Modes of Comparison and Question under Discussion: Evidence from 'contrastive comparison' in Japanese

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The distinction between *explicit comparison* (EC) and *implicit comparison* (IC) has recently been recognized as an important cross-linguistic parameter of comparison constructions (cf, e.g., Kennedy 2008; Sawada 2009). This paper aims to advance this research by first bringing to light a hitherto unnoticed third type of comparison construction in Japanese—dubbed here *contrastive comparison*—and then by providing a uniform analysis of the semantics and pragmatics of the three types of comparison constructions in terms of the notion of Question under Discussion (Roberts, 1996).

Besides EC (1) and IC (2), Japanese has a type of comparison construction in which one of the arguments of the comparison operator (i.e., the one not marked by -yori 'than') is overtly marked by a contrastive marker -hoo (3). We call this construction *contrastive comparison* (CC).

(1) John-wa Mary-yori se-ga takai. John-TOP Mary-than height-NOM high 'John is taller than Mary.'

- (explicit comparison)
- (2) John-wa Mary-ni kurabe-{tara/reba} se-ga takai. John-TOP Mary-DAT compare-if height-NOM high 'John is tall compared to Mary.'

(implicit comparison)

- (3) John-no-**hoo**-ga Mary-yori se-ga takai. John-GEN-HOO-NOM Mary-than height-NOM high
 - '(Of the two,) John is taller than Mary.'

(contrastive comparison)

Superficially, CC looks similar to EC, but they turn out to contrast with each other in terms of a set of distributional properties: (i) only EC is compatible with measure phrases (MPs) (4); (ii) only CC can occur with the expectation-reversal modifier *yoppodo* (Sawada, to appear) (5); (iii) only CC can occur with the judgment-enforcer (JE) adverbial *dotiraka-to ie-ba* 'if anything' (6).

- (4) {John-wa/??John-no-**hoo**-ga} Mary-yori **3-senti** se-ga takai. John-TOP/John-GEN-HOO-NOM Mary-than 3cm height-NOM high 'John is 3cm taller than Mary.'
- (5) {??John-wa/John-no-**hoo**-ga} Mary-yori **yoppodo** se-ga takai. John-TOP/John-GEN-HOO-NOM Mary-than YOPPODO height-NOM high '(Contrary to the expectation,) John is much taller than Mary.'
- (6) **Dotiraka-to ie-ba** {??John-wa/John-no-**hoo**-ga} Mary-yori se-ga takai. if anything John-TOP/John-GEN-HOO-NOM Mary-than height-NOM high 'If anything, John is taller than Mary.'

In these phenomena, CC behaves more like IC, which exhibits the same patterns as CC.

However, we also find a set of phenomena in which CC behaves like EC rather than IC. Specifically, CC and EC share the following properties, which set them apart from IC: (i) crisp judgments; (ii) compatibility with minimum-standard predicates (8); (iii) non-existence of a negative implicature to the positive form (i.e., unlike (2), (1) and (3) don't entail that John isn't tall).

- (7) {??John-wa Mary-ni kurabe-tara / John-no-**hoo**-ga Mary-yori} se-ga takai. John-TOP Mary-DAT compare-if John-GEN-HOO-NOM Mary-than height-NOM high '??John is tall compared to Mary.' (with John 180.5cm, Mary 180cm)
- (8) {??Sao A-wa sao B-ni kurabe-tara / Sao A-no-**hoo**-ga sao B-yori} **magat-teiru**. rod A-TOP rod B-DAT compare-if rod A-GEN-HOO-NOM rod B-than bent-NPST '??Rod A is bent compared to rod B.' / 'Rod A is more bent than rod B.'

These mixed properties of CC are problematic for the previous two-way classification between EC and IC. This paper proposes an alternative perspective that solves this apparent dilemma by taking into account the independently motivated pragmatic properties of the three types of constructions. The key notion in our account is that of Question under Discussion (QUD; Roberts 1996). Specifically, in terms of their discourse function properties, the three constructions contrast with one another sharply in that, e.g., in question-answer pairs like the following, the EC, IC and CC sentences can each form a felicitous response only for one type of question in (9)–(11).

