Pragmatic aspects of implicit comparison

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1. Introduction

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• Sapir (1944), Kennedy (2005): Two modes of comparison—explicit comparison and implicit comparison --Explicit comparison is a comparison in which a comparative morphology (-*er/more*) is used and **implicit** comparison is a comparison in which an unmodified positive form of a gradable predicate is used:

1) a. Jim is taller than Tom.	(Explicit comparison)
b. Compared to Tom, Jim is tall.	(Implicit comparison)

• Kennedy (2005) argues that implicit and explicit comparison are different in semantics and this distinction can be one of the parameters of comparison.

Purpose: The purpose of this presentation is to clarify the nature of the pragmatic aspects of implicit comparison.

The morphological comparative in (1a) and the *compared to* construction in (1b) and can be used to express comparison, but they have different pragmatic properties. (1b), but not (1a), implies (2a-b):

(2) Compared to Tom, Jim is tall.	(=1b)	
\rightarrow a. Tom is not tall.		(Inference from the comparative clause)
\rightarrow b. Jim is not definitely tall.	(possibly borderline)	(Inference from the main clause)

Q1: What is the "status" of the two implicatures in implicit comparison and where do these implicatures derive from?

--The implicature from the comparative clause is "conventional" while the implicature from the main clause is "conversational" and the implicature from the main clause depends on the implicature from the comparative clause.

--The inference from the main clause in the *compared to* construction is similar to the **invited inference** (Geis and Zwicky 1971) of the *if-then* conditionals but they are different in that the *compared to* construction is a **focus construction**.

Q2: Pragmatic motivation

a. Why does the speaker use implicit comparison?

b. Is the use of implicit comparison motivated by a pragmatic/processing principle?

--We will consider why a speaker uses implicit comparison, rather than a simple sentence with a positive form:

(3) a. Compared to Tom, Jim is tall.

b. Jim is not tall.

c. Jim is tall.

--We will argue that unlike explicit comparison, **implicit comparison has a 'double standard' in nature and this double standard contributes to the meaning of 'indirect negation.'**

--We will also consider why (4) is odd:

(4) ?? Compared to a basketball player, Tom is tall.

--The use of implicit comparison is governed by **the general principle of "Economy of standard"** which simultaneously explains the two kinds of implicatures.

Q3: Is there a distinction between implicit and explicit comparison in a language which does not have comparative morphology?

The Japanese language lacks comparative morphology like English –*er*: However, as Kennedy (2005) suggests, this does not mean that Japanese only allows implicit comparison. I will support this idea from a pragmatic point of view and argue that **although Japanese does not have comparative morphology, the distinction between the two modes of comparison exists.**

2. The inference from the comparative clause (Q1)

2.1. Low scale implicature

There is an implication that the NP of the comparative clause is construed as low on the scale of the gradable predicate (e.g. tallness):

The reason why the one of the pair of sentences is odd is because there is a conflict between low scale implicature and our encyclopedic knowledge.

2.2. Low scale implicature as a conventional implicature

(7) Cancelability:

Compared to Tom, Jim is tall. #And since Tom is tall, that makes Jim really tall.

(8) Detachibility:

a. Compared to 7	Fom, Jim is tall. (\rightarrow Tom is short.)
a. comparea to i		· · · · · · · · · · · · · · · · · · ·

- b. If Jim is compared to Tom, he is tall. $(\rightarrow$ Tom is short)
- c. Considering Tom, Jim is tall. $(\rightarrow$ Tom is short.)

Paradox: the cancelability test suggests that the inference is conventional, but the detachability test suggests that the inference is conversational.

• However, the detachability test is not always unproblematic.

- --- To test for non-detachability, we need to posit a set of synonymous expressions, which should share the same implicature. However, as Sadock (1978) points out, the implicature can actually be part of the semantic content of each member of that set.
- ---The constructions such as *compared to*, *considering*, and *if...then* **all possess the same kind of** "**conventional implicature.**" These three constructions all share the flavor of "conditionality."

• I will consider that implicature from the comparative clause is conventional.

• However, we cannot easily say that the implicature is part of "compared to" phrase:

(9) a.	Compared to Tom, Jim is tall.	(Implicature: Tom is not tall)
b. (?) Compared to Tom, Jim is taller.	(No implicature: *Tom is not tall)

- Although (9a) implies that "Tom is not tall", sentence (9b) does not imply such a low scale implication (Kennedy p.c.).
- This suggests that it is not *compared to* but the phrase "**compared to x**, **y** is a **GRADABLE PREDICATE**" that possesses the conventional implicature.

