Scope and the Nature of Japanese *hoo* Comparatives

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1 Introduction

1.1 A Starting Point: Ambiguity and Disambiguation

(1) Watashi-wa John-yori neko-o aishiteiru
I-TOP John-than cats-ACC love.NONPAST
‘I love cats more than John.’ (2a) / (2b)

(2) The two meanings:
   a. ‘Cat Loving Competition (Me vs. John)’: The degree of my love
      of cats is greater than the degree of John’s love of cats.
   b. ‘My Favorite Things (Cats vs. John)’: The degree of my love
      of cats is greater than the degree of my love of John.

(3) Watashi-no-hoo-ga John-yori neko-o aishiteiru
I-GEN-*hoo*-NOM John-than cats-ACC love.NONPAST
‘I love cats more than John does.’ (2a) / *(2b)

(4) Watashi-wa John-yori neko-no-hoo-o aishiteiru
I-TOP John-than cats-GEN-*hoo*-ACC love.NONPAST
‘I love cats more than John.’ *(2a) / (2b)

1.2 Goals for the talk today

- Derive the two meanings in (1). (section 3.1)
- Propose a semantic account to explain why the *hoo* sentences (3) and (4) cannot be ambiguous like the one without it (1). (section 3.2)
- Discuss the property of *hoo* in contrast with intonational focus in English (section 4)

1.3 Additional Data

*Hoo* is a noun that originally means ‘way, direction, side’.

(5) Mae-no-*hoo*-e tsumete-kudasai.
Front-GEN-*hoo*-to move-up-please
‘Please move up front.’

*Hoo* can take clausal complements.

(6) [basu-de itta]-*hoo*-ga iidesu yo.
bus-by go.PAST-hoo-NOM good.NONPAST yo
‘It would be better if you go by bus.’ ‘You’d better go by bus.’

(7) [shira-nai]-*hoo*-ga yokatta.
know-not.NONPAST-hoo-NOM good.PAST
‘It would have been better if I didn’t know.’ ‘I shouldn’t have known it.’

(8) John-wa [otonashii]-*hoo* da.
John-TOP quiet.NONPAST-hoo COP.NONPAST
‘He is on the quiet side.’ ‘John is rather quiet.’

2 Assumptions and Formal Tools

2.1 Relational Denotations for Gradable Predicates

Gradable predicates express relationship between individuals and degrees.

(9) a. \[\text{tall} = \lambda d \lambda x. x \text{is tall to degree } d\]
   b. \[\text{interesting} = \lambda d \lambda x. x \text{is interesting to degree } d\]

2.2 Comparative Morphemes

Degree head -er/more, or QP in Bresnan (1973)

(10) a. \([\text{QP -er much }] \text{ interesting } \rightarrow \text{ more interesting}\)
   b. \([\text{QP -er much }] \text{ tall } \rightarrow \text{ taller}\)

1By that I mean, complements that has a tense (past/nonpast) morpheme.
2.3 The Direct Analysis for Phrasal Comparatives

Comparative morphemes take three arguments, i.e. two individuals \((x, y)\) and one gradable predicate \(g\), to roughly mean ‘\(x\) is more \(g\) than \(y\) is \(g\)’.

\[
\begin{align*}
[-er] &= [more] \\
&= \lambda y \lambda g(d,e,t) \lambda x. \max \{d \mid g(d)(x) = 1\} > \max \{d \mid g(d)(y) = 1\}
\end{align*}
\]

(11)

- The preposition than is semantically vacuous.
- The comparative morpheme and than-phrase form a constituent followed by the extraposition of than phrase.2

2.4 Application to Japanese Phrasal Comparatives

    John-TOP smart.NONPAST
    ‘John is smart.’

b. John-wa Mary-yori kashikoi.
    John-TOP Mary-than smart.NONPAST
    ‘John is smarter than Mary.’

No comparative morpheme? The preposition yori does the job (Kennedy 2007, Sawada to appear).3

\[
\begin{align*}
[yori] &= [-er] = [more] \\
&= \lambda y \lambda g(d,e,t) \lambda x. \max \{d \mid g(d)(x) = 1\} > \max \{d \mid g(d)(y) = 1\}
\end{align*}
\]

(14)

(15)

3. Analysis

3.1 Deriving the Ambiguity

(1) Watashi-wa John-yori neko-o aishiteiru
    I-TOP John-than cats-ACC love.NONPAST
    ‘I love cats more than John.’

\[
\begin{align*}
\lambda d \lambda x. \begin{cases}
\max \{d \mid \text{love} (\text{cats})(d)(x) = 1\} > \max \{d \mid \text{love}(\text{cats})(d)(\text{John}) = 1\}
\end{cases}
\end{align*}
\]

(2a) / (2b)

a. ‘Cat Loving Competition (Me vs. John)’: The degree of my love of cats is greater than the degree of John’s love of cats.

b. ‘My Favorite Things (Cats vs. John)’: The degree of my love of cats is greater than the degree of my love of John.

