-wa Hanako-wa Mary-**nado**-to-wa kurabe
 song-GEN goodness-with-TOP Hanako-TOP Mary-LOW.EVAL-with-TOP compare
 mono-ni nara-nai.
 thing-to can.be-NEG

‘lit. When it comes to singing ability, Hanako cannot be compared to Mary.’
 (Hanako >!!_{good} Mary)

(24) (“Much less” reading)

Uta-no umasa-de-wa Hanako-**nado** Mary-to-wa kurabe mono-ni
 song-GEN goodness-with-TOP Hanako-LOW.EVAL Mary-with-TOP compare thing-to
 nara-nai.
 can.be-NEG

‘lit. When it comes to singing ability, Hanako cannot be compared to Mary.’
 (Hanako <!!_{good} Mary)

5. Polarity sensitivity and NPI licensing. Now, let us consider the polarity sensitivity of *kurabe mono-ni nara-nai*. Why is it that the positive statement without *nai* ‘not’ sounds odd?

(25) Samu-sa-ni kanshite-wa Siberia-wa Hokkaido-to-wa kurabe mono-ni
 cold-ness-to regarding-TOP Siberia-TOP Hokkaido-with-TOP compare thing-to
 nar-u.
 become-NON.PST

‘lit. Regarding coldness, Siberia can be compared to Hokkaido.’

I consider the positive sentence odd because it violates Grice’s (1975) maxim of quantity: Make your contribution as informative as required (for the current purposes of the exchange). If we want to determine the relative relationship, the information that *x* and *y* can be compared is not informative. Unlike Figure 2, no comparison has yet been made in Figure 1.

Figure 1 (positive sentence)

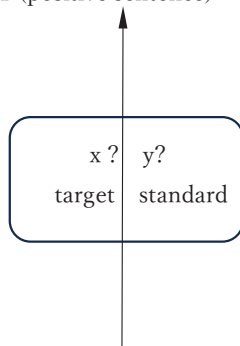
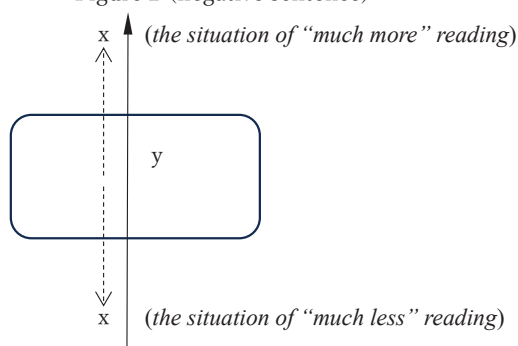


Figure 2 (negative sentence)



Let us now consider the polarity sensitivity of *kurabe mono-ni nara-nai* in terms of its relationship with negative polarity items (NPIs). *Kurabe mono-ni nara-nai* can license some NPIs. As the following examples show, *wh-mo* (which is a strong NPI and semantically simi-

lar to the English *any*) can appear in both the subject and object positions.

- (26) a. (“Much more” reading)
 Einstein-no gyooseki-wa donna butsurei gakusha-mo kurabe mono-ni
 Einstein-GEN achievement-TOP how physics scholar-*mo* compare thing-to
 nara-nai.
 become-NEG
 ‘Einstein’s achievements cannot be compared to those of any physicist.’
- b. (“Much less reading”)
 Donna butsurei gakusha-mo Einstein-no gyooseki-to-wa kurabe mono-ni
 how physics scholar-*mo* Einstein-GEN achievement-with-TOP compare thing-to
 nara-nai.
 become-NEG
 ‘lit. No physicist can compare with Einstein’s achievements.’

However, the comparative sentence with the exceptive *shika ... nai* ‘only’ sounds odd:

- (27) ?? X-wa Y-to-shika kurabe mono-ni nara-nai.
 X-TOP Y-with-*shika* compare thing-to become-NEG
 ‘X can only be compared with Y.’

Note also that *kurabe mono-ni naru* cannot appear in the neg-raising environment:

- (28) a. ?? Watashi-wa [X-wa Y-to-wa kurabe mono-ni nar-u]-to-wa
 I-TOP X-TOP Y-with-TOP compare thing-to become-NON.PST-that-TOP
 omowa-nai.
 think-NEG
 ‘I don’t think X can be compared to Y.’ (= Neg-raising)
- b. Watashi-wa [X-wa Y-to-wa kurabe mono-ni nara-nai]-to omo-u.
 I-TOP X-TOP Y-with-TOP compare thing-to become-NEG-that think-PRS
 ‘I think that X cannot be compared to Y.’ (= Non-neg-raising)

Kurabe mono-ni naru ‘can be compared’ should co-occur with negation locally. The reason neg-raising sentences and *shika ... nai* sentences sound strange is that in these environments *kurabe mono-ni naru* is not directly negated. The meaning of the significant difference between the target and the standard does not emerge in these environments.