• Conversion of scalar value

--The scalar value reverses if we use even or the free choice any in the comparative clause:

(10) a. Compared to <i>anyone</i> , Jim is tall.	(free choice <i>any</i>)
b. <i>Even</i> compared to <u>a basketball player</u> , Jim is tall.	(even insertion)

3. Implicature from the main clause (Q1)

3.1. Conversational implicature

(11) a. Compared to Tom, Jim is tall.b. →Jim is not definitely tall. (possibly borderline)

• <u>Evidence of existing the negative implicature</u>: It is impossible to signal the possibility of going higher up the scale with the 'suspender' *if not* (Horn 1972) in the *compared to*, but not in the morphological comparatives:

- (12) a. *Compared to Tom, Jim is happy, if not (more) ecstatic.
 - b. Jim is happier than Tom, if not more ecstatic.
 - (cf. Jim is happy if not ecstatic.)

Unlike the low scale inference on the standard of comparison, this implicature is conversational, because it is cancelable and non-detachable:

(13) Cancelability test:	
Compared to Tom, Jim is tall. In fact,	Jim is tall compared to anyone.
(14) Non-detachability test:	
a. Compared to Tom, Jim is tall.	$(\rightarrow$ Jim is not definitely tall.)
b. Considering Tom, Jim is tall.	$(\rightarrow$ Jim is not definitely tall.)

c. If Bill is compared to Tom, Jim is tall. $(\rightarrow$ Jim is not definitely tall.)

Because the implicature is both cancelable and non-detachable, it is safe to consider that the implicature from the main clause is conversational.

3.2. Borderline case

• The implicature from the main clause does not always have to be the implicature that "the proposition in the main clause is clearly a false."

- (15) (Context: Mary is asked whether Jim is tall but she cannot decide whether he is tall or not.)
 - Mary: Well, compared to Tom, Jim is tall.
 - (i) \rightarrow Jim is not tall.
 - $(ii) \rightarrow I$ don't know whether Jim is tall. (Epistemic uncertainty)

In this context, the speaker Mary seems to imply (ii) rather than (i). The implicature of (ii) is **epistemically** weaker than (i). This suggests that the implicature from the main clause is not uniform.

3.3. The source of the implicature from the main clause: the dependency of the implicature I will argue that the implicature from the main clause is a Q-implicature.

(16) Maxim of Quantity: "Make your contribution as informative as is required for the current purposes of the exchange" (Grice 1989: 26)Q-Principle: "Speakers should say as much as they can" (Horn 1984).

• From this maxim/principle, the scalar implicature that "not more than higher values on the scale" emerges.

(17) The scale for *compared to Tom, Jim is tall.*Compared to [an ordinary standard], Jim is tall.
Compared to _F[Tom], Jim is tall.

--Conversational implicature depends on conventional implicature. If the focused element is higher than its alternative on the scale, the Q-implicature does not arise:

(18) Bad scale: (No Q implicature)

The scale for ?? compared to a basketball player, Jim is tall.

- Compared to _F [a basket ball player], Jim is tall.
- Compared to [an ordinary standard], Jim is tall.

4. Similarity with the invited inference of *if...then* conditional (Q1)

• Implicature from the main clause is similar to the invited inference of *if...then* conditional (Geis and Zwicky 1971).

(19) a. If you mow the lawn, I'll give you \$5.

b. \rightarrow If you don't mow the lawn, I won't give you \$5.

c. \rightarrow If and only if you mow the lawn, I'll give you \$5.

• The tendency to move from (19a) to (19b) is taken to be an instance of INVITED INFERENCE. (20)

• Atlas and Levinson (1981), Horn	• van der Auwera (1997a, b)	• My analysis
(1989, 2000)	Invited inference of ifthen	The implicature from the main clause
Invited inference of <i>ifthen</i>	conditional	of <i>compared to</i>
conditional	(<u>Q based</u> , <u>additive</u> scale)	(<u>Q-based</u> , <u>substitutive</u> scale)
(<u>R based</u> , <u>substitutive</u> scale)		
- (If and) only if p, q	- If p, q and if r, q and if s, q	-compared to z, y is A
↑- If p, q	- If p, q and if r, q	\uparrow -compared to [x] _F , y is A.
	↑- If p, q	(z= ordinary standard)

R/I-principle: The speaker should limit his/her contributions to what is necessary. (Speaker's economy) **Q- principle:** Speakers should say as much as they can. (Hearer's economy)

• Unlike *if...then* conditional, in the *compared to* construction, it is necessary to posit a contrast, assuming that it is a **focus** construction..

- (21) Existential presupposition of compared to [Tom]F, Jim is tall.
 - (i) $\exists x [C(x) \land x \neq Tom \land \neg (Jim is tall compared to x)]$
 - (ii) x = contextually determined ordinary standard

A focus establishes a relation between the value of a focused expression and a set of alternatives (Rooth 1992).