Two truth-conditionally different meanings, two different logical forms.4

\[
\begin{align*}
\lambda d \lambda x. \begin{cases}
\max \{d \mid \text{love}(\text{cats})(d)(x) = 1\} > \max \{d \mid \text{love}(\text{cats})(d)(\text{John}) = 1\}
\end{cases}
\end{align*}
\]

(16)

(17)

4Tense, topic marker, and case particles are omitted in the representation hereafter.

2 Or, introduced later by ‘late merge’ Bhatt & Pancheva (2004). (Appendix A)
3 Or, try a phonologically null -er Beck et al. (2004) with a semantically vacuous yori ‘than’.
4
3.2 Explaining the disambiguation

Watashi-no-hoo-ga John-yori neko-o aishiteiru  
I-GEN-hoo-NOM John-than cats-ACC love.NONPAST  
‘I love cats more than John does.’  

\[
\max\{d \mid I\text{ love cats }d\text{-much}\} > \max\{d \mid I\text{ love John }d\text{-much}\} = (2a) / *(2b)
\]

Watashi-no-hoo John-yori neko-o aishiteiru  
I-GEN-hoo-NOM John-than cats-ACC love.NONPAST  
‘I love cats more than John does.’  

\[
\max\{d \mid I\text{ love cats }d\text{-much}\} > \max\{d \mid I\text{ love John }d\text{-much}\} = (2a) / *(2b)
\]

Hypothesis 1 (to be revised)  
Hoo forces a noun phrase to scope over yori phrases?  
\[
\text{[hoo]} = \lambda x \lambda f_{t,c} : x \text{ is one of the two individuals salient in the context } C \text{ that we are comparing } [f(x) = 1]
\]

3.3 The Meaning of Hoo?

Hoo has a contrastive meaning.

Watakushidomo-no-hoo-de itashimasu.  
We(humble)-GEN-hoo-by do(humble).NONPAST  
‘We (not you) will take care of that.’ (e.g. saying it to a customer)

4 Discussion

4.1 The Structure of Phrasal Comparatives

The two-step process (English comparatives)\(^5\)

\[
\text{Step 1: QR cats}
\]

\[
Dore \text{ ‘Which one’ vs. Docchi ‘Which one (of the two)’}
\]

\begin{itemize}
  \item a. (Banira-to choko-to maccha-no-naka-de)  
    (Vanilla-and chocolate-and greentea-GEN-among)  
    \{dore/*docchi\}-\{\#no-hoo\}-ga oishii?  
    \{which/which\}-\{GEN-hoo\}-NOM delicious.NPST  
    ‘Which one is \{more\} delicious (among vanilla, chocolate, and green tea)?’
  \item b. (Banira-to choko-to) \{\*dore/docchi\}-no-hoo-ga  
    (Vanilla-and chocolate-and) \{which/which\}-\{GEN-hoo\}-NOM oishii?  
    delicious.NPST  
    ‘Which one is more delicious (between vanilla and chocolate)?'
\end{itemize}

\begin{itemize}
  \item a. *Both vanilla, chocolate, and green tea are delicious.
  \item b. Both vanilla and chocolate are delicious.
\end{itemize}

Hypothesis 2 (the best I could do at this point...)  
Hoo has some presupposition? Context sensitive maybe?

\[
\text{[hoo]} = \lambda x \lambda f_{t,c} : x \text{ is one of the two individuals salient in the context } C \text{ that we are comparing } [f(x) = 1]
\]

Some concerns:

\begin{itemize}
  \item About the structure: Movement necessary? Derivationally speaking, when do yori phrases get into the structure?
  \item About the meaning of hoo: Is it always contrasting the two entities?
\end{itemize}

\(^5\)Cf. (Kennedy 2007, Kennedy & Stanley to appear)
Step 2: Raising of the *than*-phrase

The idea of Parasitic Scope (Barker 2007): The scope target for *than* phrase does not exist until QR has happened. The *than* phrase ‘hijacks’ the scope of the other scope taking element, ‘intervening between the quantifier and what would otherwise be its semantic argument’. (Appendix B)

Step 1: *Hoo*-phrase movement

Step 2: Combining *yori*-phrase

4.2 Comparison with Focus

Disambiguation by intonational focus (from Rooth (1992)):

(27) a. [She] y beats me more often than Sue. (28)a / *(28)b
b. She beats [me] y more often than Sue. *(28)a / (28)b

(28) a. Meaning 1: She beats me more often than Sue beats me.
   b. Meaning 2: She beats me more often than she beats Sue.