6. Similar phenomenon. In this paper, we have focused on the Japanese comparative expression *kuraba mono-ni nara-nai*. This section considers some related expressions in Chinese, English, and Japanese and discusses the semantic variation of “NEG+ compare”.

6.1. CHINESE *bù bǐ* AND *bù néng hé ... bǐ* ‘LIT. CANNOT COMPARE WITH’. The Chinese expressions *bù bǐ* [不比] (not + compare) and *bù néng hé ... bǐ* [不能和... 比] (cannot + compare) are similar to the Japanese *kurabe mono-ni nara-nai* ‘cannot be compared’ in that the sentence with the expression can be ambiguous between a “much more” reading and a “much less” reading (Linmin Zhang personal communication). Note that the former expression does not have an overt modal, while the latter expression has an overt modal:

(29) (*bù bǐ* [不比])

a. (“Much more” reading)

shuō-qǐ hánlěng xī-bó-lì-yà (kě) bù bǐ běi-hǎi-dào, (jué) bù néng
speaking-of coldness Siberia but NEG compare Hokkaido definitely NEG can
qīng-shì)
under-estimate

‘Regarding the coldness, Siberia cannot be compared to Hokkaido.’ (= Siberia is much colder than Hokkaido.) (Example provided by Linmin Zhang)

b. (“Much less” reading)

jì-shǐ tài-láng shì gè hěn-qiàng-de yè-yú xuǎn-shǒu dàn tā (bì-jìng) bù
even-if Tairo COP CL very-strong amateur player but he after-all NEG
bǐ zhí-yè xuǎn-shǒu
compare professional player

‘Even though Tairo is a strong amateur, he cannot be compared to professional players.’ (= Tairo is much weaker than professional players.) (Example provided by Linmin Zhang)

(30) (*bù néng hé ... bǐ* [不能和... 比])

a. (“Much more” reading)

shuō-qǐ hánlěng xī-bó-lì-yà bù néng hé běi-hǎi-dào bǐ
speaking-of coldness Siberia NEG can with Hokkaido compare

‘Regarding the coldness, Siberia cannot be compared to Hokkaido.’ (= Siberia is much colder than Hokkaido.) (Example provided by Linmin Zhang)

b. (“Much less” reading)

jì-shǐ tài-láng shì gè hěn-qiàng-de yè-yú xuǎn-shǒu dàn tā bù néng hé
even-if Tairo COP CL very-strong amateur player but he NEG can with
zhí-yè xuǎn-shǒu bǐ
professional player compare

‘Even though Tairo is a strong amateur, he cannot be compared to professional players.’ (= Tairo is much weaker than professional players.) (Example provided by Linmin Zhang)

These expressions behave similarly to the Japanese *kurabe mono-ni nara-nai*, and a similar analysis can be made for these expressions.

6.2. ENGLISH *cannot compare/does not compare/cannot be compared*. English also has similar expressions such as *cannot compare, does not compare*:

(31) a. The rides at the fair just can’t compare with the rides at Disneyland. (*Longman Dictionary of Contemporary English*)

b. Instant coffee just doesn’t compare with freshly ground coffee. (*Cambridge Advanced Learner’s Dictionary & Thesaurus*)

An interesting point is that unlike *kurabe mono-ni nara-nai*, these expressions basically only have a “much less” interpretation.⁸ These expressions become unnatural when used in the

⁸ The conjunctive comparative expression “there is simply no comparison between X and Y” and this expression can

context of “much more” reading, as shown in the following sentence (I assume that *cannot be compared with* also has the same tendency):⁹

- (33) a. Taro’s office is not that small, but it {cannot compare/does not compare/cannot be compared} with the chair professor’s office.
 (intended: Taro’s office is much smaller than the chair professor’s office.)
 b. ??The chair professor’s office is spacious. It {cannot compare/does not compare/cannot be compared} with Taro’s office.
 (intended: The chair professor’s office is much more spacious than Taro’s office.)