5. Division of the pragmatic labor (Q2)

• Why does the speaker use implicit comparison, rather than a simple sentence with a positive form?

(22) a. Compared to Tom, Jim is tall

b. Jim is not tall

c. Jim is tall.

(23) Division of a pragmatic labor (1989: 304): The use of a longer, marked expression in lieu of a shorter expression involving less effort on the part of the speaker signals that the speaker was not in a position to employ the simpler version felicitously.

The speaker uses implicit comparison in order to decrease a negative meaning. (indirect negation).

6. The double standard of comparison in implicit comparison (Q2)

(24) In implicit comparison, the speaker converts the truth value of proposition in the main clause from false (or unknown) to true by using the new standard which is construed as extremely low on a scale.



7. Economy of standard of comparison (Q2)

The use of implicit comparison is governed by the following processing principle:

(23) <u>Hypothesis</u> Economy of 'standard of comparison': It is a violation of economy to posit a new standard, if the truth value of the main proposition in implicit comparison does not change.

Let's test whether this general constraint is tenable based on the following scheme:

(24) Schema: (Compared to x, [y is Gradable P]).

--In the domain of square bracket, i.e. [...], the truth value of the main clause is calculated without the comparative clause. In the domain of the circle bracket, i.e. (...[...]), the truth value of main clause is calculated with the comparative clause.

(25)

Truth value of []	Truth value of ([])	Result
a. F	Т	Good
b. ?	Т	Good (borderline case)
c. T	F	Bad
d. ?	F	Bad
e. F	F	Bad
f. T	Т	Bad

--The line c, d, and e are bad. because the truth value of the entire sentence (...[...]) is false and it violates the maxim of quality, "Do not say what is considered to be false."

-- The line (f) is also bad because it violates the general principle of economy of standard.

(26) ?? Compared to a basketball player, Tom is tall. (Example of line (f))

--The good lines are (a) and (b). The line b is the **borderline case**.

The general constraint on "economy of standard" explains the nature of the two kinds of implicature, simultaneously. Therefore, it may be possible to consider that the two implications are not asymmetrical.

8. Japanese comparatives

Japanese has no explicit comparison morphology. This might lead us to think that Japanese only allows implicit comparisons. However, as the following examples show, Japanese distinguishes implicit comparison from explicit comparison by using the conditional markers such as *-tara* or the contrastive topic marker *wa*.

The sentences (27) do not have implicatures in (29) but sentences (28) have implicatures in (29):

(27) a. Taro wa Hanako *yori* se ga <u>takai</u>. Taro Top Hanako than height Nom tall 'Taro is taller than Hanako.' b. Taro wa Hanako ni *kurabe-(te)* se ga <u>takai</u>. Taro Top Hanako DAT compare TE (linker) height Nom tall 'Taro is taller than Hanako.'

- (28) a. Hanako ni kurabe- tara Taro wa se ga <u>takai</u>. Hanako to compare conditional Taro Top height Nom tall 'Compared to Hanako, Taro is tall.'
 - b. Taro wa Hanako yori-*wa* se ga <u>takai</u>. Taro Top Hanako than-Contr.Topic height Nom tall 'Compared to Hanako, Taro is tall.'

(29) (Implicature)

- a. Hanako is not tall.
- b. Taro is not definitely tall. (could be borderline)

• Kurabe-tara and yori-wa in (28) are essentially the same as the English compared to construction.

(30) English *More/-er* ---explicit comparison *Compared to, with respect to*, etc.. ---implicit comparison Japanese *Yori/kurabe-te* --- explicit comparison *Kurabe-tara / yori-CT wa* ---implicit comparison (*tara* =consitional, CT *wa* =Contrastive topic marker)

• Notice that the only difference between the *yori* and *yori-wa* comparatives is the presence of the contrastive topic marker *wa*. This suggests that the contrastive topic maker *wa* functions to convert the mode of comparison from explicit comparison to implicit comparison.

9. Conclusion

- There are two kinds of implicature in implicit comparison. The implicature from the comparative clause is conventional and that from the main clause is conversational. The latter implicature **depends on** the former implicature.
- Implicit comparison has a double standard in nature and **conditionality** is involved in this mode of comparison.
- The use of implicit comparison is governed by the general principle of Economy of Standard.
- Japanese lacks comparative morphology but it has implicit comparison and explicit comparison.

I hope this paper will contribute to the pragmatic study of comparatives and will become a complement of syntax/semantics of this construction.

References

Atlas, Jay David and Stephen C. Levinson. 1981. It-cleft, Informativeness and Logical Form. In Peter Cole (ed.), *Radical Pragmatics*,1-61. New York: Academic Press.