- (9) **Q:** How tall is John? **A:** (1) / #(2) / #(3) (10) **Q:** Is John tall? **A:** #(1) / (2) / #(3)
- (11) **Q:** Which is taller, John or Mary? -A: #(1) / #(2) / (3)

We take this as evidence for the assumption that the QUDs of (1)–(3) are (9)–(11), respectively. That these are the QUDs for these constructions is natural given their compositional semantics as well: EC is a construction that measures the degree of an object on some scale against a fixed standard ($\mathbf{tall}(\mathbf{j}) > \mathbf{tall}(\mathbf{m})$); IC lacks an overt -yori phrase introducing the standard, and hence the predication is in the positive form ($\mathbf{tall}(\mathbf{j}) > \mathbf{stnd}(\mathbf{tall})$; $C = \{\mathbf{j}, \mathbf{m}\}$) (cf. Kennedy (2008) and Sawada (2009)); CC involves the focus marker -hoo, which, from its function in non-comparative constructions, is known to set up a contrast between two objects by always involving a context set with exactly two members ($f(\mathbf{j}) = 1 \land f(\mathbf{m}) = 0$; $C = \{\mathbf{j}, \mathbf{m}\}$, where $f = \lambda x.\mathbf{tall}(x) > \mathbf{tall}(\mathbf{m})$).

This QUD-based approach, combined with the standard analyses of the semantics of the three constructions, explains their pragmatic functions and distributional properties uniformly.

First, EC is compatible with MPs since its function is to measure degrees, for which MPs are exactly suited. By contrast, IC and CC are incompatible with MPs since their primary function is to draw a distinction between two objects (cf. Kennedy (2008) and Sawada (2009) for IC and cf. the QUD for CC), where the exact amount of degree difference is irrelevant. Second, the (in)compatibility with expectation-reversal *yoppodo* also receives a natural pragmatic account. With IC and CC, the function of *yoppodo* is to reverse the expectations of negative answers to the QUDs (for CC, the relevant 'negative' answer is 'John isn't taller than Mary). However, with EC, since the QUD is not a polar question, no negative answer is available that makes *yoppodo* felicitous. Third, the distribution of JEs like *dotiraka-to ie-ba* is accounted for similarly. The function of JEs is to force a two-way yes/no judgment in contexts in which the judgment is subtle. Given this, it follows that both IC and CC are compatible with them since the essential pragmatic function of these constructions is to draw a distinction between two objects by making yes/no judgments with the same predicate. EC, by contrast, is inherently incompatible with the pragmatic function of JEs since its primary function is to measure the degree that an object has on a scale (cf. its QUD).

The phenomena for which CC behaves like EC are also straightforward in the proposed analysis. What crucially distinguishes CC from IC is the fact that the QUD involves the comparative form rather than the positive form. Thus, the comparison between the two objects under discussion is not made in terms of a context-dependent vague standard, but against a precisely fixed standard. This explains both why crisp judgments are possible and minimum-standard predicates are compatible with CC. Moreover, the negative implicature does not arise since, unlike IC, CC does not manipulate the context-dependent vague standard (cf. Sawada (2009) for how it arises in IC).

To conclude, the CC construction in Japanese necessitates a three-way distinction in the typology of modes of comparison, where the three constructions contrast with one another in a complex but systematic way. We have shown how this pattern can be captured by characterizing the pragmatic properties of these constructions in terms of Question under Discussion, a notion whose relevance for the semantics of comparison constructions has so far remained unnoticed.

References Kennedy, C. 2008. Modes of comparison. To appear in *CLS* 43. **Sawada, O.** 2009. Pragmatic aspects of implicit comparison: An economy-based approach. *J. of Pragmatics* 41:1079–1103. **Sawada, O.** to appear. Modes of scalar reversal in Japanese. In *JKL* 17. CSLI. **Roberts, C.** 1996. Information structure in discourse. In *OSUWPL* 49.