How can we explain this fact? I would like to consider that the English *cannot be compared* and related expressions presuppose that the maximum degree of the standard y is much greater than a contextually determined standard of S . I assume that *cannot be compared* has the following meaning:

- (34) $\llbracket \text{can compare} \rrbracket = \lambda y \lambda x \lambda S: x \text{ and } y \in CC_S \wedge \max(S(y)) \geq !!STND_S. x \text{ and } y \in \text{the same category} \wedge \text{can-compare}(x, y) \text{ in terms of the scale } S$

In this approach, the meaning of (33) (excluding the first part) can be analyzed as follows:

- (35) [Sentence: Taro’s office cannot compare with the chair professor’s office.]
 presupposition: Taro’s office and chair-prof’s-office $\in CC_{large} \wedge \max(\lambda d. \text{large}(\text{chair professor’s office}) = d) \geq !!STND_{large}$
 at-issue: $\neg \llbracket \text{Taro’s office and chair professor’s office} \in \text{the same category} \wedge \text{can-compare}(\text{Taro’s office, chair professor’s office}) \text{ in terms of the scale of largeness} \rrbracket$

6.3. JAPANESE *hi-de-wa nai* ‘not comparison’. In contrast to English *cannot compare* or *does not compare*, Japanese *hi-de-wa nai* only has a “much more” interpretation:

- (36) a. Siberia-no samu-sa-wa Hokkaido-no hi-de-wa nai.
 Siberia-GEN cold-NMLZ-TOP Hokkaido-GEN comparison-PRED-TOP NEG
 ‘The cold in Sakhalin cannot be compared to Hokkaido.’ = Siberia is much colder than Hokkaido. (“Much more” reading)
 b. ??? Hokkaido-no samu-sa-wa Shiberia-no hi-de-wa nai.
 Hokkaido-GEN cold-NMLZ-TOP Siberia-GEN comparison-PRED-TOP NEG
 ‘The cold in Hokkaido cannot be compared to Sakhalin.’ (= Sakhalin is much colder than Hokkaido.) (“Much less” reading)

This can be confirmed by the addition of the low evaluative particle *nado* that can only

express “X is much higher than Y” and “X is much lower than Y”:

- (32) a. When it comes to cold temperatures, there’s simply no comparison between Siberia and Hokkaido.
 (Siberia (=X) is much colder)
 b. Although Taro is a strong amateur, there’s simply no comparison between Taro and a professional player. (Taro (= X) is much weaker)

I thank Thomas Grano, Larry Horn, and Chris Kennedy for their valuable comments on conjunctive comparison.

⁹ *Cambridge Advanced Learner’s Dictionary & Thesaurus* defines the meaning of *does not compare* as follows: “if something or someone does not compare with something or someone else, the second thing is very much better than the first.” *Longman Dictionary of Contemporary English* has an entry for *doesn’t/can’t compare with* and defines them as follows: “if something does not compare with something else, it is not as good, large etc.”

attach to the object position:

- (37) Sakhalin-no samu-sa-wa Hokkaido-nado-no hi-de-wa nai.
 Sakhalin-GEN cold-NMLZ-TOP Hokkaido-low.EVAL -GEN comparison-PRED-TOP NEG
 ‘The cold in Sakhalin cannot be compared to Hokkaido.’ (= Sakhalin is much colder than Hokkaido.) (“Much more” reading)
- (38) ??? Hokkaido-no samu-sa-nado Sakhalin-no hi-de-wa nai.
 Hokkaido-GEN cold-NMLZ-low.EVAL Sakhalin-GEN comparison-PRED -TOP NEG
 ‘The cold in Hokkaido cannot be compared to Sakhalin.’ (= Sakhalin is much colder than Hokkaido.) (“Much less” reading)

I also checked the corpus data (BCCWJ corpus) for the environment in which *hi-de-wa nai* was used and found 59 out of 60 examples with the “much more” reading and only 1 example with the “much less” reading, and that example was a translation.

- (39) (Examples of *hi-de-wa nai* in BCCWJ, Data retrieved on April 24, 2023)
 “much more reading”: 59
 “much less reading”: 1

Because of the conventionality, I assume that the positive form *hi-de aru* presupposes that the subject has a high scalar meaning, as in (40).

- (40) $\llbracket \text{hi-de aru} \rrbracket = \lambda y \lambda x \lambda S: x \text{ and } y \in CC_S \wedge \max(S(x)) \geq !!STND_S. x \text{ and } y \in \text{the same category} \wedge \text{can-be-compared}(x, y) \text{ in terms of the scale } S$

(41) shows the presupposition and at-issue meaning of (37):

- (41) a. presupposition: $Siberia \text{ and } Hokkaido \in CC_{cold} \wedge \max(\lambda d. cold(Siberia) = d) > !!STND_{cold}$
 b. at-issue: $\neg[Siberia \text{ and } Hokkaido \in \text{the same category} \wedge \text{can-be-compared}(Siberia, Hokkaido) \text{ in terms of the scale of coldness}]$

7. Conclusion. In this paper, I have investigated the meaning of Japanese *kurabe mono-ni nara-nai* ‘cannot be compared’ and shown that the sentence with *kurabe mono-ni nara-nai* can be ambiguous between a “much more” reading and a “much less” reading. I argue that the two kinds of intensified meaning can be derived from the interaction with negation and the notion of category and that the expression’s polarity sensitivity can be explained based on the maxim of quantity. This study shows that natural language has a mode of comparison that expresses a relative relationship between a target and a standard (with a large gap between them) by negating that they belong to the same category.