Back, Kent. 1999. The Myth of Conventional Implicature. *Linguistics and Philosophy* 22: 367-421.Geis, Michael L and Arnold M. Zwicky. 1971. On Invited Inferences. *Linguistic Inquiry* 4: 561-566.Grice, H Paul. 1975. Logic and Conversation. In Cole, Peter. and Jerry Morgan (eds.), *Syntax and Semantics*, 3

Speech Acts, 41-58. New York: Academic Press.

Grice, H Paul. 1989. Studies in the Way of Words. Cambridge, Mass: Harvard University Press.

Hirschberg, J. B. 1985. A Theory of Scalar Implicature. PhD dissertation, University of Pennsylvania.

- Horn, Laurence R. 1972. On the Semantic Properties of Logical Operators in English. Mimeo, Indiana University Linguistics Club, Bloomington, IN.
- Horn, Laurence R. 1984. Toward a New Taxonomy for Pragmatic Inference: Q-Based and R-based implicature. In Schiffrin, D (ed.), *Meaning, Form, and Use in Context: Linguistic Applications*. Washington: Georgetown University Press.

Horn, Laurence R. 1989. A Natural History of Negation. Chicago: University of Chicago Press.

- Horn, Laurence R. 2000. From *if* to *iff*: Conditional Perfection as Pragmatic Strengthening. Journal of Pragmatics 32: 289-326.
- Karttunen, Lauri. and Stanley, Peters. 1979. Conventional Implicature. In Oh,C.K. and D.A. Dinneen (eds.), Syntax and Semantics. Vol 11 Presupposition, 1-56. New York: Academic Press.
- Kennedy, Christopher. To appear. Vagueness and Grammar: The semantics of Relative and Absolutive Gradable Predicates. *Linguistics and Philosophy*.
- Kennedy, Christopher. 2005. Parameters of Comparison. Paper for the talk at Cornell University.
- Kennedy, Christopher and McNally, Louise. 2005. Scalar structure, degree modification, and the semantics of gradable predicates. *Language* 81(2): 345-381.
- Lee, Young-Suk and Laurence Horn. 1995. Any as Indefinite plus Even. Manuscript. Yale University.

Levinson, Stephen C. 1983. Pragmatics. Cambridge: Cambridge University Press.

- Levinson, Stephen C. 2000. *Presumptive Meanings: The theory of generalized conversational implicature.* Cambridge, Mass.: The MIT Press.
- McCawley, James.D. 1978. Conversational Implicature and the Lexicon. In Cole, Peter (ed.), *Syntax and Semantics vol. 9: Pragmatics*, 245-259, New York: Academic Press.
- Potts, Christopher. 2005. The Logic of Conventional Implicatures. Oxford: Oxford University Press.
- Rooth, Mats. 1992. A Theory of Focus Interpretation. Natural Language Semantics 1: 75-116.
- Sadock, Jerrold. M. 1978. On Testing for Conversational Implicature. In Cole, Peter (ed.), *Syntax and Semantics Volume 9: Pragmatics*, 281-297. New York: Academic Press.
- Sapir, Edward. 1944. Grading: A Study in Semantics. Philosophy of Science 11: 93-116.
- Sawada, Osamu. In press. The Multifunctionality of English and Japanese Scalar Distance Constructions: A Semantic Map Approach. *Papers from the 40th annual meeting of the Chicago Linguistic Society*.
- Sawada, Osamu. In press. From Classifier Construction to Scalar Construction: The Case of the Japanese N hitotu V nai and N 1-classifier V nai Constructions. In Naomi MacGloin and Junko Mori (eds.), Japanese/Korean Linguistics 15. Stanford: CSLI Publication.
- Sawada, Osamu. 2006. Scalarity and the Rhetorical Negative Constructions. *Proceedings of the 4th International Conference on Construction Grammar*: 162-163.
- Sawada, Osamu. 2005. The Possible Semantic Diversity of the Comparative Constructions in English and Japanese: A Construction-based Approach. Paper presented at the 9th International Cognitive Linguistics Conference. July 19th, Yonsei University, Korea.
- Schwenter, Scott A. 1999. *Pragmatics of Conditional Marking: Implicature, Scalarity, and Exclusivity.* New York: Garland Publishing.
- Sigrid Beck, Toshiko, Oda, and Koji Sugisaki. 2004. Parametric Variation in the Semantics of Comparison: Japanese vs. English. *Journal of East Asian Linguistics* 13: 289-344.
- Van der Auwera, Johan. 1997a. Conditional Perfection. In Athanasiadou Angeliki and René Dirven (eds.), On Conditionals Again, 169-190. Amsterdam/Philadelphia: John Benjamins.
- Van der Auwera. 1997b. Pragmatics in the Last Quarter Century: The Case of Conditional Perfection. *Journal* of *Pragmatics* 27: 261-274.