

Comparison, indeterminateness, and the semantics-pragmatics interface

1. Introduction: In Japanese comparatives, the meaning of free choice is expressed by indeterminate pronouns and the particle *mo*. (It is usually the case, however, that the particle *demo* is used to express this meaning (Kuroda 1979: 95)):

- (1) a. Taro-wa dare-yori-mo kashikoi. (cf. **dare-yori-demo* ‘who-than-DEMO’)
 Taro-TOP who-than-MO intelligent
 ‘Taro is more intelligent than anyone else.’
 b. Dare-yori-mo Taro-wa kashikoi.
 Who-than-MO Taro-TOP intelligent
 ‘Taro is more intelligent than anyone else.’

(1a) and (1b) are different in word order, but semantically speaking, they are truth conditionally equivalent.

However, if *nani* ‘what’ is used in the same environment, there can be at most two different interpretations:

- (2) a. Tennis-wa nani-yori-mo tanoshii.
 Tennis-TOP what-than-MO fun
 ‘Tennis is more fun than anything.’ (Individual free choice)
 b. Nani-yori-mo Tennis-wa tanoshii.
 What-than-MO Tennis-TOP fun
 ‘1: Tennis is more fun than anything.’ (Individual free choice)
 ‘2: The proposition that [Tennis is fun] is more noteworthy than any other proposition.’ (Noteworthy)

(2a) and (2b) both have what I call the ‘individual free choice’ reading. However, (2b) also has what I call the ‘noteworthy reading.’ In this reading, the proposition ‘tennis is interesting’ is compared with other alternative propositions in the given context in terms of ‘noteworthiness’. It is not impossible to read (2a) the ‘noteworthy’ way, but in that case, we must treat the use of *nani-yori-mo* as ‘parenthetical’ (Potts 2005).

The purpose of this paper is to investigate the semantics and pragmatics of the two types of *nani-yori-mo* and consider the multidimensional meaning (Potts 2005) of comparison with free choice. I argue that although both *nani-yori-mo* and *dare-yori-mo* can modify a gradable predicate, the former, but not the latter, can also modify a sentence and contribute information about the speaker’s attitude towards the proposition expressed. This paper shows that the meaning of comparison with free choice can be calculated in the domain of conventional implicature (CI) as well as in the domain of ‘at issue’ semantics.

2. ‘Individual free choice’ *nani-yori-mo* vs. ‘noteworthy’ *nani-yori-mo*: There are at least two diagnostics for distinguishing between the two types of *nani-yori-mo*. First, the intensifier *totemo* ‘very/really’ can be attached to an adjective in the ‘noteworthy’ reading, but not in the ‘individual free choice’ reading, as shown in (3):

- (3) Nani-yori-mo Tennis-wa **totemo** tanoshii.
 What-than-MO Tennis-TOP really fun
 ‘* Tennis is really more fun than anything.’ (Individual free choice)
 ‘The proposition that tennis is really fun is more noteworthy than any other propositions.’ (Noteworthy)

Second, the ‘individual free choice’ reading cannot arise in negative sentences, but the ‘noteworthy reading’ can:

- (4) Nani-yori-mo Tennis-wa tanoshiku-**nai**.
 What-than-MO Tennis-TOP fun-NEG
 ‘?? Tennis is not more fun than anything.’ (Individual free choice)
 ‘The proposition that ‘Tennis is not fun’ is more noteworthy than any other propositions. (Noteworthy)

Usually, free choice items cannot appear in negative sentences (Giannakidou 1998). Does the fact that (4) allows the ‘noteworthy’ reading mean that the reading has nothing to do with free choice? My answer is no. I argue that the asymmetries in (3) and (4) can be reduced to a difference in their modification structures:

Figure 1

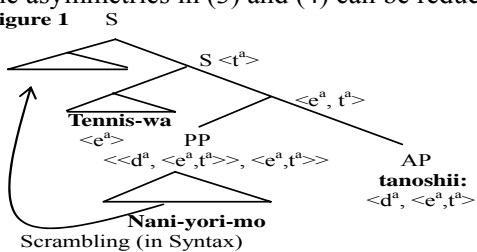
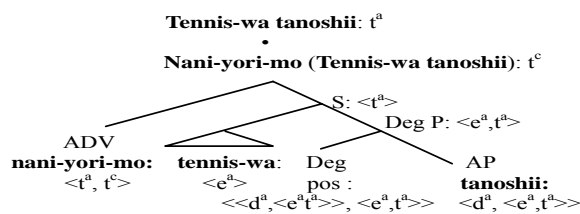


Figure 2



In terms of the type-driven interpretation, *nani-yori-mo* in the ‘individual free choice’ reading (=Figure 1) takes a positive form of the gradable adjective *tanoshii* (i.e. $\lambda d \lambda x$. interesting (x) $\geq d$) as its argument and returns a property, while in the ‘noteworthy’ reading (=Figure 2), *nani-yori-mo* takes a proposition $\langle t^a \rangle$ and returns a CI of type $\langle t^c \rangle$. It does this via the CI Application (Potts 2005), which applies to an ‘at-issue’ meaning to produce a CI meaning. (The super-script ‘c’ stands for CI and the super-script ‘a’ stands for ‘at issue.’) Note that in Figure 2, I posit a null degree morpheme *pos* at Deg whose function is to relate the degree argument of the adjectives to an appropriate standard of comparison (e.g. Cresswell 1977; Kennedy 1999). This is why the degree morpheme *totemo* ‘very/really’ can occur in the ‘noteworthy’ reading of (3), but not in its ‘individual free choice’ reading. As for the negative sentence in (4), the ‘noteworthy’ reading is possible, but the ‘individual free choice’ reading is not, because in the former reading *nani-yori-mo* is ‘above’ negation. This analysis naturally accounts for the fact that the ‘noteworthy’ reading and the ‘free choice’ reading can both occur in same sentence:

(5) Nani-yori-mo [Taro-wa dare-yori-mo kashikoi].