This paper leaves many things to be explored. First, in this paper, I have assumed that there is a modal meaning inside the semantics of *kurabe mono-ni naru*, but a more detailed analysis will be necessary regarding the compositionality inside the expression and the origin of the modal meaning. It is highly likely that *naru* has a modal meaning of capability. Second, in this paper, I have focused on the dependent type of *kurabe mono-ni nara-nai* and considered its semantic ambiguity (i.e. “much more” reading and “much less” reading), but as we have observed in Section 2, there are cases where *kurabe mono-ni nara-nai* is used in an embedded environment. Therefore, the possibility of a unified analysis needs to be explored.

Third, in terms of polarity sensitivity, unlike *kurabe mono-ni na-ru*, the English (*can*) *com-*

pare and *can be compared* can appear in a positive sentence:

- (42) In terms of physics accomplishments, Bill {can compare/compares/can be compared} with Einstein.

Notably, (42) indicates that Bill's accomplishments in physics are similar to Einstein's and these expressions work like *comparable*. It may be that because these expressions have a high scalar presupposition regarding a standard, a positive sentence is informative and meaningful.

Finally, it would be worthwhile to consider the relationship between *kurabe mono-ni nara-nai* and the so-called implicit comparison (English *compared to*, Japanese *kurabe-tara* 'compare-COND')(e.g., Kennedy 2007; Sawada 2009):

- (43) a. Compared to Hanako, Taro is tall.
b. Taro-wa Hanako-ni kurabe-tara se-ga takai.
Taro-TOP Hanako-to compare-COND height-NOM tall
'Compared to Hanako, Taro is tall.'

Implicit comparison also utilizes the verb *compare/kurabe* 'compare' and does not use comparative morphemes such as *er/more* or standard markers such as *than/ynori* 'than' and it indirectly expresses the relative relationship between the object and the standard. (Pragmatically, there is also a negative implication that both a target and a standard are not A.) There appear to be some similarities between implicit comparison and *kurabe mono-ni nara-nai* in terms of indirectness. More detailed empirical and theoretical investigations are required.

References

- Grice, Paul H. 1975. Logic and conversation. In Peter Cole & Jerry L. Morgan (eds.), *Syntax and semantics, vol. 3: Speech acts*, 43–58. New York: Academic Press.
- Kennedy, Christopher. 2007. Vagueness and grammar: The semantics of relative and absolute gradable adjectives. *Linguistics and Philosophy* 30(1). 1–45.
<https://doi.org/10.1007/s10988-006-9008-0>.
- Klein, Ewan. 1980. A semantics for positive and comparative adjectives. *Linguistics and Philosophy* 4. 1–45. <https://doi.org/10.1007/BF00351812>.
- Klein, Ewan. 1991. Comparatives. In Arnim von Stechow & Dieter Wunderlich (eds.), *Semantik: Ein internationales Handbuch der zeitgenossischen Forschung*, 673–691. Berlin: Walter de Gruyter.
- Sawada, Osamu. 2009. Pragmatic aspects of implicit comparison: An economy-based approach. *Journal of Pragmatics* 41(6). 1079–1103. <https://doi.org/10.1016/j.pragma.2008.12.004>.
- Solt, Stephanie. 2011. Notes on the comparison class. In Rick Nouwen, Robert van Rooij, Uli Sauerland & Hans-Christian Schmitz (eds.), *Vagueness in communication*, 189–206. Berlin: Springer.
- Tanaka, Eri & Kenta Mizutani. 2021. Presuppositions and comparison classes in Japanese *hodo*-equatives. In Katsutoshi Yada, Yasufumi Takama, Koji Mineshima & Ken Satoh (eds.), *New Frontiers in Artificial Intelligence: Revised selected papers*, 161–171. Berlin: Springer.
https://doi.org/10.1007/978-3-031-36190-6_11.
- Tanaka, Eri, Kenta Mizutani & Stephanie Solt. 2019. Existential semantics in equatives in Japanese and German. *Proceedings of the Amsterdam Colloquium* 22. 377–386.