Disambiguation by *hoo*

(3) Watashi-no-*hoo*-ga John-yori neko-o aishiteiru
   I-GEN-*hoo*-NOM John-than cats-ACC love.NONPAST
   ‘I love cats more than John does.’ (2)a / *(2)b

(4) Watashi-wa John-yori neko-no-*hoo*-o aishiteiru
   I-TOP John-than cats-GEN-*hoo*-ACC love.NONPAST
   ‘I love cats more than John.’ *(2)a / (2)b

(2) a. Meaning 1: The degree of my love of cats is greater than the degree of John’s love of cats.
b. Meaning 2: The degree of my love of cats is greater than the degree of my love of John.

4.2.1 Similarity

Focus movement are sensitive to syntactic islands (Dr¨ ubig 1994).6

(29) a. [The fact [that John sent not only PRESENTS but also MONEY to his friends] ] is surprising.
b. [The fact [that John sent not only PRESENTS to his friends but also MONEY ] ] is surprising.
c. *[The fact [that John sent not only PRESENTS to his friends] is surprising] but also MONEY.

(30) Also Reinhart (1991) for locality of phrasal comparatives assuming movement.
4.2.2 Difference

(33) Focus in Question-Answer pairs:
Q: Who ate the cake?
A1: [John] ate the cake.
A2: #John ate [the cake]

(34) Q: Dare-ga keeki-o tabeta no?
Who-NOM cake-ACC ate Q
‘Who ate the cake?’
A: #John-no-hoo-ga keeki-o tabeta.
[John]-GEN-hoo-NOM cake-ACC ate
#‘John ate the cake (more than someone did)’ OR
#‘John ate the cake (rather than saying someone else did)’?
Intended: ‘(It is) John (who) ate the cake.’

Unlike intonational focus in English, hoo can only function as contrastive focus?

5 Unsolved: Clausal Hoos?

The proposed denotation of hoo can only take an entity as its argument.

(24) \[\text{hoo}_C = \lambda x. \lambda f(x) : x \text{ is one of the two individuals salient in the context } C \text{ that we are comparing } [f(x) = 1]\]

6 Summary

• Derived the two meanings in (1).
  → two different logical forms via movement

• Proposed a semantic account to explain why the hoo sentences (3) and (4)
  cannot be ambiguous like the one without it (1).
  → QR hoo phrases?

• Compared the property of hoo with intonational focus in English
  → Similarity: Locality and contrastiveness; Difference: Presupposition

• Unsolved: Clausal hoos

Appendix

A. Late Merge

‘Late Merge’ of than-phrases (Bhatt & Pancheva 2004): Explains the obligatory extraposition of than phrases, while maintaining the relationship between the comparative morpheme and than-phrases.
B. Parasitic Scope

‘Parasitic Scope’ (Barker 2007): Explains the ‘internal’ reading of same, which appears when there is another scope taking elements in the sentence but which doesn’t when there is no other such elements. (Also in Kennedy (2007), Kennedy & Stanley (to appear), Sawada (to appear))

(41) a. The same waiter served John. (deictic / *internal) (The same waiter salient in the context served John.)

b. The same waiter served everyone. (deictic / internal) (The same waiter salient in the context served all people.) (There was a waiter who served all the people.)

References


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The + Comparative, the + comparative: If you need to practise your comparatives and superlatives, click here for the full explanation!
The more I learn, the more I realize how much I don’t know. The more complicated something is to do, the longer it takes to do it, (and the harder you have to try!) Or: The less you know, the better. (Title of album by DJ Shadow).

but the basic idea is the same: The + comparative, the + comparative. Try these sentences. Many of them are everyday expressions. Use the more, less (according to logic) and the comparative form of the adjective: 1. The ( ) you practise, the (easy) it will be. 2. Please come to the party - The ( ), the merrier! For each sentence, choose the correction combination of comparatives to make a sentence. 1. The ____ you study for these exams, the ____ you will do. hard - better harder - more successfully much - better more - good. 2. She doesn’t really like vodka, so the ____ a bottle you find, the ____ it will be for us! small - cheaper smaller - cheap smaller - good smaller - cheaper. 3. My neighbor is driving me mad! It seems that the ____ it is at night, the ____ he plays his music! later - more loud late - louder later - louder more late - loud. 4. He spent a year in India and loves spicy food. T Japanese differs from languages like English in that it (usually) has no overt comparative morphology like the English -er/more. However, in Modern Japanese. This paper argues that the development of the comparative morpheme for pure comparison and its supplemental nature provide supportive evidence for the view that the standard marker expresses a meaning of comparison (e.g., Kennedy 2007a; Hayashi, J East Asian Linguist 18:65-100, 2009; Schwarzschild, incomplete comparatives.)