What-than-mo Taro-TOP who-than-MO intelligent

‘The proposition that [Taro is more intelligent than anyone] is more noteworthy than any other proposition.’

3. Semantics of the two types of *nani-yori-mo*: Now let us consider the semantics of *nani-yori-mo* in each type of reading. There are various approaches to the meaning of *nani-yori-mo* in the ‘individual free choice’ reading, but here I use Hamblin-style analysis of the Japanese indeterminate pronouns with *mo* (Kratzer & Shimoyama 2002) (K&S). In their system, *nani* ‘what’ introduces a set of **individual** alternatives, as in (6a). As for the semantics of comparison, I assume that the marker of standard *yori* has a comparative meaning (Kennedy 2007), as in (6b). The denotation of *nani-yori* is composed by applying functional application ‘point wise’ in (7):

(6) a. $[[nani]] = \{x \in D_e : \text{thing}(x)\}$

b. $[[yori]] = \lambda y \lambda g_{\langle d, et \rangle} \lambda z. \max(g)(z) > \max(g)(y)$

(7) *Point wise* Functional Application (K&S 2002): If α is a branching node with daughters β and γ , and $[[\beta]]^{w,g} \subseteq D_\sigma$ and $[[\gamma]]^{w,g} \subseteq D_{\langle \sigma \tau \rangle}$, then $[[\alpha]]^{w,g} = \{a \in D_\tau : \exists b \in [[\beta]]^{w,g} \ \& \ c \in [[\gamma]]^{w,g} \ \& \ a = c(b)\}$

Note that the alternatives expand until they meet the universal operator *mo*, which selects them, as in (8a). The resulting truth condition for the ‘individual free choice’ reading in (2) is (8b):

(8) a. $[[mo]] ([[nani-yori]]) = \{\lambda g_{\langle d, et \rangle} \lambda z. \forall x [x \in \{D_e : \text{thing}(x)\} \rightarrow \max(g)(z) > \max(g)(x)]\}$

b. $[[Tennis-wa nani-yori-mo tanoshii]] = 1$ iff

$\{\forall z [z \in \{D_e : \text{thing}(z)\} \rightarrow \max(\lambda d. \text{interesting}(Tennis) \geq d) > \max(\lambda d. \text{interesting}(z) \geq d)]\} : \langle t^a \rangle$

Now let us consider the semantics of the ‘noteworthy’ type. The reason why *nani-yori-mo*, but not *dare-yori-mo*, has the ‘noteworthy’ reading is that *nani* can also introduce a set of alternatives that are **propositions**. The question is how we get the meaning of ‘noteworthiness.’ Although there is no lexical entry for ‘noteworthy’, it is clear that the speaker is comparing the proposition expressed with other contextually determined alternative propositions in terms of ‘noteworthiness.’ I propose the following denotation for *nani-yori-mo* in the ‘noteworthy’ reading, which contributes information about the speaker’s attitude towards the proposition expressed in the sentence:

(9) $[[nani-yori(-mo)]]_{NW} =$ (Note: *Mo* is optional in the ‘noteworthy’ reading.)

$\{\lambda p_{\langle t \rangle} \forall q [q \in \{D_t : \text{proposition}(q)\} \rightarrow \exists d [\text{noteworthy}(p)(d) \wedge d > \max(\lambda d' \text{noteworthy}(q)(d'))]\} : \langle t^a, t^c \rangle$

The crucial point here is that *nani-yori(-mo)* in (9) behaves like a sentential adverb. The fact that there is an intonation break after *nani-yori(-mo)* also supports this idea.

This paper argues that the meaning of comparison with free choice can be represented in the CI dimension, as well as in the ‘at issue’ dimension. The paper provides new perspectives for considering the fundamental difference between ‘regular’ comparatives (e.g. *Tom is taller than Mary*) and ‘metalinguistic’ comparatives (e.g. *Tom is more a scholar than a teacher*).

Selected References: [1] Cresswell, M. J. 1976. The Semantics of Degree. In B. H., Partee, ed., *Montague Grammar*. New York: Academic Press. [2] Giannakidou, A. 1998. *Polarity Sensitivity as (Non) Veridical Dependency*. Amsterdam: John Benjamin. [3] Kennedy, C. 1999. *Projecting the Adjective: The Syntax and Semantics of Gradability and Comparison*. New York: Garland. [4] Kennedy, C. 2007. Standards of Comparison. Handout, Colloque de Syntaxe et Sémantique à Paris. [5] Kratzer, A. and J. Shimoyama. 2002. Indeterminate Pronouns: the View from Japanese. *The Proceedings of the Third Tokyo Conference on Psycholinguistics*. [6] Kuroda, S. 1979. *Generative Grammatical Studies in the Japanese Language*. New York: Garland. [7] Potts, C. 2005. *The Logic of Conventional Implicatures*. Oxford: OUP.